

July 14, 2009

Federal Emergency Management Agency  
Office of the Federal Insurance Administrator  
W. Craig Fugate - Federal Insurance Administrator  
500 C Street S.W.  
Washington D.C. 20472

Re: FEMA's suspension of the City of Mount Vernon, Washington's Conditional Letter of Map Revision ("CLOMR") Request – City's Reply.

Case No.: 09-10-0459R

Communities: City of Mount Vernon and Skagit County, WA

Community Nos.: 530158 and 530151

*By Certified Mail Return Receipt Requested and by Facsimile to Avoid Delay*

Dear Mr. Fugate:

The City of Mount Vernon, Washington, ("Mount Vernon" or "City") has received a letter dated June 23, 2009 from Siamak Esfandiary, Program Specialist, Engineering Management Branch Mitigation Directorate, suspending indefinitely the City's request for a Conditional Letter of Map Revision ("CLOMR"). The June 23, 2009 letter was written on behalf of William R. Blanton Jr., CFM, Chief Engineering Management Branch, Mitigation Directorate and was received by the City of Mount Vernon on June 29, 2009. This letter is the first attachment to the City's response.

The City is contacting you because as the Flood Insurance Administrator, you have direct statutory and regulatory responsibility over this matter. The City believes there is no legal basis for FEMA's action and that it exceeds the authority granted FEMA by federal law. As such, it is *ultra vires* and void *ab initio*. The unauthorized suspension of the City's CLOMR request, taken at face value, will result in the imposition of an indefinite, de facto moratorium upon any further CLOMR requests from all potential applicants along the Skagit River.

Mount Vernon respectfully requests that, as the Flood Insurance Administrator, you reconsider the Agency's position and direct FEMA personnel to comply with the applicable FEMA regulations requiring the agency to process Mount Vernon's CLOMR request on its merits. For

reasons grounded in law, equity and sound policy, Mount Vernon (as well as any other applicant seeking a CLOMR) must be able to submit proposed flood projects and have them promptly evaluated on their merits under existing rules and within a reasonable time. Rather than suspending consideration indefinitely without any legal authority to do so, the City respectfully asks that FEMA promptly evaluate the City's application based on the data currently available- as required by federal law.

The Mount Vernon Downtown Flood Protection Project (the "Project") is designed to protect Mount Vernon, its citizens and infrastructure from the threat of flooding faced annually in the downtown area- a threat which cannot be minimized or ignored any longer.

The area to be protected contains critical infrastructure that serves the entire region including: the City's wastewater treatment plan; Skagit County Courthouse; City Hall; a federal post office; County jail; police, fire and emergency service facilities; sections of Interstate 5; sections of the BNSF main line track that provides both freight and passenger transport along the Pacific Coast (including the Vancouver B.C. to Portland, Oregon service); and, the regional multi-modal transportation station. The threat to the City from flooding is real and substantial based on the historical record. Over the past hundred years, the Skagit River has exceeded maximum safe channel capacity as least 17 times resulting in enormous property losses and threats to human life and safety.<sup>1</sup> The City cannot emphasize enough that this is the paramount public health and safety issue for Mount Vernon and the neighboring community.

FEMA's letter provides the following unsupported grounds for suspending Mount Vernon's CLOMR request:

The City of Burlington is pursuing a separate, independent flood protection project upstream of Mount Vernon and any cumulative effects of the two proposed projects must be considered before acting on the City's request.

The ongoing Flood Insurance Study (beginning in 1997) has not yet been completed and because there is a possibility that the current FIS (effective 1-3-85) will be modified the FIS *must* be completed prior to a CLOMR decision on the City's CLOMR request.

The United States Army Corps of Engineers General Investigation Study ("USACE GI") of the entire Skagit River has not been completed and only a 'comprehensive' CLOMR request covering all existing and proposed flood protection projects for the Skagit River can be considered by FEMA.

As detailed below, the difficulty with these arguments is that they ignore FEMA's obligations under federal law and its own regulations to consider CLOMR applications based on existing data and hydraulic models, using the best information currently available. If FEMA's position is accepted, even if the applicant used the most conservative assumptions and the best modeling available, CLOMR requests would never be timely. Under this theory, no CLOMR would ever be processed in areas undergoing existing or ongoing study. Since nearly all flood areas are constantly under study, the CLOMR process becomes a fiction. This is a recipe for nothing but

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<sup>1</sup> See April 2007 Information Paper By Linda Smith Project Manager USACE

more delay, and even greater property losses. Most important it is not authorized by federal law and is patently illegal.

### **Mount Vernon has Employed *The Most Conservative Modeling, Data, Hydrology and Hydraulics* known.**

It is of utmost importance initially to emphasize throughout the City's response, that it has taken great pains and tremendous care to design its Downtown Flood Control Project using the *most conservative* analysis - i.e. the United States Army Corps of Engineers ("USACE") modeling of the Skagit River which FEMA has contracted for in its Flood Insurance Study ("FIS"). FEMA has had the FIS data from the USACE and has been reviewing it for several years.<sup>2</sup>

The Project was intentionally designed using the most conservative assumptions for several reasons: 1) to assist FEMA as much as possible in its review and to expedite approval, 2) to avoid any potential controversy over the results obtained from use of competing hydrological and hydraulic models, and 3) to design a project that meets or exceeds the most conservative flood protections requirements. The City's use of the USACE hydrology and hydraulic model includes *all USGS data points* employed by the USACE.

No person or agency has suggested that a 1% flood (one hundred year flood) would be larger in terms of flood depths or in terms of hydraulics and hydrology than the flood modeled for this Project. However, FEMA has completely failed to address these facts and the merits of the Project in its response.

### **FEMA has Failed to Comply with its Own Procedural Regulations.**

Applications for any CLOMR or Letter of Map Revision (LOMR) must follow formal rules promulgated by FEMA. These implementing regulations are found in 44 CFR part 65 and 44 CFR part 72 to which part 65 makes reference. *See* 44 CFR § 65.8.

Substantively, the process for reviewing a CLOMR request is identical to the process for consideration of a LOMR, except as built certification of the flood control project is not required. *Id.* Procedurally, FEMA's implementing regulations are quite detailed. The applicable regulations include requirements that FEMA (i) respond to applications within pre-determined deadlines, (ii) submit requests for additional information from applicants within an established timeframe; (iii) reach a decision on completed applications within established timelines; and (iv) comply with applicable criteria in reaching its decisions.

Upon receipt of a request for a CLOMR, FEMA must mail an acknowledgement of receipt of the request to the applicant. 44 CFR § 65.9. FEMA then must notify the applicant and community within 60 days *as to the adequacy* of the submittal. 44 CFR 72.4 (h)(1). Regarding Mount Vernon's CLOMR, FEMA failed to notify the City within the 60 day deadline, as required under its own implementing regulation, as to the adequacy of the City's submittal. To date, no request from FEMA for additional

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<sup>2</sup> See series of FEMA letter attached.

information has been forthcoming and inquiries as to whether more information was necessary were not answered affirmatively.

Within 90 days of receiving the request FEMA has an additional opportunity to request additional information. 44 CFR § 65.9 (g). Rather than request more information, FEMA choose to seek extension of its review period for an additional 30 days due to the claimed “complexity of the proposed project.”<sup>3</sup> The City followed up on FEMA’s extension by seeking confirmation that no additional information was being sought.<sup>4</sup> The City thus understands that the data submitted by the City is adequate.

As will be explained in more detail below, it is improper, contrary to FEMA regulations, and illegal to require the City to submit further technical data regarding another potential flood project that has yet to be designed, permitted or funded. To date, Burlington’s project is still in its initial conceptual and planning phase. Burlington is still engaged in environmental review required by Washington State’s Environmental Policy Act, responding to citizen comments and has yet to even choose a preferred alternative or design.

**Although not Required, The City Intends to Submit Further Technical Modeling Showing no Cumulative Effects Between Burlington and Mount Vernon’s Proposed Flood Projects.**

Nevertheless, while preserving the City’s objections and reserving its full legal rights should the need to assert such rights later arise, the City desires to fully cooperate and assist FEMA in processing the City’s application and has approved additional hydrology work, at additional expense to the City, to model such potential cumulative effects. Mount Vernon has already communicated with Burlington officials about this work and both jurisdictions are sharing information and coordinating on this effort. Due to the priority Mount Vernon has placed upon the Project (as it relates to public safety), Mount Vernon anticipates completing such work within the next two weeks. The City is confident that such information will provide clear and compelling technical information which will show no cumulative impacts that give rise to an increase in water surface elevation greater than one foot- the permitted standard set forth in 44 CFR § 60.3 (c)(10). As with the entire Project, this technical submittal will employ the most current and conservative USACE hydrology and hydraulic modeling currently available.

**FEMA’s Suspension of The City’s CLOMR Request is Not Based on The Merits, Fails to Comply with the Requirements of Applicable Law, and is otherwise Arbitrary, Capricious and Unreasonable.**

*FEMA’s Suspension of the City’s CLOMR Request is not Based on the Merits.*

As a practical matter, all flood projects existing or proposed share a common risk that when FEMA conducts a new FIS that their project, despite a previously issued LOMR,

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<sup>3</sup> See FEMA letter to Mount Vernon (undated)

<sup>4</sup> See City’s Response dated June 4, 2009.

may no longer be deemed to provide the level protection that warrants removal from a FIRM due to new Base Flood Elevations (“BFE’s”). However, simply because FEMA has been re-studying the Skagit River since 1997<sup>5</sup>, does not provide grounds to suspend the City’s request of a CLOMR (or any other party with standing to request a CLOMR) for a shovel-ready flood control project. Such an approach would permit FEMA to delay such a request *indefinitely* as FIS studies, to the best of the City’s knowledge, have no statutory or regulatory deadline.

As stated previously, due to these uncertainties and to fully assist and expedite FEMA’s review, Mount Vernon has taken great pains to carefully design its project employing the most conservative data, modeling, hydrology and hydraulics known- the same modeling FEMA has been reviewing over the past years. Mount Vernon is well aware that there exists controversy due to competing flood studies- all of which have determined *lower* base flood elevations and *lower* volumes of water than the USACE study. For this very reason, the City consciously chose to avoid such controversy and thereby, to the greatest extent practical, avoid any risk of FEMA later voiding a City’s CLOMR (or LOMR should the project be constructed before the new effective maps) due to the results of the new FIS by its conservative design. FEMA has been and continues to be aware that this is the case. Simply put, there is no known flood study that employs more conservative data, hydrology or hydraulics. In all likelihood, the City design will provide *equal or greater* protection than the 100 year flood event that is ultimately determined by the ongoing FIS. Other existing studies only suggest lower base flood elevations and lower volumes of water.

*FEMA’s Review Does Not Require It To Blindly Look At Out of Date Technical Information From Effective FIS When New Information is Presented.*

FEMA has declared that any CLOMR review process *must* be based upon the “effective FIS.” See FEMA’s letter to Mount Vernon Second Paragraph. The current effective FIS is the FIS that took effect on January 3, 1985. The fact that there is an ongoing effort to revise the current FIS does not change the legal status of the current, effective FIS for purposes of FEMA’s regulations, and the City’s CLOMR request. The current FIS is the legal standards against which FEMA must review the City’s request until that FIS is amended or replaced.

Nevertheless, the City appreciates FEMA’s concerns regarding the uncertainties created by yet to be released maps and realizes that changes in the BFE’s and flood insurance rate maps (“FIRMS”) initially in the form of Preliminary Flood Insurance Rate Maps (“PFIRMS”) will be forthcoming. However, it is neither necessary *nor required* by FEMA to blindly evaluate a CLOMR request on currently-published mapping that FEMA believes may be inaccurate, out of date, or may be revised due to the ongoing FIS when new and more accurate data has been submitted by the requestor compelling technical review of the new technical information. Although not required to do so, the City has provided such new information and incorporated the most conservative assumptions in its

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<sup>5</sup> See Page Four Power Point Presentation by Ryan Ike, CFM, FEMA Region 10.

analysis reflective of the USACE modeling and study which are contained in the drafts of the new FIS.

Should FEMA limit its review of the impacts of the proposed flood project using only the 1985 base flood elevations, the City realizes that FEMA may then simply re-identify the area previously removed from effective FIRMS by a LOMR as a special flood hazard area (SFHA) as a result of new FIRMS and new analysis should it be supported by the new FIS. However, the CLOMR/LOMR process was established to assist communities in providing *new information* when seeking a revision of FIRMS. *See* 44 CFR § 65.1 (The purpose of 44 CFR part 65 is to outline the steps a community needs to take in order to assist FEMA in providing up to date identification and publication of its FIRMS.) It is fundamentally contrary to the CLOMR/LOMR process for FEMA to slavishly review the City's CLOMR/LOMR and not employ the most current information submitted. FEMA's CLOMR process explicitly provides for and in fact *requires* FEMA to process new data and information that is different from that used in the original analysis if that data and information is more accurate. *See* 44 CFR § 65.4 (A community has a right to submit technical data and request changes on effective maps.) *See also*, 44 C.F.R. 65.6 et. seq.

*The CLOMR Process Requires FEMA to Review New, Improved Hydrology and Hydraulic Analysis, Modeling, and Data Different From that Contained in the Current or Effective FIS.*

FEMA provides that because there is “ongoing hydrologic and hydraulic analysis for the Skagit River” not a part of an effective FIS that “it would not be reasonable to determine the potential impacts of your proposed project by comparing your data to data that has not yet been finalized.”

This new rule fails to recognize that FEMA's existing regulations explicitly provide a framework for resolving this problem. Those regulations already require FEMA to review new data, improved methodology, hydrology and hydraulics data included in a CLOMR request that is different from that used in the original FIS analysis.

The ability of a community to submit new technical information, request changes to any of the information shown on an effective map and have FEMA promptly review is not within FEMA's discretion. An applicant has a legal right to have such information reviewed by FEMA as part of a CLOMR request as long as it is submitted with appropriate documentation. *See* 44 CFR § 65.4- 65.7. Again, the data required to support any CLOMR request is identical to that required for final revision in a LOMR under 44 CFR. §§ 65.5, 65.6, and 65.7. *See* 44 CFR. § 65.8.

44 CFR § 65.6 (a) requires that the supporting data submitted to FEMA include all the information FEMA needs to review and evaluate the request:

This may involve the requestor's performing *new* hydrologic and hydraulic analysis and delineation of *new* flood plain boundaries and floodways, as necessary.” *Id.* Emphasis Added.

FEMA regulation goes on in great detail to describe how a requestor is to submit such new information:

- 44 CFR § 65.6 (a)(6) - details the kind of computer model that may be used.
- 44 CFR § 65.6 (a)(7)(8)- details what recurrence intervals must be modeled when submitting new information
- 44 CFR § 65.6 (a)(11)- details what delineations for flood plain boundaries must be provided
- 44 CFR § 65.6 (d)- details what data requirements exist for the use of improved hydrologic, hydraulic, or topographic data believed to be better than those used in the original analysis
- 44 CFR §65.6 (e) - details what data requirements exists for incorporating improved methodology.

*FEMA has Previously Represented to the City that the LOMR/CLOMR Process is Appropriate for Reviewing New Information.*

In fact, FEMA has represented in previous communications with the City that the CLOMR/LOMR *is the process* to resolve discrepancies when a community is faced with an effective FIS, preliminary FIS and new data:

[C]ities may follow the LOMR-PMR process. In this instance, the data will be evaluated in the context of the current FIS and the preliminary FIS study. There may be fees collected for this review. Any proposed revisions to the published **or preliminary base flood elevations** must meet section 65.6 of 44 Code of Federal Regulations. **Either as an appeal or a LOMR, FEMA will consider your information and will revise the maps if the data provided warrants such a change.**<sup>6</sup>

This interpretation of FEMA's regulation was authored by Carl Cook, FEMA's designated agent by the Flood Insurance Administrator- the FEMA official with authority regarding CLOMR decisions.<sup>7</sup> 44 CFR § 65.9

Clearly, the fact that there exists new data, new methodology, or new modeling to be studied and submitted for review in a CLOMR request is contemplated in FEMA's regulations. The fact that *FEMA is already undergoing similar analysis using the same USACE modeling and data* in its FIS should aid FEMA's in expediting this request as it already dovetails with FEMA's ongoing work. This was one reason why the City made the conscious decision to employ the very same analysis in its submission materials. Suspension of the City's CLOMR request on these grounds is improper, contradictory to previous representations and contrary to the implementing regulations.

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<sup>6</sup> See last paragraph of September 2007 Letter by Carl Cook Director of Mitigation Division to Mayor Norris. Emphasis added.

<sup>7</sup> See last paragraph of July 17, 2006 Letter by Carl Cook.

As will be discussed later on, such failure to process the City's CLOMR request adversely impacts both the local community and individual property owner and their property rights.

*FEMA's Regulations Require Review and Tender of a Decision Without Undue Delay and Do Not Provide Authority for "Suspension" of Consideration Pending Completion of Ongoing Studies.*

Once adequate information is provided by the applicant, within 90 days of receipt of such adequate information and necessary fee, FEMA is required to provide written comment in response to the request, or preliminary copies of the revised FIRM panels and/or affected portion of the FIS report for review and comment. 44 CFR § 72.4 (h)(2). The written comment provided by FEMA is limited under its regulations. Once all necessary information has been received FEMA *must* respond with one of the following decisions within 90 days:

- FEMA will not modify the effective maps
- FEMA will modify base flood elevations on the effective FIRM and new base flood elevations established under 44 C.F.R. part 67
- FEMA will approve the changes requested and amend the maps
- FEMA will approve the changes requested and a revised map will be printed and distributed
- The changes requested are not of such significant nature as to warrant a revision of the FIS or FIRMS
- An additional 90 days are required to evaluate the data submitted
- Additional data is require to support the revision request
- The required payment has not been submitted in accordance with 44 CFR part 72, no review will be conducted and no determination will be issued until payment is received.

44 CFR § 65.9 (a)-(h).

The City has submitted its technical case based on the most conservative hydrology known. No request for further information has been forthcoming from FEMA. As required by the implementing regulations, FEMA's decision should have been limited to one of the foregoing responses. FEMA requested an additional 30 days to review because of "complexity of the proposed project." Nothing in the above regulation authorizes an indefinite suspension of the City's CLOMR ***based on facts known to FEMA when the application was received- facts that in reality have been known to FEMA for over 12 years.***

*FEMA's Suspension the City's CLOMR Request is Arbitrary, Capricious and Unreasonable.*

A delay of the City's request for a CLOMR simply because there is an ongoing FIS study without evaluating the merits of the request, the new data, design, hydrology and



hydraulics submitted results in undue delay based on arbitrary grounds and is directly contrary to FEMA's obligations under its own regulations. For example, applying FEMA's reasoning (and newly created rule) with respect to the ongoing FIS, had FEMA received a CLOMR request in 2001 for a proposed flood project anywhere along the Skagit River and assuming further that the proposed project employed the best, most current and improved data and science to provide 500 year flood protection or protection against a flood of Biblical proportions, FEMA would nevertheless have been obligated to suspended such a request over the past *eight years* due to the fact there is an ongoing FIS that has not yet been completed. Moreover, *the request would be suspended indefinitely as there is no date certain for completion of the FIS*. As will be discussed in more detail below, this improper interpretation of FEMA's implementing regulations creates a new substantive legal rule without process, and results in undue delay in reaching an agency decision to which an applicant would otherwise be entitled.

### **FEMA Has Created Improper Rules By Creating New Steps Needed to Process a CLOMR.**

Congress created a regulatory process that requires agencies to learn from experience and input of the public and to maintain a flexible and open-minded attitude toward their own rules. Chocolate Manufacturers Association v. Block, 755 F.2d 1098, 1103 (4<sup>th</sup> Cir. 1985). Agencies may not circumvent the rulemaking requirements of the United States Administrative Procedures Act. N.L.R.B. v. Wyman-Gordon Co., 394 U.S., 764, 764-66 (1969); Anaheim, et al. v FERC, 723 F.2d 656, 659 (9<sup>th</sup> Cir. 1984). A change in law may not be made by informal letter-writing. Christensen v. Harris County, 529 U.S. 576, 587-88, 120 S. Ct. 1655, 146 L.Ed. 2d 621 (2000).

Mount Vernon maintains that FEMA has ignored the above requirements and adopted new rules without notice or opportunity to comment by instituting additional requirements or "steps" outside the rulemaking process. These "steps" include (i) requiring the City to wait for federal processes, one of which is beyond FEMA's control and authority (i.e. FEMA's own FIS and the USACE GI process), (ii) a requirement that the City consider in its CLOMR request all *potential* flood protection measures along the Skagit River no matter how remote or speculative so long as they are a part of the USACE GI, and (iii) a requirement that the City obtain consensus with other communities beyond its jurisdiction to solve *all* matters related to flooding along the river in one comprehensive CLOMR in order to ensure that its own CLOMR is reviewed.

The City requests that FEMA identify the applicable promulgated rules that provide legal authority to require these additional "steps" outside the rulemaking process. Absent such identification, the additional "steps" identified in the letter constitute new rules and requirements adopted without notice and opportunity to comment. FEMA's use of such sweeping terms within the letter will necessarily apply to *any* flood project along the Skagit River resulting in a *de facto* CLOMR/LOMR moratorium. FEMA's suspension letter results in FEMA creating new rules, ignoring others and as discussed below improperly interpreting other regulations to justify its action.

**FEMA's Interpretation of the Term "Anticipated Development" to Include Any Future Potential Measures Stemming from a USACE GI Results In New Rulemaking That is Arbitrary, Unreasonable and Contradicts FEMA's Regulations.**

Mount Vernon is located along both banks of the Skagit River. The City has and will continue to have large areas of land within the floodplain regardless of a successful outcome of its CLOMR request. As such, Mount Vernon strongly recognizes the need for a regional solution to the flood threat along the Skagit Valley. Mount Vernon supports and continues to partner with local, state, and federal jurisdictions to achieve a viable, regional solution to the flood problem facing the Skagit Valley. That solution, part of which includes the Project, must employ the best available science. However, it is improper, arbitrary, capricious and simply unreasonable to link downtown Mount Vernon's welfare to such long term, uncertain and yet to be funded planning goals by characterizing the long range USACE GI process as "anticipated development" that would justify suspending Mount Vernon's own local efforts to obtain appropriate regulatory relief from FEMA.

When a community proposes to permit encroachments upon the flood plain when a regulatory floodway, as set forth under 44 CFR § 60.3 (c)(10), the community is required to demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point *within the community* otherwise it must seek conditional approval from the Flood Insurance Administrator following the criteria set forth in 44 C.F.R. 65.12 (a) (1-7). 44 CFR 60.3 § (c)(10) emphasis added.

First it is plain and unambiguous that Mount Vernon is not required to show or model the entire Skagit River Valley but only that area within its own community. Second, the term "anticipated development" is not defined within FEMA's regulations. However, to refuse to include within that term "*reasonably* anticipated development" would render any interpretation unreasonable and therefore improper. It is patently unreasonable to include in the term flood protection measures so remote and speculative that they are yet to be recommended, approved, or funded such as those measures that have been analyzed by USACE GI over the last twelve years.

The general investigation study began in 1997 continues on without a recommended or approved plan of flood protection measures to date.<sup>8</sup> As of April 2007, the Study has cost \$6,638,000.00 in funds- \$3,319,090 of federal funds and \$3,319,090 of non federal funds.<sup>9</sup> Full funding for the study has yet to be appropriated and has required and will continue to require both United States Congressional approval and local matches. Given the current economic downturn, such funding remains a major uncertainty.<sup>10</sup> Should the study be completed and a recommended regional flood protection alternative receive USACE support, no actual funds for such an alternative to allow for design, permitting,

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<sup>8</sup> See April 2007 Information Paper By Linda Smith Project Manager USACE

<sup>9</sup> Id.

<sup>10</sup> Id.

and construction can be made available without an Act of the United States Congress through an appropriation which is slated to occur at the earliest in 2014.<sup>11</sup> In addition, local funding matches for such a project would need to be raised. Given the anticipated large construction costs due to the enormous scope of the problem, this may include requiring voter approval. Even if the USACE GI study is completed, the recommended measures must pass the USACE cost/benefit test to be eligible for funding<sup>12</sup> which is far from certain.

On the other hand, Mount Vernon's has accomplished a CLOMR submission, using the most conservative USACE modeling, which shows that the Project *will not* result in an increase of more than one foot in flood elevations at any point within the community, or upriver of the community and downriver of the community under existing conditions or those conditions associated with reasonably anticipated development. Nevertheless to aid the process, and as an abundance of caution, the City did obtain a concurrency letter from Skagit County which would be needed in the event such an increase were demonstrated.

FEMA's own regulations specifically address future flood projects and how they should be treated in the context of LOMR/CLOMR review. FEMA regulations explicitly state that FEMA *is not* to treat a proposed flood project or future flood protection condition as anticipated development when reviewing a CLOMR or LOMR:

Revisions cannot be made based **on the effects of proposed projects or future conditions**. Section 65.8 [the CLOMR regulation] of this subchapter contains the provisions for obtaining conditional approval of proposed projects that may effect map changes when they are completed.

44 CFR 65.6(a)(3) emphases added.

Clearly and at a minimum, any proposed flood project to be recognized as "anticipated development" must undergo its own CLOMR review and approval. This makes perfect sense when one considers that when a project receives a CLOMR, the project is at a stage that is well defined to the point where it meets the strenuous FEMA submittals requirements. Following approval of the CLOMR, only as built certifications by a licensed engineer are required. Should an applicant reach that point and receive a CLOMR, it is likely that the flood project shall become an existing condition. By FEMA's own implementing regulations, anything short of this constitutes a remote and speculative flood project on which revisions cannot be based.

As stated previously, while not necessary (as Burlington's project is far from either design, permitting, or receiving a CLOMR or LOMR), Mount Vernon intends to submit further analysis regarding potential cumulative effects between its project and Burlington's potential flood project.

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<sup>11</sup> Id.

<sup>12</sup> Id.

As a practical matter, it is important to also note that the City has historically and will continue to provide similar levels of flood protection in the *same area* with massive volunteer efforts and coordinated government response to imminent flooding threats to the downtown area including sandbagging, belly dumping, and erection of the City's portable flood wall to protect its citizens, property and critical infrastructure from injury. To date, no "cumulative effects" have resulted from these emergency flood fighting efforts nor any significant increases in water levels elsewhere. It stands to reason and is supported by plain common sense that replacing the City's historical emergency measures with a permanent flood structure should not be barred because a speculative "cumulative results" analysis as FEMA suggests, an analysis which cannot be performed until 2014 assuming the USACE GI study reached this point, must be performed.

### **The Project Can Be Incorporated Into the USACE GI Study.**

USACE officials conducting the GI study are aware of the ongoing Project and can incorporate this into their GI study as it progresses toward recommended measures. On June 6, 2006 City officials met with USACE officials as well and State DOE officials to discuss concerns raised by these agencies and to respond to such concerns during its environmental review of the Project. During the meeting, the City informed USACE and DOE officials that the proposed improvements along this stretch of the river are consistent with solutions that have been identified in the GI Study and the models used are based on the USACE hydrology. After meeting with USACE officials, the City commented formally within the final environmental impact statement that the Project would be treated as an existing condition within the USACE GI study in the event it is completed prior to the study. As will be discussed later on, a Mount Vernon Downtown Flood Project is a recommended measure recognized by the local flood control advisory committee which is serving as an advisory body to Skagit County- the local sponsor for the GI.

### **FEMA's Suspension of the City's CLOMR Request will Create Unreasonable Delay.**

The United States Administrative Procedures Act requires federal agencies to make decisions such as the one at issue without unreasonable delay. See 5 USC § 706(1) (APA provides that courts shall compel "agency action unlawfully withheld or unreasonably delayed"). At this point Mount Vernon is entitled to a timely decision and it does not appear that one will be forthcoming without a court-imposed deadline unless FEMA reconsiders its position and continues processing the CLOMR based on the merits of the City's proposal.

As stated previously, it is highly unlikely that the USACE GI study will provide any timely, measurable results, or any certainty. However, it is results of this same uncertain process (linked to further Acts of Congress) FEMA has dictated Mount Vernon must await as an additional "step" required before lifting its suspension of the City's CLOMR. The FIS study has been ongoing since 1997. After twelve years of study *no date has been set for the release of any new maps*. Moreover, should an administrative appeal be filed by anyone with standing (which is *any* property owner adversely effected) such appeal will delay the effective date of the PFIRM and tack on further delay. See 44 CFR

§ 67 *et. seq.* and 44 CFR § 68 *et. seq.* FEMA appeal timelines are far from certain and it is not unreasonable to anticipate that an appeal could take months or even years to resolve depending on the issues at hand, the degree of discrepancy of the competing sciences and the process FEMA chooses to adjudicate the administrative appeal.

**FEMA's Suspension Causes Injury To Any Party Who Owns Property in an Area Protected by An Existing or Future Area Flood Project and Increases the Risk to Public Safety.**

CLOMR and LOMR review are substantively identical. *See* 44 CFR§ 65.8. Thus, if FEMA's new position is adopted regarding the requirements for a CLOMR approval; those same requirements would presumably apply to a LOMR approval. In short, both CLOMR's and LOMR's have been effectively suspended, based on FEMA's letter. This indefinite CLOMR/LOMR moratorium removes a property owner's ability to obtain regulatory relief from floodplain management standards or any flood insurance requirements imposed by the National Flood Insurance Program. Despite it being shown that a proposed or even existing flood project meets and continues to meet minimum design, operation, and maintenance standards consistent with the level of protection needed under FEMA regulations, the FEMA CLOMR/LOMR suspension continues until the FIS and USACE GI processes are completed and one comprehensive CLOMR request for all potential flood projects along the Skagit River is submitted. Property owners then will continue to be *required* to comply and build to flood management standards and pay for flood plain insurance despite the fact it can be shown that they are in fact out of the 100 year floodplain. Thus the results of FEMA's suspension decision sweep up all property owners within the floodplain causing significant increases in costs to construct, insure, and develop their property.

In the case of Mount Vernon's Downtown Project, this will result in further jeopardizing public safety. Skagit County has been and is facing overcrowding of its County jail facility. This growing problem has reached the point where the County has been forced to release post and pre conviction detainees and criminals back into the public it would otherwise have keep incarcerated for public safety. For a variety of reasons (proximity to other government services such as the County Court House being a material factor) Skagit County has selected a new jail site within Mount Vernon's Downtown area and within proposed protected area of the Project.

Jails are expensive. Obtaining local funding in today's economic downturn is a tremendous challenge and it is predicted that funding of the jail will likely require some tax upon the County citizens and voter approval. Current costs to construct the facility are estimated at \$115 million dollars.<sup>13</sup> As the jail site currently resides in the floodplain, this cost factors the added costs of building the site above ground level higher than current base flood elevations according to floodplain management standards promulgated by Mount Vernon under the NFIP.<sup>14</sup> To make matters worse, such costs will substantially increase in the event the new FIS increases BFE's in the area which is likely given the

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<sup>13</sup> Ralph Swartz, "The Rising Price of Justice", *Skagit Valley Herald*, June 22, 2009.

<sup>14</sup> *Id.*

results of the USACE study. *These costs could be avoided in the event Mount Vernon Downtown Flood Protection Project received recognition by FEMA through the CLOMR/LOMR process.* Interestingly, while the jail facility is seeking funding upwards to \$115 million dollars in part due to the demands of constructing in a floodplain, the Project, which if successful removes the site from the floodplain along with many other valuable pieces of infrastructure, needs approximately only ten million dollars in funding to reach full funding to complete construct its flood-control Project. Indeed, the savings on the jail foundation alone from removing Downtown Mount Vernon from the 100 year floodplain may be enough to pay for the remaining funding needed based on current estimates. The Project has all necessary permits and is otherwise shovel-ready.

**The City Has Relied On FEMA’s Representations Prior to and During the City’s CLOMR Submission. Fundamental Fairness Requires FEMA to Conduct a Genuine, Objective, Analysis of the Merits of the City’s Project rather than Suspend Consideration of its CLOMR Request.**

FEMA has a general duty to provide sound and adequate consultation with appropriate elected officials of general purpose local governments. 42 USC § 4107. The scope of this consultation expressly includes providing adequate guidance with “criteria derived from data reflecting new development that may indicate the desirability of modifying elevations based on previous flood studies”. *Id.*

FEMA’s ongoing FIS began in July 1997 during a requested restudy of the region as a component of the USACE GI.<sup>15</sup> Scoping meetings for the FIS began in 2001 and FEMA has had draft maps from the USACE since at least March 2007.<sup>16</sup> However, no date for release of maps has yet been issued by FEMA. As the GI study prompted the FIS, it is quite plain that FEMA has had knowledge of both processes at their onset.

Despite what has been common knowledge for FEMA officials for over twelve years, communications with City officials prior to the City’s CLOMR submission have been very limited, despite numerous opportunities to comment on the City’s plan. Specifically, FEMA has the opportunity to raise any specific adverse impacts in the City’s environmental review of the Project. More important, for *four months after acceptance* of the City’s CLOMR application, FEMA failed to provide any notice or guidance to the City that FEMA *would suspend indefinitely* the CLOMR on the grounds set out in the letter. Moreover, as stated previously, FEMA’s designated consultation officer, Carl Cook, stated in 2007 without reservation that the LOMR/CLOMR process is an appropriate process to review new technical data and modeling when it is different from an original FIS and preliminary FIS and would be reviewed.

Based on those communications, and in reasonable reliance thereon, the City has to date spent hundreds of hours and expended significant funds on consultants to develop the necessary technical submission for FEMA’s review. At no time, did FEMA indicate to

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<sup>15</sup> See Page Four Power Point Presentation by Ryan Ike, CFM, FEMA Region 10.

<sup>16</sup> *Id.*

the City while undergoing this process that FEMA would place *a moratorium* to CLOMR requests until other studies are completed.

As early as March 2008, the City made inquiries to FEMA seeking guidance on the issue of how the ongoing study was to affect any potential CLOMR.<sup>17</sup> Despite such specific inquiries, FEMA failed to provide any indication that consideration of the City's CLOMR request would *be suspended* despite the uncertainties FEMA has known existed. This is patently unfair to the City, and raises a serious question as to whether FEMA has been acting in good faith toward the City.

The City finds it quite disturbing that FEMA, knowing a CLOMR application was in the works, would accept that application without any warning that it would not be considered on its merits, and then delay such notification for months after receipt. Even more remarkable was FEMA's request for an additional 30 days to review the CLOMR due to "the complexities of the Project;" and then tender a decision based on facts FEMA has known for over twelve years.

The City is entitled to rely on sound consultation and guidance with its federal counterparts when maneuvering through FEMA regulations in order to achieve the regulatory relief should it present a flood project based on sound scientific principles. It is quite apparent that FEMA's decision at this time reflects a lack of good faith and contradicts previous representations to the city. The City has not received due process nor a fair hearing from FEMA.

### **The City Suspects That Mount Vernon's Property Owners Are Being Treated Differently than Similarly Situated Property Owners Who Have Applied for a CLOMR or LOMR.**

Property rights are a fundamental right. Any federal agency action that constitutes infringement of a fundamental interest must comply with protections provided by the federal constitution. Such decisions which fail to do so can give rise to a Sec. 1983 action. Village of Willowbrook v. Olech, 528 U.S. 562, 120 S.Ct. 1073 (2000). An action may be based on substantive and/or procedural due process, and equal protection.

As no regulation has been forthcoming or cited by FEMA to base the decision to suspend based on ongoing studies, the City suspects that FEMA has intentionally treated Mount Vernon property owners differently. There is simply no rational basis for the difference in treatment here as in other areas throughout the nation where FIS studies are ongoing. The City requests that FEMA produce records of similar decisions from other floodplains in the nation requiring that local community to solve all the potential flooding problem upstream and downstream in the subject floodway through a 'comprehensive' CLOMR request, await it CLOMR request while FEMA completes an ongoing FIS, and seek an USACE GI process before FEMA will consider a request for a CLOMR or LOMR.

### **The City has Coordinated and Obtained Support From Other Local Jurisdictions.**

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<sup>17</sup> See e-mail from Jana Hanson

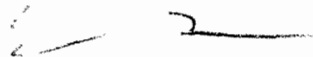
FEMA's letter suggests that the City has not garnered local support for the proposed Project or coordinated its efforts with other local jurisdictions. To the contrary, Mount Vernon has cooperated and continues to cooperate with other general purpose local governments. The City has followed the extensive notice and comment process required under the State Environmental Policy Act. All governments were allowed to participate and comment. Any local agency failure to comment constitutes an acceptance of the analysis. WAC 197-11-545. There was no appeal from the Project EIS. That process is now complete.

As a further example of the City's outreach efforts, the Downtown Project has received preliminary approval from the Flood Control Advisory Committee which consists of representatives of many local cities, state agencies, and other interest groups.<sup>18</sup> This advisory committee is charged with providing recommendations to the Skagit County Flood Control Zone which consists of the Skagit County Board of Commissioners. It is this body which has partnered with the USACE on the GI Study.

The City has received both formal and informal support from the entities including general purpose local governments, business community organizations, specific businesses who will benefit from the project, the law and justice community, and special purpose districts including but not limited to the City of Burlington, Skagit County, Dike District 3, Dike District 17, Downtown Business Association, and the Mount Vernon Chamber of Commerce. The City shall forward all formal expressions to FEMA as they are received.

Thank you for taking the time to review Mount Vernon's response. Mount Vernon is committed to protecting its citizens and infrastructure from the significant flooding threat it faces every year. The City looks forward to your prompt response and request that you re-consider the Agency's position on the CLOMR request. The City would also appreciate the opportunity to meet with you face to face to discuss this matter further. Please call me so that we can schedule that meeting.

Very truly yours,



Kevin Rogerson

Mount Vernon City Attorney

Re: May 25<sup>th</sup>, 2006 FEMA letter to Skagit County Council of Governments

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<sup>18</sup> The County Flood Control Zone District Advisory Committee Membership consists of 15 members who represent the following: City of Sedro Woolley, Skagit Land Trust, The Nature Conservancy, Washington State Department of Transportation, Washington Realtors, Drainage District #21, Sterling Area, Town of LaConner, Agricultural Advisory Committee, A Local Flood Historian, Dike Districts # 22 and #3, Seattle City Light, Swinomish Indian Tribe and City of Mount Vernon.



cc: Mount Vernon City Council  
Mayor Bud Norris  
The Office of Senator Patty Murray  
The Office of Senator Maria Cantwell  
The Office of Congressman Rick Larsen  
Charles L. Steele, Department of Ecology, Bellevue  
Skagit County Council of Governments  
William R. Blanton Jr., CFM, Chief Engineering Management Branch  
Mitigation Directorate



# Federal Emergency Management Agency

Washington, D.C. 20472

June 23, 2009

RECEIVED  
CITY OF MOUNT VERNON

JUN 29 2009

Mr. Albert Liou, P.E.  
Pacific International Engineering  
P.O. Box 1599  
Edmonds, WA 90820

IN REPLY REFER TO: PUBLIC WORKS  
Case No.: 09-10-0459R  
Communities: City of Mount Vernon and  
Skagit County, WA  
Community Nos.: 530158 and 530151

Dear Mr. Liou:

This letter is in regard to your request dated February 25, 2009, that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issue a conditional revision to the Flood Insurance Rate Maps (FIRMs) for the above-referenced communities. Pertinent information about the request is listed below.

Identifier:	Mount Vernon Downtown Flood Protection Project
Flooding Source:	Skagit River
FIRM Panel(s) Affected:	530158 0001 B and 0002 B; and 530151 0425 C

The Seattle District of the U.S. Army Corps of Engineers (USACE) is conducting a flood damage reduction feasibility study for the Skagit River in cooperation with Skagit County, Washington. The purpose of the study is to formulate and recommend a comprehensive flood hazard management plan for the Skagit River floodplain that will reduce flood damages in Skagit County. The results of this study will also be used in the development of a countywide Flood Insurance Study (FIS) and FIRM for Skagit County, Washington and Incorporated Areas.

In order to properly calculate the effects of the Mount Vernon Downtown Flood Protection project on flood hazards, the ongoing hydrologic and hydraulic analyses for the Skagit River study must be completed. It would not be reasonable to determine the potential impacts of your proposed project by comparing your data to data that have not yet been finalized. Since these ongoing hydrologic and hydraulic analyses are not part of the effective FIS, there is the potential that they could be modified. This could result in increases to the effective Base (1-percent-annual-chance) Flood Elevation (BFE), which could jeopardize the height of the levee freeboard, and not meet all the requirements under Title 44 of the Code of Federal Regulations (CFR), Section 65.10 (44 CFR 65.10).

It has come to our attention that the City of Burlington is pursuing a flood protection project just upstream of your project site. If the effects of that project are not considered, we are concerned that your project may not meet all requirements of 44 CFR 65.12, including subparagraph (c)10 of 44 CFR 60.3. This subparagraph states that no new construction or other development shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effects of the proposed development, when combined with all other existing and anticipated development, will not increase the base flood water-surface elevation (WSEL) more than 1 foot at any point within the community. The effects of the City of Burlington project on the Skagit River WSELs should be evaluated to ensure that the

Mount Vernon project can be constructed in compliance with all aspects of 44 CFR 65.12. The failure to adequately address the effects of all anticipated development on the Skagit River could result in the construction of a levee that does not meet all the requirements under 44 CFR 65.10.

In order to ensure the safety of the lives and property of Skagit County citizens, it is critical to consider the final flood hazard information from the USACE study when designing proposed flood protection projects along the Skagit River. Because the revised FIRM has not yet been issued to the communities involved, the City of Mount Vernon should wait for the finalization of the revised FIRM and coordinate with upstream and downstream communities regarding all potential levee projects along the Skagit River. We encourage the City of Mount Vernon to work with other communities to submit one comprehensive Conditional Letter of Map Revision (CLOMR) that includes all existing and proposed flood protection projects for the Skagit River. In order to meet all the requirements of 44 CFR, communities along the Skagit River should not finalize their levee plans until they have collaborated on levee project designs and effects and incorporated the results of the USACE flood damage reduction feasibility study. The processing of this CLOMR is hereby suspended until these steps can be taken.

If you have any technical questions regarding this CLOMR request, please contact me by telephone at (202) 212-2252, or call the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP).

Sincerely,



Siamak Esfandiary, Ph.D., P.E., CFM,  
Program Specialist  
Engineering Management Branch  
Mitigation Directorate

For: William R. Blanton Jr., CFM, Chief  
Engineering Management Branch  
Mitigation Directorate

cc: The Honorable Bud Norris  
Mayor, City of Mount Vernon

Mr. Esco Bell  
Director  
Public Works  
City of Mount Vernon

Mr. Gary R. Christensen, AICP  
Director  
Planning and Development Services  
City of Mount Vernon

Mr. Jeffery M. Miller, P.E.  
Director/ County Engineer  
Public Works  
Skagit County

Mr. Harry Hosey, P.E.  
Pacific International Engineering

FOOTNOTED MATERIALS  
ENCLOSED

# Information Paper

4-20-07

## U.S. Army Corps of Engineers, Seattle District

Date: April, 2007  
Project Name: Skagit River, Washington, Flood Damage Reduction  
Location: Skagit County, Western Washington  
Project Manager: Linda Smith, (206) 764-6721, [Linda.s.smith@usace.army.mil](mailto:Linda.s.smith@usace.army.mil)  
Congressional District: 2

**Description:** The Skagit River Basin is located in the northwest corner of the State of Washington. The 100-square mile flood plain of the Skagit River delta is located in Skagit County and defines the study area. Since 1908, the maximum safe channel capacity has been exceeded 17 times. In November 1990, a flood peaked at 9.4 feet above flood stage at the city of Mount Vernon. During late November 1995, the flood peaked at a new record at Concrete, and at Mount Vernon 9.3 feet above flood stage. During the October 2003 flood, the Skagit Valley experienced over \$11 million in total flood damages according to Skagit County estimates. Flood fighting costs were estimated at an additional \$9.5 million. Average annual flood damages total \$54 million despite the fact that there are about 60 miles of existing diking district levees in the study area and two private dams with some flood control capacity. Skagit County is home to 120,000 citizens. Over 64,000 acres of rich and productive agricultural lands in the flood plain are subject to flooding. The Skagit River is the largest on the Puget Sound and is considered prime habitat to five species of salmon and Bull Trout. There is also pristine wildlife habitat for large number of species including bald eagle.

**Status:** The feasibility study is authorized under Section 209 of the Flood Control Act of 1962 (Public Law 87-874). In 1997, the Corps and Skagit County entered into a cost sharing agreement to conduct a General Investigations study to reduce flood damages in the Skagit River basin. In April, 2007 Skagit County and the Corps signed an amendment to the agreement to fund a cost shared study of \$214,000 to scope completion of the feasibility study. By fall, 2007 the scoping will be complete, and with the signing of another FCSA to complete the feasibility phase, the Corps and the County will continue the evaluation of preliminary flood damage reduction measures that have been identified in cooperation with the County and other stakeholders in the basin, primarily for their economic viability. This will result in a suite of measures that can be further evaluated for economic, environmental, and engineering feasibility.

The feasibility study has cost approximately \$6,638,000 to date, \$3,319,090 federal, \$3,319,090 nonfederal. It is currently scheduled for completion in 2012. It is anticipated the study will cost another \$3 million total to complete. Construction could begin in 2014, pending authorization and funding by Congress. The study received \$350,000 Federal funding in fiscal year 2007.

Measures being evaluated in the feasibility study include: levee modifications, bypass channels, modifications to the Baker Dams, storage at Nookachamps Creek, floodwalls, and nonstructural methods such as floodproofing and relocations. These measures will be screened for economic, environmental, and engineering acceptability. Those selected by the Corps, County, and the public will be combined into alternatives. The alternative with the greatest flood damage reduction benefits and the lowest cost, environmental impact, and engineering risk will be recommended for Federal support.

### Milestones:

- Execute cost-sharing agreement to scope completion of feasibility report – April 2007
- Execute cost-sharing agreement to complete feasibility study – Fall 2007
- Select Recommended Plan – December 2009
- Commander signs Feasibility Report/EIS/BA – November 2011
- Construction – 2014 (Subject to Congressional authorization/appropriation)

U.S. Department of Homeland Security  
Region X  
130 228th Street, SW  
Bothell, WA 98021-9796



**FEMA**

May 25, 2006

Kelley Moldstad, Executive Director  
Skagit County Council of Governments  
204 W. Montgomery  
Mount Vernon, Washington 98273

Dear Mr. Moldstad:

The purpose of this letter is to provide a status update of the ongoing Skagit River Flood Insurance Study (FIS) being conducted by the Department of Homeland Security's Federal Emergency Management Agency (FEMA). I am informing the Council of Governments of our progress because it is an established forum that contains all of the affected community partners.

At this time, we are nearing completion of the initial work maps covering the floodplain extending along the Skagit River from Sedro Woolley downstream to the bay. The work, being accomplished by the United States Army Corps of Engineers, will be received by FEMA and will follow our standard protocol which requires a FEMA review before the study is endorsed by this agency.

I do not wish to see information that may change released prematurely, nor do I wish to cause unnecessary delays. Several interested parties have requested that the release of the data be delayed while others have asked for an early release of the study results. FEMA intends to make the model and its results available to interested parties once our internal technical review is complete. At that time, members of my staff will arrange to meet with local officials and this council to discuss the next steps and receive feedback.

Comments or questions regarding this letter should be directed to Ryan Ike at the address above, or by calling (425) 487-4767.

Sincerely,

A handwritten signature in black ink, appearing to read "Carl L. Cook, Jr.", written over a white background.

Carl L. Cook, Jr., Director  
Mitigation Division

cc: The Office of Senator Patty Murray  
The Office of Senator Maria Cantwell  
The Office of Congressman Rick Larsen  
Charles L. Steele, Department of Ecology, Bellevue

RI:gb



**FEMA**

July 5, 2006

Kelley Moldstad, Executive Director  
Skagit County Council of Governments  
204 W. Montgomery  
Mount Vernon, Washington 98273

Dear Mr. Moldstad:

The purpose of this letter is to provide an update of the ongoing Skagit River Flood Insurance Study (FIS) being conducted by the Department of Homeland Security's Federal Emergency Management Agency (FEMA). Pursuant to Part 66 of the Code of Federal Regulations, FEMA is required to consult with local officials during the initial scoping phase of a new flood insurance study. As a matter of regional policy, we also conduct meetings periodically throughout the study to solicit community comments and address local concerns over the draft maps portrayal of the flood risk.

On June 28, 2006, the US Army Corps of Engineers (COE) provided FEMA with a copy of the first set of draft work maps covering the lower Skagit River floodplain from Sedro Woolley downstream to the Puget Sound as well as a copy of the hydraulic model used to produce the maps. The model is currently at FEMA's National Service Provider for technical review. These maps are the first of a series of maps that will eventually include the flood-prone areas along the Skagit River from Concrete to the Sound as well as portions of the Sauk and Cascade Rivers. Please note that the current work maps do not yet include a depiction of the floodway. Pending the outcome of the internal FEMA technical review, we intend to task the COE with producing the next set of maps covering the upper Skagit River floodplain from Sedro Woolley to Concrete as soon as possible.

At this time, we are prepared to meet with your community to discuss the technical aspects of the initial work maps. This meeting, referred to as an Intermediate Consultation and Coordination Officers' meeting (ICCO), is traditionally held with FEMA, the study contractor (COE), and the affected community's engineering and planning staff for the purposes of reviewing the maps for cartographic accuracy, evaluation of initial base flood elevations, discussing map impacts on current and future floodplain permitting, and collection of technical feedback to be included in the file prior to release as "Preliminary Flood Insurance Rate Maps." ICCO meetings are also an excellent way to establish a consultation process by which subsequent map releases will occur in your community.

Please contact Ryan Ike of my staff to arrange a consultation and coordination meeting in your area. He can be reached at the above address, or by calling (425) 487-4767.

Sincerely,

A handwritten signature in black ink, appearing to read "Carl L. Cook, Jr.", written over a white background.

Carl L. Cook, Jr., Director  
Mitigation Division

cc: US Congressional Delegation  
Department of Ecology



NATIONAL FLOOD INSURANCE PROGRAM  
FEMA NATIONAL SERVICE PROVIDER

Mr. Albert Liou, P.E.  
Pacific International Engineering  
P.O. Box 1599  
Edmonds, WA 90820

IN REPLY REFER TO:  
Case No.: 09-10-0459R  
Community: City of Mount Vernon and  
Skagit County, WA  
Community No.: 530158 and 530151

316-INT

Dear Mr. Liou:

This is in regard to your February 25, 2009, request that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issue a Conditional Letter of Map Revision for the above-referenced community. In our email dated April 16, 2009, we indicated we were reviewing the data submitted in support of your request and, within 90 days of receiving your request, we would notify you if we needed additional data or if we encountered delays. Because of the complexity of the proposed project, we will need additional time to complete our review. We will inform you of our findings within 30 days of the date of this letter.

Please direct questions concerning your request to us at the address shown at the bottom of this page. For identification purposes, please include the case number referenced above on all correspondence.

If you have general questions about your request, FEMA policy, or the National Flood Insurance Program, please call the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627). If you have specific questions concerning your request, please contact the Revisions Coordinator for your State, Mr. Joe Kuechenmeister, CFM, at [Joseph.Kuechenmeister@mapmodteam.com](mailto:Joseph.Kuechenmeister@mapmodteam.com) or at (720) 479-3181.

Sincerely,

Syed Qayum, CFM  
National LOMR Technical Manager  
Michael Baker Jr., Inc.

cc: Mayor Bud Norris  
City of Mount Vernon

Mr. Esco Bell  
Director of Public Works, Mt. Vernon

Mr. Gary R. Christensen, ACIP  
Director Planning and Development Services

Mr. Jeffery M. Miller, P.E.  
Public Works Director/County Engineer

3601 Eisenhower Avenue, Alexandria, VA 22304-6425 PH:1-877-FEMA MAP FX: 703.960.9125

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The Mapping on Demand Team, under contract with the Federal Emergency Management Agency, is the National Service Provider for the National Flood Insurance Program





## PACIFIC INTERNATIONAL ENGINEERING

June 4, 2009

Syed Qayum, CFM  
National LOMR Technical Manager  
FEMA National Service Provider  
3601 Eisenhower Avenue  
Alexandria, VA 22304-6425

RE: Response to notice for additional 30 days to process Mount Vernon's request for a Conditional Letter of Map Revision (CLOMR). FEMA Case No: 09-10-0459R. Community: City of Mount Vernon and Skagit County, WA. Community No.: 530158 and 530151

Dear Mr. Qayum,

Thank you for the letter (enclosed) received May 29<sup>th</sup>, 2009 (undated) regarding the status of the City's request to issue a CLOMR for the City's proposed downtown flood project informing the City that an additional 30 days will be needed to complete your review. At this time, the City understands FEMA has determined that the submittal contains adequate information, no additional information is required by FEMA, that FEMA continues to evaluate the scientific or technical data submitted and shall notify the City of its decision within 30 days of May 29<sup>th</sup>, 2009.

The City appreciates Michael Baker Jr, Inc.'s (acting as FEMA's National Service Provider) ongoing efforts in evaluating the City's request and looks forward to hearing from you in the near future. Should you have any questions or concerns about the City's submission, as always, feel free to contact me at the contact information provided in this response.

Sincerely,

Albert Liou, P.E.  
Senior Hydraulic/Hydrologic Engineer  
Pacific International Engineering

Cc: Mayor Bud Norris  
City of Mount Vernon

Mr. Esco Bell  
Director of Public Works, Mt. Vernon

Mr. Gary R. Christensen, ACIP  
Director Planning and Development Services

Mr. Jeffrey M. Miller, P.E.  
Public Works Director/County Engineer

SKAGIT COUNTY  
FLOOD INSURANCE STUDY UPDATE

**RYAN IKE, CFM**  
**FEMA REGION 10**

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SKAGIT COUNTY

- Process, Schedule, & Deliverables
- Base Flood Elevations, Modeling, & Levees
- Flood Insurance Rates & Grandfathering

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PROCESS & SCHEDULE

- New maps cover Sedro Woolley downstream to bay
- Study uses an unsteady-state, 2-D hydraulic model
- The hydrologic data for the study:
  - Regulated 100-year discharge of 226,400 cfs (at Concrete)
  - 50-year discharge of 185,000 cfs (at Concrete)
- There are no 100-year flood protective levees
- Vertical datum changes from NGVD 29 to NAVD 88
- New maps will not contain a floodway (at this time)

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PROGRESS & GOALS

- Follows a USGS Quad layout - countywide coverage with no city "cut-outs"
- Currently working with the County GIS staffs to ensure that quality LIDAR-topo data is used
- Contains 100 & 500 year floodplains (AE/X zones)
- 10, 50, 100, 500 year flood elevations published
- Not the same results as the USACE is using for their Flood Damage Reduction Study

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CONVERSION OF NGVD TO NAVD

- **NGVD 29**
  - Based on a mean sea level from 21 tidal stations in the US & 5 stations in Canada
- **NAVD 88**
  - Based on the density of the Earth instead of varying values of sea heights
  - More accurate
- **Conversion in Skagit County is 3.77'**
  - $NGVD + (3.77') = NAVD$

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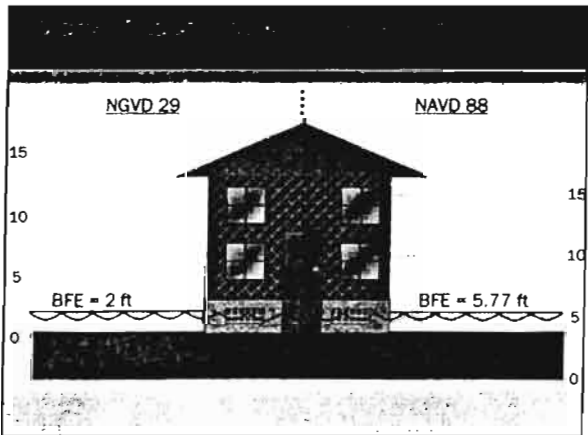
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**PROCESS & GOALS**

- Finish mapping upper Skagit from Sedro Woolley to Concrete (including portions of the Sauk)
  - Will include updated topo/floodway/new BFEs
- Meet with communities to start to discuss a floodway downstream of Sedro Woolley
- Work with the communities to outreach study results and homeowner implications
- Issue revised maps

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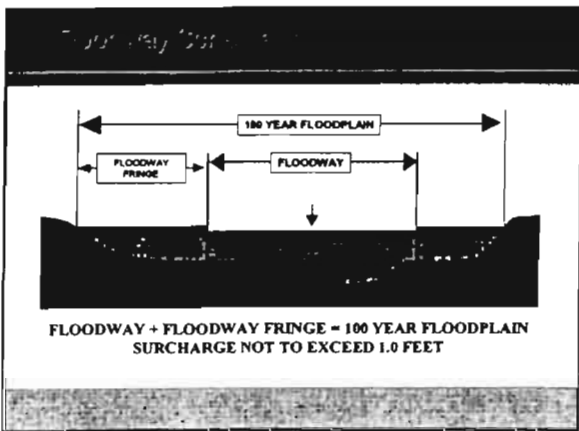
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**FLOODWAY**

- Historically, Skagit County, Burlington, and Mount Vernon have all adopted their own version of a conveyance preservation tool pursuant to 60.3(C)(10) of the 44 Code of Federal Regulations.
- RCW 86.16 applies to a "floodway" as shown on a FEMA map
- A floodway is a standardized approach to preserving open space to convey the 100-year flood without causing greater than a 1' rise.
- Floodways are used from Sedro Woolley upstream

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**RE-STUDY PROCESS**

1. Restudy is requested - July 1997 (part of USACE GI)
2. Scoping meetings - January 4, 2001
3. Draft study / maps - March, 2007
4. Preliminary maps issued - est. July, 2007
5. Hold Final Coordination Meeting - est. Sept, 2007
6. 90 day appeal period begins after 2<sup>nd</sup> public notice in local newspaper - est. Sept, 2007

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**RE-STUDY PROCESS**

7. 90-day appeal period ends - est. December, 2007
8. FEMA reviews submitted technical appeals and modifies or maintains maps as appropriate
8. FEMA issues "Letter of Final Determination (LFD)" to communities and publishes the BFEs in the Federal Register - est. January/February, 2008
9. Communities have 6 months to adopt the study before the data becomes "effective".  
*Failure to adopt results in suspension from NFIP*
10. Effective date - est. July, 2008

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**90 DAY APPEAL PERIOD**

- | Appeals   | Protests  |
|---|---|
| <ul style="list-style-type: none"><li>• "requests for changes to proposed BFEs"</li><li>• Must be based on scientific evidence demonstrating error</li><li>• FEMA will not accept anecdotal information</li></ul> | <ul style="list-style-type: none"><li>• "requests that do not involve BFEs"</li><li>• Floodplain boundaries</li><li>• corporate limits</li><li>• road locations</li><li>• road names</li><li>• etc.</li></ul> |

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**MYTHS VS. FACTS**

- **Myth:** "BFEs would be lower if we removed the four controversial "Stewart" floods!"
- **Fact:** FEMA evaluated a 50-year flood event with a lower discharge than would occur with the 4 floods removed and verified that the BFE would only decrease by about 1-2'

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**BACK FLOODING EXAMPLES**

- A 50-year flood has a 2% chance of occurring (or being exceeded) each year or a 45% chance of occurring over 30 years

**Two Examples...**

- At I-5 (in "3 bridge corridor") NAVD 88
  - Draft 100 year SWL: ~44.3'
  - Draft 50 year SWL: ~43.8' (.5' less than draft 100 year)
  - Effective BFE: ~39.2' (5.1' less than draft 100 year)
- At intersection of I-5 & HW20 "Overflow Path 1" NAVD 88
  - Draft 100 year SWL: ~39.8'
  - Draft 50 year SWL: ~38.9' (.9' less than draft 100 year)
  - Effective BFE: ~34.2' (5.6' less than draft 100 year)

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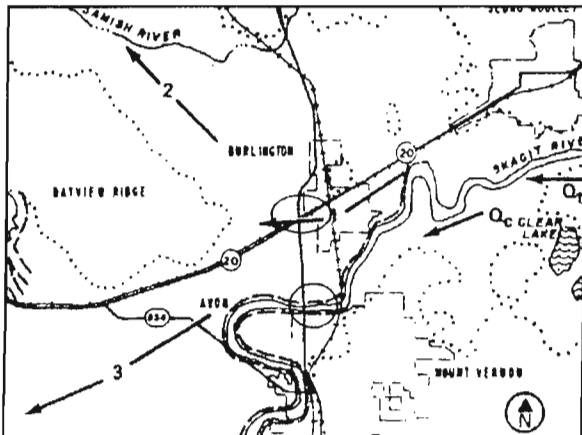
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### DADE FLOOD DELTA MODEL

#### • Previous model

- Assumed 3 "Flow Paths" each carrying a limited amount of water
  - Flow Path 1: 130k CFS    Flow Path 2: 86k CFS    Flow Path 3: 44k CFS
- Did not factor levee failures
  - Flooding in Fir Island: effective BFE is 12.7' (NAVD88), but levee failure resulted in observed depths of 10' above the ground (exceeding BFE's by 3-4')
- Used a single est. of 240,000 cfs entering the river (steady-state) and routed it in a uniform direction downstream (1-dimension)
- Relled on a variety of simplified engineering assumptions (e.g. 3 flow paths with finite amounts of water)

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### DADE FLOOD DELTA MODEL

#### • New model factors conditions such as:

- Water entering or exiting the river system 2-dimensions) as the river rises, crests, and falls over time (unsteady-state)
- Water freely moving/interacting throughout the entire delta (as opposed to assumed separate "flow paths" with their own assumed 100-year discharge)
- levee failure scenarios

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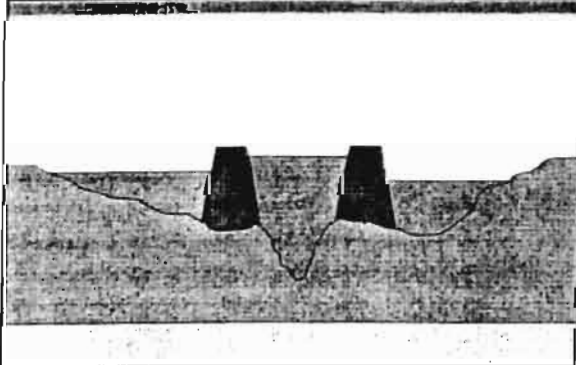
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### HOW DOES FEMA MODEL LEVEES?



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**SCENARIO 1:**

- Establishes a baseline for comparison
- Used for calculating the Floodway
- Provides lowest BFEs

No levee BFE: 20'



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**SCENARIO 2:**

This determines the BFE on the right bank (behind levee)

Right bank BFE: 21'



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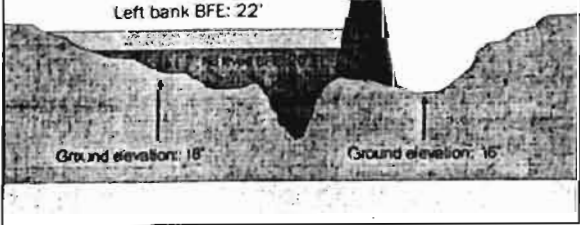
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**SCENARIO 3:**

This determines the BFE on the left bank (behind levee)

Left bank BFE: 22'



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**EXAMPLE 4**

- Determines the BFE within the levee
- Indicates insufficient freeboard?

Within levee BFE: 24'

Ground elevation: 15'      Ground elevation: 15'

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**EXAMPLE 5**

- Final BFE shown reflects what would occur when a levee fails by factoring in the unknown of where the levee will fail

Channel BFE: 24'

Left bank BFE: 22'      Right bank BFE: 21'

Ground elevation: 15'      Ground elevation: 16'

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**"THE LEVEE CENTERED BY USACE"**

- Levees must meet standards identified at 44 CFR 65.10
- Based on FEMA Guidelines and Specifications for mapping
- Original interim levee policy: May 15, 1981

AE Zone BFE: 24'

X Zone      X Zone

Ground elevation: 15'      Ground elevation: 15'

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### FLOOD INSURANCE STATISTICS

- **Myth:** "I won't be able to purchase flood insurance because of FEMA's maps"
- **Fact:** Flood Insurance will remain available to every resident in Skagit County or City
  - Skagit Co residents save 25%
  - Mount Vernon Residents save 20%
  - Burlington Residents save 20%
  - La Conner Residents save 10%

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### FLOOD INSURANCE STATISTICS

- Total number of policies: 2,737 (highest in State)
- Average premium: \$650
  - 90% of policies are in the floodplain
- Insurance in force: \$489 million
- 73% of County buildings are Pre-FIRM
- 27% are Post-FIRM
- Total losses since 1978: 532
- \$6.7 million claims paid

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### COMMUNITY RATING SYSTEM CLASS 5

- Policy holders in the SFHA save 25% on premiums
- SFHA buildings save \$227 annually
  - This equals -\$561,000 saved each year
- B, C, X Zone buildings save \$55 annually
- Average residential premium: \$605
- Average non-residential premium: \$986

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**KEY REGULATORY INFORMATION**

- When maps change, homeowners may have access to additional funds to help mitigate...
- ICC provides up to \$30,000 to:
  - Elevate the building on site;
  - Relocate the building to another site;
  - Demolish the building;
  - Floodproof the building (non-residential only)
  - Any combination above.
- Total claim payment cannot exceed \$250k for residential, \$500k for non-residential

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**FLOOD DAMAGE COSTS**

- 3 ft above BFE = \$196
- 2 ft above BFE = \$261
- 1 ft above BFE = \$411
- 0 ft at BFE = \$741
- 1 ft below BFE = \$2,296
- 2 ft below BFE = \$2,535
- 3 ft below BFE = \$2,825
- 5 ft below BFE = \$5,500

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**FLOOD INSURANCE COSTS**

- +4 ft above BFE \*= \$888
- 1 ft above BFE = \$726
- 0 ft at BFE = \$1,806
- 1 ft below BFE = \$7,041

\*\$500k building, \$500k contents w/ Class 5 CRS discount

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**FLOOD INSURANCE**

- To recognize policy holders who have built in compliance and have maintained a continuous and current flood insurance policy, FEMA will allow the policy holder to continue to benefit from the original rating of that building.
- Policies are transferable from one owner to another (e.g. due sale of property)
- Owner has the option of using the updated maps as the rating criteria for that property or continuing to use the rate established based on the original (old) maps.
- Or...

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**FLOOD INSURANCE**

- The date of the FIRM in effect when building was constructed
- The flood zone from that FIRM in which the property is located
- The Base Flood Elevation (BFE) for that zone (if applicable)
- A copy of the map panel showing the location of the building
- The rating element that is to be grandfathered (rate or zone). Evidence supporting the rating element includes documents such as Elevation Certificates.
- A letter from the community official verifying this information also is acceptable, as long as the above information is provided.

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**FLOOD INSURANCE**

**Why use the draft maps for permitting?**

- If a building is voluntarily elevated today using the draft BFEs, when the maps become effective, that owner will still be able to pay rates reflecting the additional freeboard!
- The key to rating buildings built in compliance with old maps is to retain copies of the old maps!

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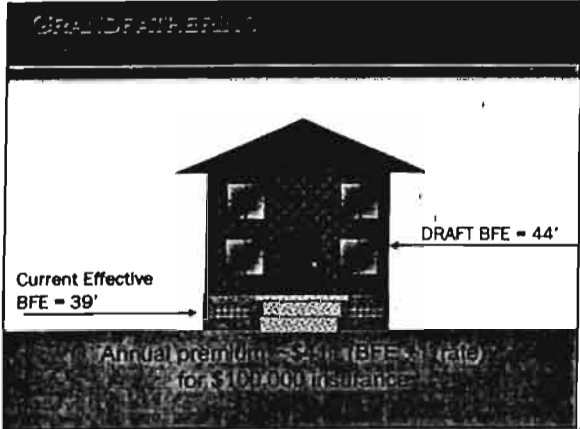
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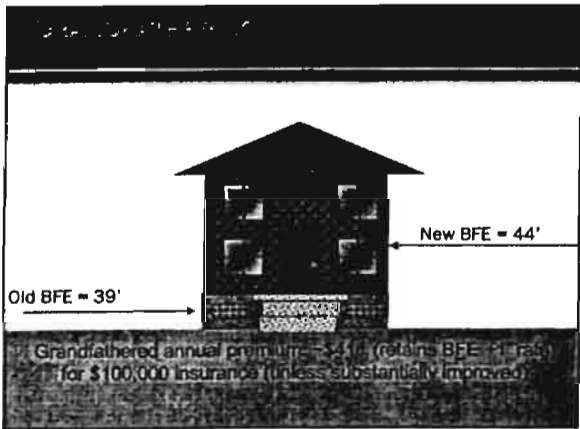
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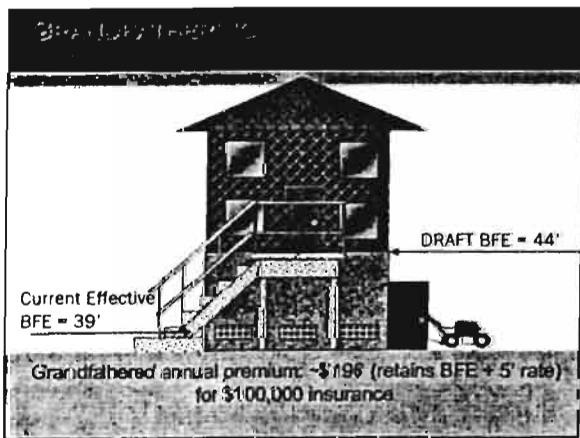
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**QUESTIONS & CONTACTS**

FEMA Region X  
Ryan Ike, CFM (425) 487-4767

Ecology, NWRO Bellevue  
Chuck Steele (425) 649-7139

NFIP Insurance Questions  
Leslie Meville (425) 482-0316

FEMA Map Services Center: [www.msc.fema.gov](http://www.msc.fema.gov)  
Access *current* maps for your location

Letter of Map Amendment (LOMA) Hotline - 1-877-FEMA-MAP

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**Levee Related:**

**1. *How does FEMA's levee policy reflect specific levee failure locations?***

When mapping areas protected by non-certified (by the Army Corps of Engineers - USACE) levees, FEMA considers a potential levee failure into account. Because we cannot predict exactly where a levee will fail, we must consider the effects of a failure at any point along the structure. By using computer models, we simulate what would happen if a levee failed on one side of the river while the levee on the other side held. We follow the same procedure for both sides of the river and map the resulting flood conditions. We also model a scenario where both levees fail for additional comparisons. In some instances, base flood elevations can be higher on one side of the river than the other due to natural differences in terrain or filling that has occurred in the floodplain.

**2. *Why does FEMA use calculated levee failures to determine the 100-year flood elevation?***

FEMA takes all of the results from the levee failure scenarios and maps the highest resulting base flood elevation. While this may seem overly conservative, we cannot predict exactly where a levee will fail so we must show the potential risk equally. Combining all three levee scenarios allows us to determine how high the 100-year flood would be in the event of a left bank levee failure, a right bank failure, or a simultaneous levee failure on both sides of the river. Our maps reflect base flood elevations and floodplain boundaries that account for these possibilities so that the public can be aware of the risk of living behind levees and take appropriate steps to elevate their structures and have appropriate flood insurance coverage.

**3. *Are there other floodplains in the country that are similar to those in the Skagit Delta where FEMA's levee policy was determined to be not applicable?***

Throughout the United States, communities are taking steps to work with FEMA and the Army Corps of Engineers to re-evaluate their flood control structures and better map the flood risk in areas protected by levees. In Eureka, Utah (FEMA Region 8), a private engineering firm is also using the Flo-2D model to map their floodplains. While the river systems may not be identical to the Skagit, citizens in UT also have concerns that floodplain maps are accurate. Following a nation-wide standard approach to floodplain mapping and data analysis, study contractors around the country are required to follow FEMA's guidelines and specifications for studying and creating updated Flood Insurance Rate Maps.

**4. *What does it take to certify existing levees to meet FEMA standards?***

In order for FEMA to certify that a riverine levee is capable of providing protection during a 100-year flood, the system must be able to meet the standards outlined in Section 65.10 of 44 Code of Federal Regulations. Certification for existing levees includes, but is not limited to, an evaluation of the levee's freeboard, design criteria, embankment protection, interior drainage, and its operations and maintenance plan. A detailed levee analysis can be done by a community (through a registered professional engineer) or in coordination with the Army Corps of Engineers. The national standards are rigorous; however, if certified, the area protected by the levee may be removed from the special flood hazard area making flood insurance optional to property owners.

## **BFE Related**

**5. *There have only been 26 flood insurance claims since the 1985 maps were issued for Burlington. Don't the levees provide enough protection?***

Levees in Burlington offer great flood protection, even though they do not protect against the 100-year flood. With the high level of protection offered by the Burlington levees, only the largest floods will impact the City. More frequent flooding in the range of roughly the 10 to 35-year flood will generally be contained within the levees. Of the 12 floods that have occurred in the last 32 years, none has been greater than a 40-year flood in the Burlington-Mount Vernon area. So even though there have been relatively few flood claims in Burlington since 1985, a major flood exceeding those that have been seen to date could cause catastrophic damages. The 100-year flood is the flood that is required by law to be depicted on the FEMA maps. In order for FEMA to show the levees as providing protection, they must be able to contain and protect against the 100-year flood.

**6. *What is the difference between the 100 year flood and lesser floods along the Skagit River?***

Statistically, there is a 46% chance of having a 50-year flood during a 30 year period. FEMA routinely evaluates the 10, 50, 100, and 500-year flood elevations during detailed re-studies. Calculating the 50-year flood event provides another way to evaluate surface water elevations during more frequently recurring floods. FEMA's new re-study uses a USACE projected 100-year flood discharge of 226,600 cubic feet per second (cfs) and a 50-year discharge of 185,000 cfs. When we compared the difference in water surface elevations between these two flood events, we found (on average) that the 50-year flood elevation was only 1'-1.5' lower than the 100-year flood.

**7. *FEMA did a similar study in 1984 using the same 100 year flow and came up with lower Base Flood Elevations. Why are things different now?***

Our ability to more accurately model complex river systems has improved remarkably over the last 30 years. The computational and processing power in today's computers can easily calculate complex equations that better approximate the real physical flooding process. Today's models can factor conditions that could not be easily evaluated 30 years ago. New models, like Flo-2D, can consider factors such as water lost from the river due to off site storage, the effects of time and severity of the storm on the river in multiple locations, simultaneous movement of water in multiple directions, and more. The model also considers how various levee failures would affect the depth of the 100-year flood in various locations. This level of detailed analysis was not performed in previous studies. This fact is most evident in the Fir Island area. When we compared the water surface elevations that were witnessed during recent flood disasters, we noted that the observed flood elevations exceeded the old study's 100-year flood height by several feet in many locations. This confirms that previous models did not include the conditions of a failed levee. Although the expected amount of water in the river during a 100-year flood is similar to the original study, our ability to better model the complexities of the river system as well as levee failures, in addition to documented flood disasters, indicates that the effects of 100-year flood could be more severe than previously stated.



## Floodway

**8. *Would a floodway be centered on the river or could it be located in overflow (bypass) areas?***

FEMA may initially produce a floodway map that shows equal amount of land on both sides of the channel being reserved to pass the 100-year flood without causing more than a 1 foot increase in water surface elevation. This is commonly known as an “equal conveyance floodway” because it shares development restrictions linked to floodways with communities on both sides of the river. However, the floodway is a development tool that is adopted by local governments. Thus, local governments can work with FEMA to configure its floodway in a variety of different locations as long as it meets FEMA’s conveyance requirements.

**9. *How will the State prohibition on residences in the floodway be dealt with when determining a floodway?***

State law specifies that there can be no new construction of residences in the floodway, nor can an existing residential structure be substantially improved (improved over 50 percent of the market value of the structure). The law is based on life-safety issues that recognize more severe conditions in the floodway than in the remainder of the floodplain. Certainly when determining a floodway, heavily residential areas should be avoided wherever possible. While there are serious ramifications wherever a floodway is located, there is greater flexibility regarding nonresidential uses than there are for residential uses.

**10. *Is there any chance FEMA will not use a floodway (like the current maps)?***

A floodway is essentially a planning tool that communities adopt that allows them to preserve an open area adjacent to the river large enough to allow the 100-year flood to pass without increasing water surface elevations greater than 1 foot in any location. The Skagit River Delta does not currently have any mapped dedicated locations like a floodway. Since 1984, FEMA has relied on local community ordinances to strictly regulate development in areas considered to be the most hazardous (i.e. deep and fast flowing overflow channels). Without a dedicated floodway, it is difficult to uniformly monitor the floodplain and preserve this critical flow area. As conveyance space is blocked, base flood elevations raise. Over time, this can result in worse flooding, higher base flood elevations, and reduced map accuracy. As such, FEMA intends to add a floodway to the Skagit County maps in the future, but we have not yet begun a floodway identification process.

## Model & Mapping

**11. *Did FEMA consider sticking with its methodology of using 3 flow paths to delineate flooding in the Delta as it did in preparing its 1985 maps?***

The decision to use 3 separate flow paths in 1985 was, in part, due to limitations of the available computer models. In order to accommodate the river and match observed flooding, it was necessary to make several assumptions about where the water would go. The original modeling estimated that a certain quantity of water would exit the river (and not return) at various points. It also assumed a certain amount would stay in the channel. The new model does not necessarily rely on these simplified assumptions.

**12. *Why did the Corps of Engineers and FEMA choose to use a different computer model to map the Skagit River?***

Computer models used to map floodplains use hydrologic and topographic information to determine where flooding could occur. A model called “Flo-2D” was used for this study because of its ability to factor in complex river conditions that affect flooding. It is a “2-dimensional unsteady-state model,” meaning, it considers the amount of water entering *or exiting* the river system (2-dimensions) as the river rises, crests, and falls over time (unsteady-state). Flo2D evaluates multiple flood peaks occurring at different time intervals and locations, flooding associated with ponding in areas outside of the river, and water lost from the main channel that does not necessarily re-enter the river. This type of advanced modeling requires significant computer capacity that was not widely available 30 years ago.

The existing flood insurance study, conducted in the early 1980s, used a “1-dimensional steady-state model.” This type of model uses a single estimated maximum amount of water that could enter the river (steady-state) and routes it in a uniform direction downstream (1-dimension). 1-dimensional models rely on a variety of simplified engineering assumptions. As hydraulic conditions become more complicated, this type of model becomes less accurate.

**13. *What alternatives did FEMA evaluate for mapping the 100-year floodplain?***

FEMA evaluated as many as 9 different possible scenarios that could occur at any site along the river. We evaluated what would happen if there were no levees and the river were allowed to flood the entire valley. The results of this model suggested that the 100-year flood elevations would be drastically lower than observed flooding that has occurred in multiple locations during different floods. The results of this model were skewed by many factors and the results, while informative, do not reflect the 100-year flood. We also evaluated what would happen if the entire river system was contained within levees. This result removed the floodplain from the entire County, but was purely hypothetical. The results of this model help FEMA and interested communities understand how high levees would need to be in order to meet FEMA standards for 100-year certifiable levees. The other 6 runs contained scenarios where discreet levee sections were “failed” in the model to show what the resulting flood would look like. Each scenario provided a glimpse of how deep water would be when a given levee failed. By aggregating the different levee failure scenarios, we were able to determine what the floodplain could look like during a 100-year flood. FEMA uses this multi-scenario process to map the floodplain because it most appropriately accounts for possible levee failures (which have historically occurred throughout Skagit County). The 100-year flood elevations shown on the new maps reflect what would occur if a levee failed near your house, but remained intact on the other side of the river.

**Insurance**

**14. *How expensive will my flood insurance be if the interior grade of my crawlspace is below the exterior grade?***

FEMA refers to this as a below-grade crawlspace. FEMA regulations allow crawlspaces, but prohibit crawlspaces that are below-grade (below the exterior ground level) on all sides. However, a Technical Bulletin was issued in 2001 that does allow below-grade crawlspaces, as long as the community adopts regulations specifically allowing the below-grade crawlspaces and the interior grade of the below-grade crawlspace is no more than 2 feet

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below the lowest exterior grade. If this and a couple of other measures are met, flood insurance will cost more but the cost will not be excessive; generally the additional cost will be between \$75 and \$125 on an annual premium. However, if the below-grade crawlspace is more than 2 feet below the lowest exterior grade, flood insurance costs can increase greatly.

**15. *Of the cases FEMA is aware of that have had to be “special rated,” how many of these involved crawlspaces that are greater than two feet below the lowest exterior grade?***

Most of the cases needing special rating that FEMA has reviewed from Skagit Valley communities involve below-grade crawlspaces. Cases that are special rated cannot be rated using the FEMA insurance manual that is used for normal cases, and the process often results in higher rates and premiums. In a recent summary of special-rated cases, FEMA found that of 44 Skagit Delta cases, fully 35 were special rated because they had below-grade crawlspaces. Most of these were in Burlington. However, of the 35, only one case had its crawlspace elevation greater than 2 feet below the exterior grade; this was the only case where insurance rates were far above the average case that had a below-grade crawlspace. The other 34 cases were rated higher than normal, but within the \$75-\$125 range cited in Question No. 14 above.

**16. *How will the new maps affect my flood insurance premiums?***

FEMA has always had, and continues to have, a policy that allows grandfathering of flood insurance. The policy specifies that buildings built in compliance with the floodplain management regulations in effect at the time the building was built, will usually continue to be rated in accordance with rates in effect at the time of construction, even though higher flood elevations or more restrictive flood zones result from map revisions. A property owner must have adequate documentation, which usually consists of a photocopy of the map in effect when the building was built, together with an Elevation Certificate indicating that the building was built in compliance. Thus, there should be little impact on existing flood insurance premiums with the higher elevations. New buildings will have to be constructed to meet the new elevations, but being built in compliance will mean that these buildings, too, will not pay excessive rates.

**17. *Will my flood insurance rating always be grandfathered?***

FEMA's grandfathering policy has been maintained throughout the Program's 39-year history; however, one could not say for certain that the policy will not be changed in the future. Currently, there are no efforts to change it. Even if it were to be changed, there would probably be a cap on rates that would assure that property owners would not have to pay excessive costs for their flood insurance.

**18. *My home was built to minimize flood insurance costs under current NFIP rules. What will happen to my insurance rates?***

Based on FEMA's policy of grandfathering flood insurance, rating for a structure such as this should not change, assuming there is adequate documentation from the property owner (a copy of the original map and an Elevation Certificate showing the building was built in compliance with the map and regulations). If grandfathering that has been in effect for 39 years is ever discontinued, it would be hard to speculate what would happen to the rates, but

## Common Questions & Answers Pertaining to the Skagit River FIS

there is a good likelihood that any increases would be capped to assure that property owners would not be subject to excessive costs.

### **Building Standards**

#### **19. How can I fix the problem of having a crawlspace that does not meet the FEMA requirement to be only 2 feet below exterior grade?**

If a building exceeds the FEMA criterion that a below-grade crawlspace can be no greater than 2 feet below the exterior grade, there are a couple of remedies. First, the property owner could import fill to the crawlspace in order to bring the interior grade within the 2-foot criterion or, better, that brings the interior grade level with the exterior grade. When the interior and exterior grades are the same, there is no extra charge for flood insurance; when the interior grade is within two feet of the exterior grade, the modest additional charge is applied (usually \$75-\$125). Crawlspaces that exceed the 2-foot criterion will incur very high insurance rates. Another possible remedy is to lower the exterior grade on at least one side of the structure, so that the lowest exterior grade is equal to the interior grade. Either of these remedies will result in lower insurance rating.

#### **20. What will result from people continuing to bring in fill to elevate structures as a result of higher Base Flood Elevations (BFEs)? Will the result be even higher BFEs in the future because floodplain storage will be lost?**

While fill is an accepted method of elevating structures above flood levels, fills can have detrimental effects. FEMA's maps usually depict a floodway, which is a zone where fills and other encroachments cannot be allowed. Encroachments are allowed in the remainder of the floodplain, called the flood fringe. However, even here fills can be harmful by removing floodwater storage areas thereby altering the natural hydrology and causing increased flood levels. In the Skagit Delta, FEMA has not yet provided a floodway, so the issue of increased fills is even more critical. Here, it is possible that increased fills will further increase BFEs over time. A floodway delineation will help to minimize increases from fills, but only a flood control project will completely solve this issue.

### **Public Process & General Information**

#### **21. What is the difference between a "work map" and a "preliminary map"?**

Maps that resemble our typical Flood Insurance Rate Maps (FIRM) are shared with the general public once the data has undergone several levels of independent and internal review. These maps fall under two categories: a "work map" and a "Preliminary FIRM." A *work map* is produced by the Study Contractor and contains the results of their study. This map is provided to FEMA, the County, and City officials once it is at an acceptable level of completion. Once FEMA receives the map and supporting study data, it is subjected to multiple internal reviews of the information by thoroughly examining the model and other technical aspects of the study. This rigorous review period can take several months to conduct. If the information meets FEMA's quality standards, then it is converted into a conventional Flood Insurance Rate Map product.

These "preliminary" maps will also be shared with the public and each community. FEMA solicits comments on the preliminary maps. Preliminary maps are transmitted to community

## Common Questions & Answers Pertaining to the Skagit River FIS

officials for their review and use. Within 30 days of receipt, FEMA will arrange to meet with local staffs to go over the maps and discuss various assumptions and technical considerations that were made during production. The Study Contractor will also attend these meetings. Multiple evening public meetings are often arranged, in coordination with the affected community officials, to share the maps and discuss the public comment and appeal period. Appeals and protests to the maps are collected and considered during a final technical review period. This is done to assure that the maps contain the most accurate data available as provided by the study contractor and local interested parties. Once these redundant reviews are completed, the maps become regulatory with a new effective date assigned.

### **22. *Has Hurricane Katrina influenced FEMA's approach to floodplain mapping?***

This is a myth. The Flood Insurance Study process and the rates established to determine an annual flood insurance premium have not changed as a result of the hurricane. FEMA and the U.S. Army Corps of Engineers were charged with re-evaluating and re-certifying the nation's levee systems before Hurricane Katrina occurred. Flood insurance premiums and rates, established annually by FEMA, have not been artificially raised due to any single disaster or hurricane.

### **23. *What is the timeline and appeal process should someone disagree with the maps?***

During the study process, the maps undergo many iterations and changes as new information is provided by communities, citizens, or the study contractor. FEMA assembles all of these data and produces a Preliminary Flood Insurance Rate Map (FIRM). Once we provide this map to community officials, FEMA will conduct several meetings. The official 90-day appeal process begins on the date of the second newspaper publication noting that new maps have been released that contain new base flood elevations. Communities can expect to see two publications in local newspapers after a series of meetings conducted between FEMA and NFIP participating communities. These meetings also include public meetings where FEMA staff will be available to explain, in detail, the results of the study (as shown on the Preliminary FIRM). While this appeal period runs for 90 days, FEMA maps can always be revised (based on better technical data) by way of a Letter of Map Revision.

### **24. *Where can I get my questions answered should I have more informational needs?***

FEMA recommends that citizens contact their local government as the best source of information regarding the NFIP. In unincorporated Skagit County, contact should be made with either the Natural Resources Management Division of Public Works or the Building Services Division of Planning and Development Services. In the Cities, contact should be made with the city planning departments. These contacts can provide you with information on flood maps and on their regulations that pertain to building restrictions in floodplains. Additional information can be obtained from the FEMA website ([www.fema.gov](http://www.fema.gov)); this includes information on the status of communities in the NFIP and also includes flood map information. Individuals can find flood maps that include their property by clicking on the FEMA "Map Service Center." They can even print portions of maps pertaining to their area of interest from this source. Another FEMA website that is also very helpful is [www.floodsmart.gov](http://www.floodsmart.gov). Here, people can get information on their flood risk (by address), estimates of premiums for flood insurance on their property, agents serving their area, specific costs of repairing flood-damaged structures, definitions of FEMA flood zones, flood

## Common Questions & Answers Pertaining to the Skagit River FIS

facts, statistics and frequently asked questions, and much more. Additional contacts may include the FEMA Region X Office in Bothell, and the State Department of Ecology office in Bellevue.

### **25. Common definitions in the NFIP...**

Following are some definitions that are commonly used in the NFIP.

**Area of Special Flood Hazard:** is the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

**Base Flood:** the flood having a 1% chance of being equaled or exceeded in any given year (also referred to as the "100-year flood"). Designated on Flood Insurance Rate Maps by the letters A or V. The FEMA **floodplain** is the base, or 100-year, floodplain.

**Base Flood Elevations (BFEs)** are the wavy lines on the maps that depict the 100-year flood elevations at various places in the floodplain.

**Basement:** means any area of the building having its floor sub-grade (below ground level) on all sides.

**Community Rating System (CRS):** a voluntary element of the NFIP that rewards communities for exceeding minimum requirements of the NFIP by reducing flood insurance costs by 5 to 45 percent. Credit points are given for 18 floodplain mitigation elements; the more credit points a community gets, the lower the flood insurance costs for residents of the community. Similar to fire rating in communities.

**Development:** means any man-made 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 or storage of equipment or materials located within the area of special flood hazard.

**Elevation Certificate:** means the official form (FEMA Form 81-31) used to track development, provide elevation information necessary to ensure compliance with community floodplain management ordinances, and determine the proper insurance premium rate with Section B completed by Community Officials.

**Flood Insurance Rate Map (FIRM):** means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

**Flood Insurance Study (FIS):** means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Maps, and the water surface elevation of the base flood.

**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.

**Flood Insurance "Grandfathering":** see questions 17 and 18 above.

**Increased Cost of Compliance (ICC):** additional coverage in the Standard Flood Insurance Policy that provides up to \$30,000 to elevate, relocate or demolish a structure that has been cited

## Common Questions & Answers Pertaining to the Skagit River FIS

to be substantially damaged due to flooding. Damages must be cited by the local building official.

**Lowest Floor:** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the floodplain development ordinance.

**Structure:** a walled and roofed building, including a gas or liquid storage tank that is principally above ground.

**Substantial Improvement:** means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- 1) Before the improvement or repair is started; or
- 2) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

### **26. Why change at all? Is FEMA required to update their maps?**

The NFIP is a partnership program. In return for adopting an ordinance and regulating development in the floodplain, flood insurance is made available to residents and FEMA agrees to identify and publish information about areas subject to flooding. As conditions evolve within a basin or change along a river, the study must be updated to reflect the changes.

### **27. When will the new maps replace the old ones?**

All FEMA Flood Insurance Rate Maps (FIRM) contain a date. Some maps, like the Preliminary maps, are still considered subject to change. As such, these maps do not affect insurance rates nor do they trigger mandatory purchase requirements for lending/banking institutions. However, after the 90 day appeal period occurs, and all submitted appeals have been addressed, FEMA will re-issue the maps in conjunction with a "Letter of Final Base Flood Elevation Determination." This document is an official notice to communities, homeowners, insurance companies, banks, and lenders that the base flood elevations shown on the maps are legally binding and that the communities must adopt the information within 6 months (or by the effective date printed in the determination letter). The Determination letter and the re-issued final maps will contain an "effective date" after which the maps will be used by all stakeholders.

### **28. Why will the AO Zones change?**

The AO Zones that appear on the existing maps were used because areas adjacent to the levees were not part of the hydraulic flow paths, given limitations of earlier study methods. Instead, these areas would be flooded through levee overtopping. This would produce sheet flow, with high velocities, that were best characterized using the AO Zone FEMA criteria. These initial high velocities were developed through separate equations, and range up to 9 feet per second; they would occur over a short distance until they merge with the flow paths



**FEMA**

September 5, 2007

CERTIFIED MAIL  
Return Receipt Requested

Honorable Bud Norris  
Mayor of Mount Vernon  
PO Box 809  
Mount Vernon, Washington 98273

Dear Mayor Norris:

On September 4, 2007 the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) was notified by the City of Burlington Public Works Director that the Cities of Mount Vernon and Burlington intend to sign a joint resolution to independently prepare Flood Insurance Rate Maps that will apply only to the two cities. The resolution indicates that the cities will perform their own analysis outside of the current Skagit County-wide Flood Insurance Study (FIS) process.

Please be advised that the cities' resolution will not change the data currently being used to produce the Preliminary Flood Insurance Rate Maps (FIRM). Those maps will contain the authoritative data that has been generated, reviewed, and approved by the U.S. Geological Survey, U.S. Army Corps of Engineers, and FEMA with input from other local entities. The maps will still contain the base flood elevations and the special flood hazard area for unincorporated Skagit County (downstream of Sedro-Woolley) to the bays and will include the cities of Burlington and Mount Vernon.

However, as we have maintained from the outset of this study, we will use the best available data that is technically accurate in the formulation of our study and maps. FEMA has two formal processes to receive information like what you are planning to submit: the statutory 90-day appeals period and a Letter of Map Revision (LOMR) (Physical Map Revision). If we receive your data prior to, or during, the pending appeal period, we will consider your mapping and analysis (among any others received) as a formal appeal to the preliminary results shown on our maps. Appeals must be based on data that show the proposed base flood elevations to be scientifically or technically incorrect pursuant to 44 CFR Part 67.

If the data is received after the close of the appeal period, the cities may follow the LOMR-PMR process. In this instance, the data will be evaluated in the context of the current effective FIS and the preliminary FIS. There may be fees collected for this review. Any proposed revisions to the published or preliminary base flood elevations must meet section 65.6 of 44 Code of Federal Regulations.



Honorable Bud Norris  
September 5, 2007  
Page 2

Either as an appeal or a LOMR, FEMA will consider your information and will revise the maps if the data provided warrants such a change. If you have any questions about this letter, please contact Ryan Ike of my staff. He can be reached at the above address, or by calling (425) 487-4767.

Sincerely,



Carl L. Cook, Jr., Director  
Mitigation Division

cc: Jana Hanson, Director, Mount Vernon Community and Economic Development Dept  
Mayor Roger "Gus" Tjeerdsma, City of Burlington  
Chal A. Martin, P.E. Public Works Director / City Engineer, City of Burlington  
Margaret Fleek, Planning Director, City of Burlington  
James E. Voetberg, Director, Skagit County Public Works  
Chuck Steele, WA Dept of Ecology  
Col Michael McCormick, District Engineer, U.S. Army Corps of Engineers

RI:bb

U.S. Department of Homeland Security  
Region X  
130 228th Street, SW  
Bothell, WA 98021-9796

RECEIVED

JUL 27 2006

SKAGIT COUNTY  
PUBLIC WORKS ADMIN.



FEMA

July 17, 2006

Honorable Ted Anderson  
Chair, Skagit County Commissioners  
700 South 2<sup>nd</sup> Street Room 202  
Mount Vernon, Washington 98273

*811*  
*Dmitri*  
*Smick*  
*L. Linn*

RECEIVED  
JUL 25 2006  
SKAGIT COUNTY  
COMMISSIONERS

Dear Chairman Anderson:

On July 5, 2006, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) provided a copy of a status update letter to the Skagit County Council of Governments (SCOG). Initially, the SCOG appeared to be an efficient conduit for FEMA to disseminate information broadly to community stakeholders in Skagit County. However, some local officials have recently requested direct coordination. From this point forward, FEMA will correspond individually with each community in all matters associated with the ongoing Skagit River Flood Insurance Study.

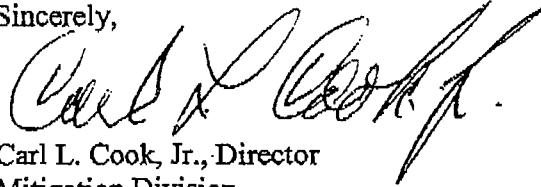
On June 28, 2006, the U.S. Army Corps of Engineers (USACE) provided FEMA with a copy of the first set of *draft* work maps covering the lower Skagit River floodplain from Sedro Woolley downstream to the Puget Sound as well as a copy of the hydraulic model used to produce the maps. The model is currently at FEMA's National Service Provider for technical review. These maps are the first of a series of maps that will eventually include the flood-prone areas along the Skagit River from Concrete to the sound as well as portions of the Sauk and Cascade Rivers. Please note that the current work maps do not yet include a depiction of the floodway. Pending the outcome of the internal FEMA technical review, we intend to task the Corp of Engineers with producing the next set of maps covering the upper Skagit River floodplain from Sedro Woolley to Concrete as soon as possible.

Pursuant to Part 66 of the Code of Federal Regulations (CFR), FEMA is required to consult with local officials during the initial scoping phase of a new flood insurance study. *As a matter of regional policy*, we periodically conduct additional meetings throughout the study phase to solicit community comments and address local concerns over the *draft* map portrayal of the flood risk. This should not be confused with Part 67 of the CFR pertaining to the official 90-day appeal period. Pursuant to Part 67, FEMA shall publish study results in the Federal Register, notify community officials via certified mail of proposed flood elevation changes, and publish the proposed flood elevation data in a prominent local newspaper at least twice. Upon the second publication, a 90-day appeal period will begin. During this time, interested parties may review the hydraulic and hydrologic data used to create the Flood Insurance Rate Maps (FIRMs) and submit any findings that conclusively demonstrate that FEMA is scientifically or technically incorrect. Please be advised that this has not yet occurred.

At this time, we would like to meet with your community's staff to discuss the technical aspects of the initial draft work maps. This meeting, referred to as an Intermediate Consultation and Coordination Officers' meeting (ICCO), is traditionally held with FEMA, the study contractor, USACE, and the affected community's engineering and planning staff. The purpose is to review the maps for cartographic accuracy, evaluate the initial base flood elevations, discuss map impacts on current and future floodplain permitting, and collect technical feedback to be included in the file prior to release as "Preliminary Flood Insurance Rate Maps." ICCO meetings are also an excellent way to establish a consultation process by which subsequent map releases will occur in your community.

I am the designated Consultation Coordination Officer for Region X. In Washington, I've delegated the responsibilities of this position to Ryan Ike of my staff. Please contact him directly to set up a meeting in your area. He can be reached at the above address, or by calling (425) 487-4767.

Sincerely,



Carl L. Cook, Jr., Director  
Mitigation Division

cc: Dave Brookings, Skagit County Public Works  
Chal Martin, Skagit County Public Works  
Kelley Moldstad, Executive Director, SCOG  
Allan Olsen, General Manager, Swinomish Indian Tribe  
Kenneth Hansen, Chairman, Samish Indian Tribe  
David Shaw, General Manager, Sauk-Suiattle Indian Tribe  
Stan Walsh, Skagit River System Cooperative  
US Congressional Delegation  
Department of Ecology

RI:gb

**Publication:**Skagit Valley Herald;**Date:**Jun 21, 2009;**Section:**Front Page;**Page Number:**A1

## The rising price of justice

### Latest cost estimate on new jail worries officials

By **RALPH SCHWARTZ** Staff Writer

The first cost estimate in four years for a new Skagit County jail has created some sticker shock.

The new number is so high — almost \$150 million to construct a facility that would house 708 inmates — that the small number of county officials who have seen the report won't brief the county commissioners on it anytime soon.

The first phase of the project includes only 428 beds and was expected to cost \$49 million in 2005. Now the cost per square foot has doubled, and with demolition and other site costs not considered in 2005, the new price tag is \$115 million just for the first phase.

"That's high," said Charlie Wend, a state community corrections supervisor who has been on the county Law and Justice Council since its inception in 1994. Although Wend is one of the project leads for the new jail, he hadn't seen the cost report, made available to the county in the first week of June, until a reporter showed it to him Tuesday.

Still, the cost wasn't a complete surprise to Wend.

"I knew all along this thing was going to be costly," he said.

Under the current plan, the new jail would have more than just cells. It would include courtrooms, county attorneys' offices, and mental health and chemical dependency treatment centers.

#### 'The full-meal deal'

One of the biggest reasons for the increased expense is the architect's proposal to elevate the jail 12 feet above ground to provide parking underneath the building and keep the first floor well above flood level.

At that height, the foundation alone would cost \$17 million for the full, 708-bed facility, which could be needed as early as 2025, according to the 2005 report.

The county commissioners selected the Alf Christianson Seed facility south of Kincaid Street in downtown Mount Vernon as the site of the proposed jail. The soil in the area is so unstable that the jail would need to be built on pilings set 90 feet into the ground, according to the architect's report.

"You're building on quicksand, basically," county Capital Facilities Manager Al Jongsma said.

Jongsma, one of a small number of county officials who have studied the report since it arrived earlier this month, believes he can find ways to cut costs significantly.

"I'm not comfortable at this point saying this is the best we can do with our cost figures," he said. "I'm all about trying to reduce this cost."

That's why the commissioners won't be fully briefed on the report for about 60 days, Jongsma said. He wants to use that time to bring the bottom line down to a more realistic level.

County Administrator Tim Holloran, who also has seen the report, said that scaling back the jail plan is not only possible, but it may be necessary in the current economic climate.

"It's the full-meal deal, and our economy is the brown-bag lunch," Holloran said. "It may not be the best design."

Jongsma, who has a background in construction, said there are two ways to save money on the foundation. Either eliminate the ground-level parking and buy more land for a parking lot, or make the building that sits on the pilings lighter, using less expensive materials.

Jongsma would recommend eliminating the parking under the building, but the decision will first be addressed by the Law and Justice Council and ultimately by the commissioners, he said.

To meet current flood-protection requirements, any building constructed on the Christianson Seed property must be at least 2 feet above ground level in any case.

### **The voters decide**

Building and then running a new jail will involve other costs that aren't yet known. Jongsma is waiting for an appraisal of the 10-acre Christianson Seed property, which he said was two weeks overdue on Wednesday.

The property would certainly cost the county several million dollars. The land alone on the two largest parcels on the property, about 6 acres, was valued at \$2.3 million in 2008 by the County Assessor's Office.

As county officials try to figure out how to pay for the new jail, they also must factor in the cost of day-to-day operations — mainly the salaries paid to jail staff. County Budget and Finance Director Trisha Logue said she doesn't have an estimate for operating costs yet. The 2005 estimate for operating costs, based on a slightly smaller jail and the lower wages of that time, was \$4.3 million a year.

County officials are planning for a ballot measure that would ask voters for a tax increase to pay for the jail.

The commissioners have said they are more likely to ask voters for a sales tax increase to finance the jail, rather than the potentially more unpopular property tax hike.

State law allows a maximum sales tax increase of 0.3 percent for law and justice programs.

Logue said a consultant is still working out how much the 0.3 percent increase would raise for a new jail.

There may be grant money available for energy-efficient construction or drug treatment, but the county has found nothing definite, Logue said.

Forty percent of any additional salestax revenue approved by voters would go directly to the cities. County officials said the cities need to agree to funnel that money to the county so it can pay off the bond, or else bear higher daily rates for putting people in the jail.

"It needs to be a partnership both of will and of money," Commissioner Sharon Dillon said. "They (the cities) need to believe in this, too."

The measure won't be on the ballot until next spring at the earliest, county officials have said.

### **'We can't wait'**

The jail's Web site, [www.skagitcounty.net/jail](http://www.skagitcounty.net/jail), includes a weekly statistics page that reports how many people were arrested but not jailed due to overcrowding, and how many inmates were released early because jail staff needed the bed for someone else.

The current jail, completed in 1984 and designed to house 83 inmates, was later remodeled to hold 180 beds. For the week ending June 13, the jail averaged 214 inmates.

In that same week, seven inmates were released early to relieve overcrowding, and 20 people who were arrested never made it to jail because there was no room.

On Tuesday, Chief Corrections Officer Gary Shand hadn't seen the architect's cost estimate, so he could not comment on it.

"I will tell you one thing: We can't wait. There's just no way we can wait," Shand said.

Another reason the jail is relatively expensive is that the plans include functions not found in the current jail: more courtrooms, and programs to help people manage mental illness or overcome alcoholism and drug addiction.

Wend, the government official who has worked on the jail proposal the longest, didn't want to see the new facility reduced to what he called a warehouse for offenders. "Reducing recidivism" is the mantra that law and justice officials won't easily give up.

"The sense I've had from a lot of the public is they want that treatment component included," Wend said. "In the long run, you save lots of dollars that way, and you prevent crime."

Commissioner Dillon, who is still months away from any major decisions on the jail, has spoken in favor of bringing treatment services inside the new jail. Last week, however, she was reluctantly willing to leave those services out, at least in the first phase, if the result is a jail the community can afford.

"It may not be something we can ask the voters to do," Dillon said of the more expensive option.

## Rogerson, Kevin

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**From:** Hanson, Jana  
**Sent:** Wednesday, July 08, 2009 11:55 AM  
**To:** Rogerson, Kevin  
**Subject:** FW: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

-----Original Message-----

**From:** Hanson, Jana  
**Sent:** Thursday, May 08, 2008 4:50 PM  
**To:** 'Ike, Ryan'  
**Cc:** Graves, John  
**Subject:** RE: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

Ryan,

Thank you for your response, however the questions that we need FEMA Region X's guidance are the hydrology, hydraulics and flood maps, in light of the effective FIRM and the on-going FIS of the Skagit River. If there were no on-going FIS, it would be very simple. We would use the effective hydrology (100-year flow 110,000 cfs at downtown Mt. Vernon), hydraulics (HEC-2 model) and the best map to revise the effective FIRM. But with the current on-going FIS which is still subject to review and formal adoption by FEMA, is FEMA suggesting that the not-yet-effective FLO-2D and the Corps hydrology be used for the map revisions? We don't have any problem to go either way, but we don't want to waste our efforts to go with one way and get a request later to go the other way. Anyway, FEMA Region X's guidance on this issue would be greatly appreciated.

Thank you Ryan.

Jana

-----Original Message-----

**From:** Ike, Ryan [mailto:ryan.ike@dhs.gov]  
**Sent:** Thursday, May 08, 2008 2:02 PM  
**To:** Hanson, Jana  
**Cc:** Graves, John  
**Subject:** RE: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

Jana,

Joe Weber, our Regional Engineer, moved his retirement date to tomorrow (from July). As such, we're currently without an engineer. The application forms necessary for either a CLOMR or LOMR are attached to this email. Unfortunately, we do not do a regional review of the data submittal. The expectation is that your study contractor would complete the application forms and attach all necessary supplemental studies required to support the designs. The completed packet would be submitted to the address listed on the MT-2 (in Alexandria, VA – see page 5). If there is missing documentation, you will receive a letter from FEMA indicating the missing data and be given 90 days to submit the documentation. In many instances of typical LOMRs, this “back-and-forth” data request/supply can occur a few times (in other words, it is normal to be asked for more documentation, etc). Once everything necessary to review your proposed revision is received, FEMA will do the analysis and provide a formal response.

Standards identified in 44CFR 65.10 “describes the types of information FEMA needs to recognize, on NFIP maps, that a levee system provides protection from the base flood.” Key word here is “types;” it does not state exactly in what format, etc. It is up to the study contractor and community to study, collect, and consolidate data necessary to substantiate design standards and demonstrate that all sub-elements of the regulations have been met. I've continued to advise Burlington that the USACE has many engineers on staff that are familiar with our standards (which are based on USACE levee design criteria). I encourage you to do the same.

Hopefully this helps. As for a meeting, I'm not sure how productive it would be until we have a staff engineer. Take a look at the MT-2 form and work with your consultant to determine what specific questions they have. Perhaps if you have specifics I can be of more assistance.

Regards,

Ryan Ike, CFM  
Chief, Risk Analysis Branch  
DHS - FEMA Region X  
(425) 487-4767 office  
(425) 213-9496 mobile

---

**From:** Hanson, Jana [mailto:janah@ci.mount-vernon.wa.us]  
**Sent:** Tuesday, May 06, 2008 9:06 AM  
**To:** Ike, Ryan  
**Subject:** FW: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

Ryan,

Have you had a chance to see check your calendar for a meeting in the next month, hopefully?

Jana

-----Original Message-----

**From:** Hanson, Jana  
**Sent:** Wednesday, April 30, 2008 5:18 PM  
**To:** 'Ike, Ryan'  
**Subject:** RE: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

Ryan,

We would like to meet with you in order to request formal guidance. Joe Weber or anyone else from your office is of course welcome to attend.

I'll look forward to hearing back from you when you return. Thanks,

Jana

-----Original Message-----

**From:** Ike, Ryan [mailto:ryan.ike@dhs.gov]  
**Sent:** Monday, April 28, 2008 5:54 PM  
**To:** Hanson, Jana  
**Cc:** Graves, John; Weber, Joseph  
**Subject:** Re: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

Jana, I'm back in DC right now. I'll coordinate with you when I return. In the mean time, perhaps Joe can help?

Ryan Ike, Chief  
Risk Analysis Branch  
FEMA Region X  
(425) 213-9496 mobile  
-----  
Sent using BlackBerry



-----Original Message-----

From: Hanson, Jana <janah@ci.mount-vernon.wa.us>

To: Ike, Ryan <ryan.ike@dhs.gov>

CC: Steele, Chuck (ECY) <CHST461@ECY.WA.GOV>; Bell, Esco <escob@ci.mount-vernon.wa.us>

Sent: Mon Apr 28 20:26:17 2008

Subject: Downtown Mount Vernon Flood Protection Project - Consultation with FEMA

Ryan,

The City of Mount Vernon has been actively pursuing all necessary engineering, environmental and permitting works for the Downtown Mount Vernon Flood Protection Project since 2005. It is the City's intent that the Project will be designed, constructed, operated and maintained to provide 100-year flood protection in the downtown area, in compliance with the FEMA levee standards specified at 44 CFR 65.10 of the NFIP regulations. As the Project proceeds into the design phase this summer, the City will need to submit an application for a Conditional Letter of Map Revision (CLOMR) to FEMA. In light of the effective FIRM since January 3, 1985 and the on-going Revised Flood Insurance Study of the Skagit River Basin that would result in revisions of the FIRM and complicate the matters, the City would like to request a consultation meeting with FEMA - Region X to seek FEMA official guidance on this CLOMR submittal. The guidance that the City is seeking from FEMA includes the appropriate application forms, hydrologic computations, hydraulic computations, topographic maps and revised FIRM to reflect changes due to the Project. Attached is a map showing the preliminary 100-year flood protection area of the Project.

Please let me know when you would be available to meet with me, Esco Bell the City's Public Works Director and Albert Liou.

Thank you Ryan, I look forward to hearing from you.

Jana Hanson, Director  
City of Mount Vernon Community and Economic Development Department  
PO Box 809 / 910 Cleveland Avenue  
Mount Vernon, WA 98273-0809  
Phone: (360) 336-6214  
Fax: (360) 336-6283