MEMORANDUM OF AGREEMENT BETWEEN SKAGIT COUNTY, THE CITY OF BURLINGTON, THE CITY OF MOUNT VERNON, SKAGIT COUNTY DIKING DISTRICT NO. 1, SKAGIT COUNTY DIKING DISTRICT NO. 12, AND THE FEDERAL EMERGENCY MANAGEMENT AGENCY REGARDING DETERMINATION OF 100-YEAR FLOOD CONDITIONS ON THE LOWER SKAGIT RIVER, WASHINGTON

1. **Parties:** This Dispute Resolution Agreement ("Agreement") is entered between the City of Burlington, the City of Mount Vernon, Skagit County, Skagit County Diking District No. 1, and Skagit County Diking District No. 12 (collectively, the "Skagit Partnership"). Collectively, the Skagit Partnership and FEMA shall be referred to as the "Parties."

2. **Scope:** This Agreement governs the use of an Independent Scientific Panel (the "Panel") to resolve certain issues related to FEMA's current flood mapping and flood insurance studies regarding the Skagit River in Skagit County, Washington. In particular, the Panel would be charged only with selecting the most scientifically and technically correct 100-year regulated discharge hydrograph for the Skagit River near Sedro-Woolley, Washington, together with the most appropriate concurrent discharge hydrograph for Nookachamps Creek. The two selected hydrographs shall provide the hydrologic basis for any FEMA flood insurance studies and flood damage reduction studies for the lower Skagit River, including but not limited to all Flood Insurance Rate Maps ("FIRM") for this region.

3. **Effect:** The Panel’s decision shall substitute for any appeal provided under 44 C.F.R. § 67.5 and shall serve the same purpose as the independent scientific body provided for in 44 C.F.R. § 67.8(b). The Panel's choice of hydrographs shall be final and binding on all parties for the purposes of an administrative appeal under 44 C.F.R. § 67.5 and shall form the sole hydrologic basis for any FEMA flood insurance studies and flood damage reduction studies for the lower Skagit River, including but not limited to all Flood Insurance Rate Maps ("FIRM") for this region. FEMA shall not issue any FIRM inconsistent with the Panel's hydrographs. All other matters related to the FEMA flood insurance studies and flood damage reduction studies not specifically contained within this Paragraph, including but not limited to issues related to levee or levee failure policies, are preserved.

4. **Definitions:** Any term not specifically defined in this Agreement shall have the same meaning as that term is given in 44 C.F.R. § 59. The term “100-year regulated discharge hydrograph for the Skagit River near Sedro-Woolley” (hereinafter "100-year Skagit River Hydrograph") shall mean: a graph showing the variation of river discharge with time at the location of the U.S. Geological Survey streamflow gage “Skagit River near Sedro-Woolley” (USGS gage 12199000) for a flood event with an exceedance probability of 1% and which accounts for the effects of authorized flood control regulation at the Skagit River Hydroelectric Project and the Baker River Hydroelectric Project. The term “concurrent discharge hydrograph for Nookachamps Creek” (hereinafter “Concurrent Nookachamps Creek Hydrograph") shall mean: a graph showing the variation of river discharge with time for Nookachamps Creek at its confluence with the Skagit River which would occur coincident with the 100-year regulated discharge hydrograph for the Skagit River near Sedro-Woolley but in the absence of backwater effects from the Skagit River. The term “lower Skagit River” shall mean: the Skagit River and
its associated floodplain and distributaries downstream from the USGS streamflow gage “Skagit River near Sedro-Woolley”.

5. **Panel Membership:** The Panel shall consist of three independent experts in the fields of hydrology and hydraulic engineering. At least one panelist shall be a Hydrologist with expertise in hydraulics, and at least one panelist shall be a Hydraulic Engineer with expertise in hydrology. Panel members may not be employees of any Party, but may be employees of agencies of the United States other than FEMA or the U.S. Army Corps of Engineers. No Panel member shall have previously conducted a review of hydrological conditions or data for any Party to the Agreement.

6. **Panel Selection:**

   a. Within 15 days of the execution of this agreement, the Skagit Partnership agrees to propose an initial pool of up to five qualified, independent experts to serve as Panel members.

   b. Within 15 days of receipt of the Skagit Partnership’s proposed Panel members, FEMA may select a pool of up to five additional qualified, independent experts to propose as Panel members, or may agree to choose the final three Panel members from the Skagit Partnership’s proposed Panel members.

   c. Any party proposing a Panel member for consideration must compile relevant information regarding that expert’s qualifications, including relevant curriculum vitae for each expert and any relevant scholarly, technical, or scientific research or publications in which the proposed Panel member participated. This information shall be provided at the time the Panel member is proposed.

   d. Any proposed Panel member shall disclose to the Parties any circumstance likely to impact the Panel member’s impartiality or independence, including any bias, or any financial or personal interest in the Panel’s determination, or any past or present relationship with any of the Parties or with the U.S. Army Corps of Engineers or the U.S. Geological Survey. This information shall be provided before the final Panel members are selected and the Parties may take this information into consideration when selecting the Panel members.

   e. Within 15 days of compiling the complete list of proposed Panel members, the Parties agree to meet to discuss the qualifications of each proposed panelist. If possible, the Parties shall select the members of the Panel by consensus. If the Parties are unable to agree regarding the membership of the Panel, the Parties agree to employ the following procedure to select the Panel members:

      1. FEMA and the Skagit Partnership will each be given three preemptory strikes that they may exercise against the Panel members proposed by the other Party.
The Parties will independently rank the remaining proposed Panel members in order of preference. The three proposed Panel members with the highest cumulative ranking by both Parties shall be selected to serve on the Panel such that a Panel having three members is designated.

iii. In the event of a tie, the Parties will select the top ranked two proposed Panel members. These two Panel members will select the third Panelist from the two remaining proposed Panel members.

f. Once the final Panel is selected, the Panel members may appoint a chairperson to manage the Panel deliberations and proceedings.

g. In the event a Panelist is unable to serve for any reason, the process set forth in subsection 6(e) above shall be employed to select another Panelist.

7. Contact with Panelists: The Parties agree not to communicate ex parte with any Panel member or proposed Panel member concerning their assignment on the Panel, except that the Parties may communicate with a proposed Panelist to determine their qualifications, availability, interest, and independence in relation to service on the Panel, or with a member of the Panel regarding ministerial or scheduling matters.

8. Panel Procedures:

a. According to the timeline established in Section 11, the Panel shall convene to consider any presentation by interested parties, including the individual members of the Skagit Partnership and FEMA. Any interested party may submit a 100-year Skagit River Hydrograph and/or a Concurrent Nookachamps Creek Hydrograph to the Panel, or may present any other presentation materials provided that the presentation contains valid technical or scientific data as set forth in the subparts of this Section. The Parties are not required to join any other participant or interested party’s proposal.

b. Any presentations to the Panel shall include relevant scientific and technical information and analysis regarding the 100-year flood event for the Skagit River near Sedro-Woolley and/or concurrent flows on Nookachamps Creek. Any presentation may include a proposed regulated discharge hydrograph to govern the determination of the 100-year flood conditions on the lower Skagit River. Any interested party who does not wish to submit a proposed hydrograph may present other scientific and technical information to the Panel that may be used to inform the Panel’s decision.

c. There shall be no restriction on information presented to the Panel, however, the sources for all information shall be cited and all significant assumptions justified. There shall be no presumption of validity as to the position of any party presenting information to the Panel. The Panel shall review all information presented on its own merits.
d. Analyses presented by Parties or interested persons or parties shall use well-documented and technically defensible approaches, including but not limited to methodologies incorporated into existing Federal or State regulations, guidelines, or engineering manuals. The validity or appropriateness of the methodologies used by the various parties shall be determined on their technical merits by the Panel irrespective of their adoption by Federal or State agencies.

9. **Panel Findings and Determinations:** Within 30 days of the conclusion of all presentations, the Panel shall render its decision by selecting the 100-year Skagit River Hydrograph and Concurrent Nookachamps Creek Hydrograph which it believes are most scientifically and technically correct to use in determining the 100-year flood conditions on the lower Skagit River. The Panel’s determination shall be made on the basis of the technical information and analyses presented by the parties. The panel shall select from among the hydrographs presented by the parties and shall not generate its own hydrograph. At the time it issues its decision, the Panel shall state the basis for its findings.

10. **Modifications of Panel Hydrograph:** The hydrograph chosen by the Panel may be modified only if significant new information becomes available or if significant changes occur in the Skagit River basin upstream of Sedro-Woolley or in the Nookachamps Creek basin. Significant new information would include the occurrence of a flood or floods large enough to warrant reassessment of flood risk or the availability of significant new historic or paleo flood data. Significant changes to the basin upstream from Sedro-Woolley would include changes in flood control operating policies at upstream reservoirs. New information does not include any further analysis of hydrological or other data that was presented to the Panel, or that reasonably could have been presented to the Panel, by any of the Parties or any other interested party.

11. **Timing of Panel Presentations and Deliberations:** The Parties agree that the Panel review process should commence as soon as possible so as not to delay the issuance of the FEMA flood insurance studies or flood reduction studies regarding the lower Skagit River. The Parties agree to convene the Panel prior to FEMA’s issuance of the FIRMs for the lower Skagit River. The Parties agree that the following time frames should apply to the Panel selection and deliberations:

   a. The Parties agree to finalize the selection of the Panel members no later than 45 days after the execution of the Agreement.

   b. The Parties and any interested party shall have 90 days from the date of the execution of this agreement in which to submit their proposed 100-year Skagit River Hydrograph and Concurrent Nookachamps Creek Hydrograph or other scientific and technical information to the Panel.

   c. All materials submitted to the Panel shall be publicly available. Any party to this Agreement or any member of the public shall have the right to make a counter statement to the Panel either in the form of a presentation or in writing regarding any material submitted to the Panel.
d. After the conclusion of this 90 day period, the Panel shall have 60 days to convene to review any presentations by interested parties, including presentations explaining or describing any material submitted. The Panel shall convene as necessary within this 60 day period to hold a hearing or hearings to consider such presentations regarding materials submitted by the Parties or the public. The Panel shall convene in Skagit County, Washington at a location to be determined.

e. It being the intent of the Parties to facilitate in-person, direct, and open communication with the Panel, the Panel may, at its sole discretion, convene additional meetings to pose questions or to obtain feedback from the Parties or any interested parties during its deliberations. Any meetings may by in person or by telephone. All Parties shall be notified in advance of any such meetings and given an opportunity to attend the meetings.

f. The Panel shall issue its findings within 30 days of the conclusion of all presentations.

12. **Remedy for Breach of Agreement**: The terms of this Agreement may be enforced by the Parties in United States Federal Court, or in any other court of competent jurisdiction.

13. **Public Participation**: The Parties encourage public participation in this process and agree to publicize the procedures detailed in this Agreement to allow for public notice and participation.