SUPERIOR COURT OF WASHINGTON FOR SNOHOMISH COUNTY

LEONARD and JEANNE HALVERSON, husband and wife, et al.,

Plaintiffs,

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VS.

SKAGIT COUNTY, a municipal corporation,

Defendant.

SKAGIT COUNTY, a municipal corporation,

Third-Party Plaintiff,

vs.

STATE OF WASHINGTON,

Third-Party Defendant.

NO. 93-2-05201-2

RULE 26(B)(4) STATEMENT REGARDING EXPECTED OPINIONS OF PLAINTIFFS' EXPERT WITNESSES

Plaintiffs now expect to call as expert witnesses, as part of their case in chief, one or more of the following: Gerald Mutter, Richard Regan and Larry Kunzler. Pursuant to Civil

Rule 26(b)(4) plaintiffs hereby provide the following information relating to those prospective witnesses.

1. Gerald Mutter, Ph.D.

Dr. Mutter is a principal of Northwest Hydraulic Consultants, Inc., and holds a Ph.D. in Civil Engineering (with specialization in hydraulics and fluid mechanics), an M.Sc. in Civil Engineering (with specialization in hydraulics and river engineering) and B.Sc. in Civil Engineering. A copy of his resume has been previously provided. Plaintiffs expect Dr. Mutter to testify on the following subjects:

- a. How the levee system between Mount Vernon and Sedro Woolley affects the Nookachamps ("Nookachamps" refers to the area at issue in this litigation) during flooding events.
- b. The nature of the water that floods the Nookachamps during flooding events, i.e., surface water or diverted river water;
 - c. The amount of water diverted onto plaintiffs' property expressed as a range;
- d. The relationship between the flow of Skagit River water and various structures, including the Burlington Northern Bridge.
- e. Whether the temporary berm erected along the shoulder of Highway 20 was erected in response to a problem created by the levee system and/or was a foreseeable response to the 1990 flood event.

The substance of the facts and opinions to which Mr. Mutter is expected to testify is as follows:

- a. The levee system diverts and artificially stores significant quantities of Skagit River water in the Nookachamps area during significant flood events. This is water which originates from the Skagit River (perhaps having come from tens of miles upstream) and which escapes into the flood plain adjacent to the main channel on those occasions when the channel capacity is insufficient to convey all flood flow.
- b. Absent the levee system there would be a decrease in water surface elevations in the Nookachamps area during flood events comparable to that which occurred on November 25, 1990.

- c. Absent the levee system, during high water events the flow of the Skagit River water would inundate the historic or original flood plain through Burlington and north Mount Vernon and on occasion would drain in a northwesterly direction through the Samish Valley into Padilla Bay.
- d. The vast majority of the water that occupies the Nookachamps area during significant flood events, including the events of 1990, originates in the Skagit River and is Skagit River water. Although some of the water that occupied the Nookachamps area in the 1990 events originated in Nookachamps Creek and other local drainage basins, our analysis indicates that typically the majority of such local runoff at this site occurs 24 to 48 hours prior to the occurrence of the peak flow of the Skagit River at Mount Vernon. Any remaining local runoff (after the 1990 Skagit River peak occurred) would have been able to drain harmlessly.
- e. Although the Nookachamps area is in a flood plain, and parts of it would be subject to flooding if the levee system were not there, the levee system causes an increase in flood elevation that can make a material difference in the nature and extent of damage caused and causes certain areas to experience flooding that otherwise would not. The degree of flooding caused each plaintiff by the Skagit levee system is, depending on location and event, as much as 4 feet. The precise amount for each plaintiff is the subject of continuing analysis and investigation.
- f. The defendants have, during at least the past 20 years, performed construction and maintenance activities to strengthen the levee system, in a variety of ways, to prevent its failure through mechanisms other than overtopping. This had the effect of decreasing the likelihood of levee collapse, and ensuring that plaintiffs will not receive any relief associated with such a failure. An example of such potential relief was provided by the collapse of levees surrounding Fir Island, near the mouth of the Skagit River, in the November 1990 floods. Upon failure of those levees, water levels in the Skagit River for a considerable distance upstream fell rapidly, providing significant relief for those at risk upstream from Fir Island. Strengthening of the levees between Mount Vernon and Sedro Woolley since 1975, even if levees were not raised during this period, has decreased the probability of levee collapse in this area and therefore reduced the likelihood that residents of the Nookachamps would experience any flood relief from downstream levee failure.

The following is a summary of the grounds for Dr. Mutter's opinions: a.His professional knowledge and experience;

- b. The complaints filed in this case;
- c.Transcripts of depositions taken in this litigation, including, but not limited to Rodney Archer, Noel Gilbrough, Leonard Halverson, Patricia Mae Howell, Larry Kunzler, Gerald Mapes, Ronald Mattox, Howard Miller and Peter Walker;
- d.Documents produced in the course of this litigation, including, but not limited to:
 - 1.1923 USGS Report by Stewart on Skagit River Flood Control Issues (Exhibit 10 to Gilbrough Deposition);
 - 2.1932 Army Corps Report on Skagit River Flood Control (Exhibit 11 to Gilbrough Deposition);
- 3.1937 Army Corps Report on Skagit River Flood Control (Exhibit 12 to Gilbrough Deposition);
 - 4.1940 Army Corps Report on Skagit River Flood Control (Exhibit 13 to Gilbrough Deposition);
 - 5.1978 Army Corps Public Brochure on Levee Improvements (Exhibit A to Johnson Declaration in support of plaintiffs' opposition to defendants Motion for Partial Summary Judgement);
 - 6.1978 Army Corps General Design Memorandum Re: Lower Skagit River Levee Improvement Project;
 - 7.1993 Army Corps Draft Report on Reconnaissance Survey (Exhibit 1 to Gilbrough Deposition);
 - 8.USGS Quadrangle Maps;
 - 9. Army Corps Topographic Maps from the 1978 Lower Skagit River Levee Improvement Project (previously produced to Skagit County in this lawsuit);
 - 10. Survey Notes from a survey of levees produced by Skagit County in this lawsuit; and
 - 11.1990 Memorandum from Mr. Brookings to Skagit County Commissioners Re: Highway 20 Flood Fight (ACOE00000194 ACOE00000198).

2. Richard Regan.

Mr. Regan's credentials and resume were provided during his recent deposition.

Plaintiffs expect Mr. Regan to testify on the following subjects as well as testimony arising from his knowledge as a fact witness:

- a. The history of the Skagit River and the development of the levee system;
- b. Flood control and its impact on upstream and downstream communities;
- c. What a flowage easement is;
- d. The 1979 Army Corps of Engineers Levee Improvement Project.
- e. How the levee system between Mount Vernon and Sedro Woolley affects the Nookachamps during flooding events.
- f. The nature of the water that floods the Nookachamps during flooding events, i.e., surface water or diverted river water;
- g. The relationship between the flow of Skagit River water and various structures, including the Burlington Northern Bridge.

The substance of the facts and opinions to which Mr. Regan is expected to testify is as follows:

- a. The levee system diverts and artificially stores significant quantities of Skagit River water in the Nookachamps area during significant flood events. This is water which originates from the Skagit River (perhaps having come from tens of miles upstream) and which escapes into the flood plain adjacent to the main channel on those occasions when the main channel capacity is insufficient to convey all flood flow.
- b. Absent the levee system there would be a decrease in water surface elevations in the Nookachamps area during flood events comparable to that which occurred on November 25, 1990 in a range of up to 4 feet.
- c. Absent the levee system, the flow of the Skagit River during flood events would inundate the historic or original flood plain through Burlington and north Mount Vernon and on occasion would drain in a northwesterly direction through the Samish Valley into Padilla Bay.
- d. The vast majority of the water that occupies the Nookachamps area during significant flood events, including the events of 1990, originates in the Skagit River.

- e. The defendants have, during at least the past 20 years, performed construction and maintenance activities to strengthen the levee system, in a variety of ways, to prevent its failure through mechanisms other than overtopping. This had the effect of decreasing the likelihood of levee collapse, and ensuring that plaintiffs will not receive any relief associated with such a failure. An example of such potential relief was provided by the collapse of levees surrounding Fir Island, near the mouth of the Skagit River, in the November 1990 floods. Upon failure of those levees, water levels in the Skagit River for a considerable distance upstream fell rapidly, providing significant relief for those at risk upstream from Fir Island. Strengthening of the levees between Mount Vernon and Sedro Woolley since 1975, even if levees were not raised during this period, has decreased the probability of levee collapse in this area and therefore reduced the likelihood that residents of the Nookachamps would experience any flood relief from downstream levee failure.
- f. In 1979 the Army Corps proposed a project that would have "improved" the protection afforded by the levees. Prior to commencing the improvements the proposed project was publicized and the Army Corps held workshops with members of the public. At these workshops residents of the Nookachamps, as well as other areas, expressed their concerns about the proposed project. In response the Army Corps modified the project.
- h. Skagit County and the diking districts could alleviate the impact of the levees with a minimal impact on areas that are now protected.
- i. Other alternatives to the use of the Nookachamps as a storage area existed and were available to the defendants.

The following is a summary of the grounds for Mr. Regan's opinions: a.His professional knowledge and experience;

- b. The complaints and other pleadings filed in this case;
- c.Transcripts of depositions taken in this litigation including, but not limited to Rodney Archer, Noel Gilbrough, Leonard Halverson, Patricia Mae Howell, Larry Kunzler, Gerald Mapes, Ronald Mattox, Howard Miller and Peter Walker;
- d.Documents produced in the course of this litigation, including, but not limited to:
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 - 10. Survey Notes from a survey of levees produced by Skagit County in this lawsuit; and
 - 11.1990 Memorandum from Mr. Brookings to Skagit County Commissioners Re: Highway 20 Flood Fight (ACOE00000194 ACOE00000198).

3. Larry Kunzler

Larry Kunzler is a resident of Skagit County, author and Historian of the Skagit Diking System. He has studied and investigated the Skagit Diking System for over a decade and has reviewed the Skagit County's Public Archives and newspaper accounts of floods, attended multiple meetings with Skagit County officials as well as representatives of the Army Corp of Engineers and numerous others involved with the Skagit Diking System.

Plaintiffs expect Mr. Kunzler to testify on the following subjects.

(a) The history of the Skagit River and the development of the levee system;

(b) Skagit County's knowledge of the potential impacts of the levee system on plaintiffs;

(c) Efforts of Skagit County representatives to disclose accurately how the Skagit

County levee system operates during significant flood events;

(d) The relationship between the Skagit County, the Diking Districts, the Corp of

Engineers and the State of Washington.

(e) Historical political activities relating to flood control in Skagit County;

(f) Skagit County's failure to require certain permits for activities on the levee system;

and

(g) Efforts of Skagit County to reduce the impacts of significant flood events upon

plaintiffs.

Mr. Kunzler is not expected to provide any opinions but he will detail what the public

record and a comprehensive literary search reveal on the above subject matters.

As to each witness, plaintiffs may, in their case in chief, expand the subject of their

opinions upon results of further analysis and investigation and receipt of defendants'

disclosures.

DATED: October 2, 1995.

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