SKAGIT COUNTY
BOARD OF COMMISSIONERS

DON MUNKS, First District
KENNETH A. DAHLSTEDT, Second District
SHARON D. DILLON, Third District

COPY FOR Skagit River Impact Partnership Members

May 21, 2007

This letter also went to:

Kimberly Harris – Puget Sound Energy
Carl L. Cook Jr. - FEMA
Col. Michael McCormick - USACE
Cynthia Barton - USGS

Jorge Carrasco
Superintendent
Seattle City Light
PO Box 34023
Seattle, WA 98124-4023

Re: *Skagit River Hydrology Independent Technical Review – Final Report*

Dear Mr. Carrasco:

As you know, there has been much local concern over the published historic peak flows estimated by the United States Geological Survey (USGS) and their use within the US Army Corps of Engineers' (USACE) Skagit River flood frequency analyses. Inconsistency between these estimates and actual recorded flood peaks have lead to the belief that the 1897, 1909, 1917, and 1921 floods are overestimated and skew the 100-year peak flow. Late in 2006 Skagit County commissioned Northwest Hydraulics Consultants (nhc) to provide an independent technical review of this matter. We are pleased to report nhc has completed its review and a copy of the Final Report is enclosed for your information.

Skagit County now intends to pursue several recommendations made in the report and seek the assistance and cooperation of the USACE, USGS, Puget Sound Energy (PSE) and Seattle City Light (SCL) in doing so (see pages 28-29 for Conclusions and Recommendations). We are sending this letter to each of you, as well as FEMA, and request your response as appropriate to the following:

1. Assistance from USACE to initiate negotiations with SCL and with PSE to ensure availability of 120,000 acre-ft of flood control storage at Ross Dam and 74,000 acre-ft of flood control storage at Upper Baker Dam earlier in the flood control season and no later than November 1. (Consideration should be given to conditioning flood control storage requirements as early as October 1 each year on watershed moisture conditions and intermediate term weather forecasts.) As you can envision, implementing this recommendation has potential for huge flood damage reduction savings for moderate flood events occurring earlier in the flood control season when current flood pool storage requirements are not in effect.

2. Clarification from USGS regarding the potential for additional paleoflood studies to further reduce uncertainty in Skagit flood frequency analyses. (USGS proposed such a study in late 2006 that targets the pre-settlement floods of around 1856 and 1815: estimated to take 2 years and require $180,000 in non-USGS funding.) For example, can the proposed work produce estimates of the magnitude of these events? Can the proposed work establish a time period within which the 1815 event was the largest event?

3. Assistance from USGS installing a staff gage at the original site of the Concrete gage to compare water surface elevations at both the current and original locations during future flood events. Do

you concur that this data could be used to better account for the hydraulic fall occurring between the current gage site and the original gage site?

Additionally, we request more information from USGS, the Federal Emergency Management Agency (FEMA) and USACE regarding the possible use of the Expected Moments Algorithm (EMA) methodology for Skagit River flood frequency analyses to potentially improve the accuracy of the analyses by better accommodating uncertainty o. the peak discharge of historic flood events. To help Skagit County better understand and evaluate the merits of pursuing EMA, we need to know the technical and institutional feasibility of each of these federal agencies for using EMA to refine the current 100-year base flood estimates for the Skagit River near Concrete. For this purpose, please respond to each of the following:

a) the merits of using EMA as opposed to Bulletin 17B;
b) your agency's acceptability of using EMA;
c) institutional issues resulting from possible revisions to the current flood peak estimates, including scheduling and budgetary considerations;
d) the process for review and acceptance of revised flood peak estimates; and,
e) the process for establishing acceptable ranges of uncertainty and time periods for historic peak flow values.

Skagit County appreciates the work performed by the federal agencies and the Baker and Skagit River dam operators to help minimize and manage threats from Skagit River flooding. We look forward to your responses to this letter by June 30, 2007 so we can evaluate all the responses with other local stakeholders and determine what next steps are warranted and necessary.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
SKAGIT COUNTY, WASHINGTON

Sharon D Dillon
SHARON D. DILLON, Chair

Don Munks
DON MUNKS, Commissioner

Kenneth A. Dahlstedt
KENNETH A. DAHLSTEDT, Commissioner

BCC/ejb

Encl.

cc: Skagit River Impact Partnership Members
Congressman Rick Larsen