[Service Date No	ovember <u>5</u> , 2007]
Exhibit No	(MW-1T)

BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

)
BNSF RAILWAY COMPANY,) DOCKET TR-070696
Petitioner,	
v.) PREFILED WRITTEN
CITY OF MOUNT VERNON) TESTIMONY OF MARK) WATKINSON
Respondent.)
And	
SKAGIT COUNTY, WASHINGTON)
STATE DEPARTMENT OF TRANSPORTATION, and WEST)
VALLEY FARMS, LLC,)
Intervenors))
)

- Q: Please state your name, full job title, and business address.
- 2 A: Mark Watkinson, Skagit County Department of Emergency Management
- Coordinator, 2911 E. College Way, Suite B, Mount Vernon, WA 98273.

5		LED WRITTEN TESTIMONY OF MARK WATKINSON
6	Q:	How long have you been employed at your current position?
7	A:	I have been employed as the Skagit County Department of Emergency
8	Manag	gement Coordinator for over 17 years. I have been employed by Skagit County for
9	over 2	2 years, both in my current capacity, and as an Engineering Technician and Field
10	Engine	eer for the Skagit County Public Works Department.
11		
12	Q:	What are your qualifications?
13	A:	Please see the copy of my resume, attached hereto as Exhibit "A" and fully
14	incorp	orated herein by reference.
15		
16	Q:	Please describe the nature of your position as Skagit County Department of
17	Emerç	gency Management Coordinator.
18	A:	Please see the copy of my resume (attached hereto as Exhibit "A"). Please also
19	see th	e copy of my job description attached hereto as Exhibit "B" and fully incorporated
20	herein	by reference.
21		
22	Q:	How often does flooding occur in Skagit County?
23	A:	Since 1975, flooding has occurred on an average of once every two (2) years in
24	Skagit	County. Recent major flood events resulting in Presidential Disaster Declarations
25	occurr	red in December, 1975; December, 1979; November, 1990 (2 events); November,
26	1995 ((2 events); February, 1996; October, 2003; and November, 2006. Since 1815

there have been thirty five (35) recorded flood events on the Skagit River. Additional

information regarding Skagit River Recorded Discharges from 1815 through 2006,

illustrating a total of thirty five (35) flood events since 1815, is attached hereto

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	DOCKI	ET TR-070696	PAGE 3
30		ED WRITTEN TESTIMONY OF MARK WATKINSON ibit "C" and incorporated by reference. Additional general informatio	n regarding
31	annual	flood risk awareness in Skagit County is attached hereto as Exhibit	"D" and is
32	incorpo	prated by reference.	
33			
34	Q:	Can you briefly describe the County's role in this coordinated f	lood fighting
35	efforts	?	
36	A:	Operating under the authority of the Skagit Board of County Comm	nissioners,
37	represe	entatives from the Skagit County Public Works Department, the Skag	git County
38	Sheriff'	s Office, the Skagit County Health Department, and the Skagit Cour	nty
39	Depart	ment of Emergency Management form a Unified Command to overs	ee a flood
40	fight or	ganization that operates within the Skagit County Emergency Opera	tions Center
41	at 2911	1 East College Way, Mount Vernon, WA. This group is organized in	conformance
42	with the	e National Incident Management System (NIMS) protocol and provid	les public
43	informa	ation, collects and disseminates critical incident information to other	agencies and
44	jurisdic	ctions, coordinates evacuations and the establishment of emergency	shelters,
45	and pro	ovides a central point-of-contact for requesting resources needed to	conduct flood
46	fight ac	ctivities for the purpose of protecting life, property, and the environment	ent.
47			
48	Q:	In the event of a levee failure in the vicinity of the crossing, wh	at could
49	happe	n?	
50	A:	Depending on the severity of the failure or breach, the entire area c	ould be

inundated with flood water in very short time. Significant property damage, potentially

significant injuries, or even loss of life could occur.

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Q: In the event of a severe failure of a levee in the vicinity of the crossing, how much time would people have to evacuate?

A: Depending on the severity of the failure, and depending on the location of the residents in relation to the failure, persons could have anywhere from just a few minutes to several hours to evacuate.

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Q: Does the County have designated evacuation routes in the event of an emergency requiring evacuation (including flooding)?

Yes, the County does have officially designated emergency evacuation routes. A: These routes are depicted on the map attached hereto as Exhibit "E" and incorporated by reference. These evacuation routes (and the map) were established prior to 1995. These routes are generally comprised of major roads within the County (with a specific focus on providing multiple points of local access and redundancy). Local access to these evacuation routes in the event of a significant emergency (such as a levee failure) is very important in order to help ensure public safety and order in the event of the need for evacuation. As is evident on the map, the Hickox Road crossing is in direct proximity to one of the most significant evacuation routes in the entire County (I-5). Hickox Road is crucial in providing local access to this evacuation route, and also in providing the most proximate and direct access to higher ground located on the east side of I-5. Hickox Road would be especially important in the event that flooding has rendered other local access roads (such as Dike Road, Britt Road, or West Stackpole Road) impassible. Given the proximity of these local access routes to levee infrastructure, it is possible that these and/or other local access roads could be rendered impassible if flooding occurred in the vicinity of the crossing (either by flood waters and/or by equipment and/or local

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PREFILED WRITTEN TESTIMONY OF MARK WATKINSON

agency personnel engaged in monitoring, maintaining, repairing, and/or reinforcing the levees). As such, even though Hickox Road is not formally designated as an evacuation route, Hickox Road is nevertheless important and significant in providing local evacuation access and in providing local access for flood fighting efforts. There is a significant public need for the Hickox Road crossing to remain open to provide for such access.

Q: What would be the impact on local evacuation and flood fight response if the Hickox Road railroad crossing were closed?

A: Closure of the Hickox Road railroad crossing would have a negative impact on the ability of local residents to evacuate in the event of an emergency, and it would also have a negative impact on the ability of local agencies to provide flood fight response in the vicinity of the crossing. Closure of the crossing could endanger lives and property, and could pose a significant threat to public health and welfare in the event of a flood emergency. Given the location of the crossing to flood control infrastructure in the area (levees), in the event of a significant flood event other evacuation routes may be blocked by floodwaters, and/or congested with evacuees and/or flood fighting equipment and/or personnel. The Hickox Road crossing also provides a direct route and access to the Meridian Quarry, which is used to obtain flood fighting materials, and lies to the east of the crossing. In light of the forgoing, closure of the Hickox Road crossing would not serve or promote the interest of public safety.

DECLARATION.

I, Mark Watkinson, declare under penalty of perjury under the laws of the State of Washington that the forgoing PREFILED DIRECT TESTIMONY OF MARK WATKINSON is true and correct to the best of my knowledge and belief.

DATED this ZND day of November, 2007

Mark Watkinson

DATED this $\frac{2}{}$ day of November, 2007

Stephen R. Fallquist, WSBA # 31678
Deputy Prosecuting Attorney, Civil Division
Skagit County

CERTIFICATE OF SERVICE

Judy Kiesser states and declares as follows:

I am a citizen of the United States of America, over 18 years of age and competent to testify to the matters set forth herein. On November ________, 2007, I caused to be served by first class mail, postage prepaid, a true and correct copy of the foregoing document entitled PREFILED WRITTEN TESTIMONY OF MARK WATKINSON on the following:

JOHN LI, MANAGER
PUBLIC PROJECTS
BNSF RAILWAY COMPANY
2454 OCCIDENTAL AVE S, STE 1A
SEATTLE WA 98134-1451

BRADLEY P. SCARP, ESQ. 1218 THIRD AVENUE, 27TH FLOOR SEATTLE, WA 98101

JONATHAN THOMPSON, AAG OFFICE OF THE ATTORNEY GENERAL PO BOX 40128 OLYMPIA, WA 98504-0128

GARY T. JONES JONES & SMITH PO BOX 1245 MOUNT VERNON, WA 98273

BRIAN K. SNURE SNURE LAW OFFICE 612 S 227TH STREET DES MOINES WA 98198

ADAM E. TOREM 1300 S. EVERGREEN PARK DR. S.W. P.O. BOX 47250 OLYMPIA, WA 98504-7250

L. SCOTT LOCKWOOD, AAG OFFICE OF THE ATTORNEY GENERAL PO BOX 40113 OLYMPIA, WA 98504-0113

DOCKET TR-070696 PREFILED WRITTEN TESTIMONY OF MARK WATKINSON

KEVIN ROGERSON CITY ATTORNEY CITY OF MOUNT VERNON 910 CLEVELAND AVE., MOUNT VERNON, WA 98273

DATED this 5 day of November, 2007.

Judy Kiesser, Legal Assistant

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DOCKET TR-070696 PREFILED WRITTEN TESTIMONY OF MARK WATKINSON

Exhibit	No.	((MW-2))

EXHIBIT "A"

RESUME OF MARK WATKINSON

Mark Watkinson 16936 Bradshaw Road Mount Vernon, WA 98273

EDUCATION:

Skagit Valley College; Mount Vernon, WA 1982 - 1984

CIVIL ENGINEERING TECHNOLOGY; Associate in Technical Arts Degree with High Honors

University of Puget Sound; Tacoma, WA 1970 – 1975 Major: Geology-Natural Science and Education

Mount Vernon High School; Mount Vernon, WA 1966 - 1970

PROFESSIONAL WORK EXPERIENCE:

Skagit County Department of Emergency Management: March, 1990 – Present

Primary Responsibilities:

- Maintain an integrated emergency management program for the benefit of local governmental jurisdictions and the citizens of Skagit County.
- Support county and municipal elected officials and agencies in the delivery of disaster response and recovery services to protect life, property, and the environment.
- Develop and maintain cooperative working relationships with local elected and appointed officials.
- Coordinate inter-jurisdictional and inter-agency emergency planning and exercise activities to meet the needs of county and municipal agencies.
- Establish long-term emergency planning goals for the department.
- Insure the operational readiness of the Skagit County Emergency Operations Center.
- Coordinate the compilation and timely submittal of all documents necessary to support the federal disaster declaration process following local emergency events.
- Develop, coordinate, and deliver the Community Emergency Response Team (C.E.R.T.)
 Program within Skagit County for the benefit of the public, schools, and businesses.

Significant Experiences:

- 1992-1994: Served on a state-wide committee to develop the Washington State Fire Services Resource Mobilization Plan.
- 1995: Presenter Washington State Department of Natural Resources Top Management Tour ... Wildland Fires in the Urban Interface a look at Cascade Ridge, Skagit County.
- 1997: Trainer Washington State Emergency Management Division Fire Mobilization Tabletop Exercise.
- 2000: Developed and instituted the Skagit County Community Emergency Response Team (C.E.R.T.) Program in partnership with the Mount Vernon Fire Department.
- 2002-2003: Served as the lead project coordinator and plan writer for the Skagit County Natural Hazards Mitigation Plan – the first multi-jurisdictional mitigation plan approved by the Federal Emergency Management Agency in the State of Washington.
- 2003: Developed a model Supplemental Justification document that was distributed statewide following the 2006 flood and windstorm events for the purpose of obtaining a Presidential Disaster Declaration.
- 2004: Presenter Partners in Emergency Preparedness Conference, Bellevue, WA
 Hazard Mitigation and the Community Rating System, the Skagit County Process.

RESUME: Mark Watkinson

- 2004: Instructor Washington State Emergency Management Division Emergency Preparedness Course – Hazard Mitigation Planning.
- Coordinated the mobilization and deployment of Skagit County Fire Resources to respond to the following events:
 - 1. Tyee Complex Fire, Chelan County; 1994.
 - 2. World Trade Organization (W.T.O.) riot, Seattle; 1999.
 - 3. Leona Complex Fire, Ferry County; 2001.
- Coordinated efforts with county and municipal agencies to obtain Presidential Disaster Declarations for the following events:
 - 1. 1990 flood events.
 - 2. 1990 severe wind storm.
 - 3. 1995 flood events.
 - 4. 1996 flood.
 - 5. 1997 severe wind storm and severe snow storm events.
 - 6. 2001 Nisqually Earthquake.
 - 7. 2003 flood.
 - 8. 2006 flood and severe wind storm events.

Skagit County Public Works Department: April, 1985 – March, 1990

Engineering Technician IV, Field Engineer:

- Issue construction permits for work to be performed within county rights-of-way.
- Perform construction inspection to determine compliance with Skagit County Road Standards.
- Maintain computer data base files.
- Establish and maintain effective working relationships with rural Fire District Chiefs and emergency response dispatching agencies regarding the assigning of addresses in the unincorporated areas of Skagit County.
- Assign new addresses in accordance with Skagit County policy.
- Coordinate and cooperate with local officials regarding address problems along jurisdictional boundaries.
- Participate as a member of the Skagit County Emergency Flood Fight Team.

Engineering Technician III:

- Design various Public Works construction projects.
- Prepare project drawings, plans, specifications, and cost estimates for Public Works construction projects.
- Perform construction and as-built inspections to insure quality control and conformance with contract and county specifications
- Participate as a member of the Skagit County Emergency Flood Fight Team.

Engineering Technician I:

- Perform research related to county rights-of-way, road establishments and vacations.
- Prepare documents for public hearings and presentations to the Board of County Commissioners.
- Maintain a variety of records for the engineering department.
- Assist the public with a variety of issues related to county roads and rights-of-way.
- Assist private engineering/survey firms in researching county engineering records.
- Participate as a member of the Skagit County Emergency Flood Fight Team.

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RESUME: Mark Watkinson

PROFESSIONAL TRAINING:

Throughout the past 17 years I have attended and/or completed numerous training courses; the most significant training courses I have attended are listed below:

- Federal Emergency Management Professional Development Series: Completed April, 1993
- National Fire Protection Association Fire Service Instructor I: September, 1993
- Hazardous Materials Awareness and Operations Train-The-Trainer: November, 1993
- Earthquake Safety Program For Schools: April, 1994
- Community Emergency Response Team Train-The-Trainer: June, 1999
- Emergency Operations Center: September, 1999
- Flood Fight Operations: September, 1999
- Hazardous Materials On-Scene Incident Command: March, 2002
- Hazardous Materials Responder Technician Level: June, 2002
- Disaster Assistance for Local Governments Workshop: June, 2003
- Weapons of Mass Destruction Awareness Level: December, 2003
- Emergency Response to Domestic Biological Incidents Operations Level: February, 2004
- Weapons of Mass Destruction Incident Command/Unified Command: September, 2004
- National Incident Management System (N.I.M.S.) Training: 2006 Present Courses completed: IS-700; IS-100; IS-200; IS-800; I-300; I-400

OTHER TRAINING:

Leadership Skagit

Member: Class of 2005

Member: Agriculture Committee, Class of 2006

Member: A Sense of Place Committee, Class of 2007 Leadership Skagit Service Award Recipient, 2007

VOLUNTEER EXPERIENCE:

Skagit County Fire District No. 2

Volunteer Fire Fighter: 1982 – Present Emergency Medical Technician: 1985 – 1997 Captain and Medical Officer: 1994 – 1997

Skagit Emergency Medical Services Council

General Council/Commission Member: 1990 - Present

Executive Board Member: 1992 - 1999

American Red Cross - Skagit Valley Chapter:

Member – Board of Directors: 1998 – 2000

Boy Scouts of America

Den Leader: 1995 - 1999

Assistant Scoutmaster: 1999 - 2002

Wood Badge Adult Leadership Training Program: 2000

La Conner Booster Club

Member: 2002 - Present

La Conner Community Coalition

Member: 2004 - 2006

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	Exhibit No	(MW-3)

EXHIBIT "B"

EMERGENCY MANAGEMENT COORDINATOR JOB DESCRIPTION

SKAGIT COUNTY POSITION DESCRIPTION

Position Title: Coordinator

Department: Emergency Management

Report To: Director
Occupation Code: 1210
Salary Range: 12

SUMMARY: Works with the Director and other Department of Emergency Management staff as well as other city and County officials, staff and emergency response personnel in planning, organizing, coordinating and conducting activities of the Skagit County Emergency Management Department. Assists in formulating emergency plan contingencies and coordinates with various community agencies to insure an organized and timely delivery of emergency services. Job requires response to hazardous materials incidents, fires and other natural and man-made disasters at various sites throughout the County on an on-call, 24-hour a day basis. Performs a variety of duties to relieve the department head of technical as well as routine administrative detail.

ESSENTIAL FUNCTIONS:

Assists in the planning, organizing, directing, monitoring and controlling the performance of the emergency management department in conformance with objectives, plans, schedules and budgets.

Responds as Incident Commander or part of a United Command to hazardous materials incidents and other natural and human-caused emergencies or disasters throughout Skagit County on an on-call 24 hour a day basis.

Assists in implementing the accomplishment of required Federal and State Emergency Management Programs.

Provides response to fire scenes to conduct cause and origin investigations and compiles fire investigation reports on a weekend duty and/or in the absence of the Fire Marshal and/or the Deputy Fire Marshal.

Meets with Emergency Management Council and Advisory Committee members regarding direction and progress of Emergency Management Program.

Establishes and maintains an effective working relationship with Skagit Emergency Management Council members, other elected officials and appointed officials, agencies, and private industry to facilitate the emergency management program in Skagit County.

Conducts research, plans and writes a variety of emergency plans and documents including but not limited to the Skagit County Emergency Management Plan, the Skagit County Emergency Alert Plan, the Skagit County Fire Mobilization Plan, the Skagit County Local Emergency Planning Committee Plan and the Skagit County Emergency Operation Center Manual and updates these plans as needed.

Assists in the development of other requested local, State and Federal plans.

Provide assistance to local jurisdictions/agencies in the development of other requested local, State, and Federal plans; and in the reviewing of school, hospital, other agency, industry, and company emergency plans as requested.

Attends trainings, professional conferences, seminars, and other meetings to maintain technical certifications and gain new job related information.

Assists in the establishment of a Countywide warning and notification system to include the Emergency Alert System, and in the development of an emergency communications system.

Updated 5.04 1

Determines the need for other special warning systems and works with elected officials, government agencies and private industry to provide warning systems to help prevent loss of life during emergency situations.

Organize, oversee, and assist other staff and volunteers in the activation of the Skagit Country Emergency Operations Center or on-scene command post for the purposes of coordinating response and recovery operations in an effort to limit loss of life and property damage during emergency or disaster events.

Assists in the administering of the County's SARA Title III Reporting of Extremely Hazardous Substances Program and assists in the updating of the "Skagit County LEPC Hazardous Materials Contingency Plan".

Work with the Director to organize and assist in the design, development, coordination, and implementation of an annual Federally mandated Countywide exercise to test emergency response systems to natural and man-made disasters; and participate in other agency and private industry/company exercises as requested.

Participates in public relations programs; maintains close contact with news media, initiates community interest in emergency preparedness education.

Develop, expand, coordinate, and deliver a Community Emergency Response Team (CERT) Program within Skagit County for Skagit County residents. Encourage the participation of Skagit County and City Employees in the CERT program and provide for the development, training, and coordination of CERT teams.

Develop and update the Hazard Vulnerability Analysis document for the County.

Assists in the establishment and maintenance of a community shelter system and coordinates with welfare agencies and other voluntary groups to develop emergency welfare capabilities for the mass care of people during a disaster or incident.

Assists in the compiling of damage assessment information and supporting documentation for the submittal of a request for assistance to the State for a disaster declaration in the event of a natural or man-made disaster.

Reviews disasters/incidents to see if there are ways to mitigate future reoccurrence.

Supports local Search and Rescue Programs.

Independently or as directed, initiates correspondence, reports, and other similar matters.

Receives and responds to inquiries from the public, other agencies, or private industry/companies to supply information which is available and known, or direct to proper source.

Helps perform the duties of the Fire Marshal's Office in the absence of the Fire Marshal and/or Deputy Fire Marshal.

Provides secretarial support to the department to include composing and typing departmental materials, assisting in the development of office procedures and filing systems, and developing proper report and correspondence layout, arrangement, grammatical composition, and assures inclusion of all pertinent information from sources.

Prepares agendas, attends meetings, takes meeting minutes and assures proper distribution of minutes.

Assists in planning and organizing work, assigns and checks work of and/or assists and instructs others.

Supervisory:

This position has direct supervisory responsibility over certain full-time employees and occasional volunteer staff.

OTHER JOB FUNCTIONS:

Performs related duties as assigned. *

QUALIFICATIONS:

High School Diploma or G.E.D. Equivalent.

Two-year college degree in emergency management or other related technical field required.

Minimum of 1-3 years of experience required.

Specialized training through a community college, technical, vocational, trade or business program required.

Emergency management, fire service and hazardous materials training desired.

The following is preferred or must be completed in a reasonable time frame as established by the Director:

Completion of FEMA Emergency Management Professional Development Series Training.

Completion of 40-Hour Course for Emergency Response to Hazardous Material Incidents.

Completion of Emergency Vehicle Accident Prevention Course for the operation of an emergency vehicle sponsored by Washington State Fire Service Training

Completion of Emergency Vehicle Operator's Course

National Fire Academy Fire and Arson Investigation Training or college level equivalent.

Completion of the following hazardous materials training courses:

Awareness Level - 6 Hour training.

Operations Level - 8 Hour training in addition to prior completion of Awareness Level training.

Technician Level – 40 Hour training in addition to completion of Awareness Level and Operations Level training.

An equivalent combination of education and experience may be substituted which provides the skills, knowledge and abilities to perform the essential functions of the position.

Requires knowledge of:

Local politics such as Board of County Commissioners, Fire Department Commissioners, Dike District Commissioners and City Mayors as well as local major industry organizational systems.

Modern techniques, development, design systems, methods, practices and equipment utilized in emergency management.

The Incident Command System.

Office machines such as typewriters, computer equipment, adding machines and other office equipment.

The principles of fire investigations sufficient to conduct cause and origin investigation in fire districts throughout the County.

Engineering.

* Related duties as required are duties that may not be specifically listed in the Position Description but are within the general occupational series and responsibility level typically associated with the employee's classification of work.

The principles of arson investigation and rules of evidence sufficient to aid the sheriff in efficient investigation and prosecution of arson cases.

Requires the ability to:

Determine the best way to communicate either by e-mail, telephone and/or in person based on the issue, incident or event.

Be conscious of safety and be aware of the level of knowledge of those around you, question their judgment when necessary to prevent serious injury or death to themselves and/or others as well as possible damage to the environment.

Develop and complete a majority of plans and projects undertaken by this office.

Accomplish the necessary tasks and keep a project on line to its completion.

Receive direction from the director and then begin the development of the plan/project.

Keep the Director and the various entities involved and advised as to the progress being made and request further direction is necessary.

Review all plans before being finalized and make revisions if needed.

Cooperatively work with elected officials, fire service, law enforcement, emergency medical services and many other agencies to plan and prepare for a variety of emergency events that could adversely impact the community.

Coordinate with a wide variety of governmental agencies, private businesses and industries and non profit groups to effectively respond to the emergency event to protect lives and property and then continue to coordinate and manage the recovery efforts which may extend for several months or even years after the event.

Analyze a situation to determine if response plans or strategies should be changed to more effectively and efficiently utilize available resources and better address the needs of the public.

Effectively write technical plans and documents that can be easily understood and put into place.

Educate coworkers and the public to be better prepared to survive and deal with the effects of catastrophic disasters.

Self motivated and follow through tasks to completion.

Organize and manage a variety of projects and tasks simultaneously.

Consider the overall consequences of actions decided upon while at the same time continuing to focus on specific issues or problems that need to be considered.

Establish and maintain effective working relationships with officials, other employees and the general public.

Prepare comprehensive reports, budgets, departmental materials and correspondence.

Communicate effectively both verbally and in writing.

Quickly coordinate and direct emergency response to flooding, hazardous material incidents, and other disasters.

Analytical and conceptual.

Logical and intuitive.

Licenses and/or Certifications:

Valid Washington State driver's license required.

WORKING CONDITIONS/PHYSICAL REQUIREMENTS:

Work is conducted both in an office environment and at a wide range of sites throughout Skagit County under a wide variety of conditions including but no limited to response to hazardous materials incidents which pose a health threat due to potential exposure to these materials, oil spills at docks and on ships, and natural disasters such as floods, landslides, forest fires, and earthquakes. This type of response could happen at any location in Skagit County and requires access to all types and conditions of structures and terrain. Department of Emergency Management personnel also are required to respond to fire investigation scenes. Lifting in excess of 25 pounds, shoveling, bending, crawling, climbing, entering confined spaces, traversing steep and unstable terrain, in all types of weather and lighting conditions.

Hazards:

Those present in a normal office environment. Exposure to dangerous structurally damaged buildings, hazardous materials through inhalation, absorption, injection or ingestion, exposure to noxious fumes, smoke, fire, traffic and risk of drowning due to entrapment under water. Work is on-call, 24-hours a day, seven days a week and requires carrying a pager at all times.

The statements contained herein reflect general details as necessary to describe the essential functions of this position, the level of knowledge and skill typically required, and the scope of responsibility, but should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absences or relief, to equalize peak work periods, or otherwise to balance the workload. Changes to the position description may be made at the discretion of the employer.

It is the policy of Skagit County to not discriminate against any person with regard to race, color, religion, sex, age, national origin, marital status or physical or mental disability.

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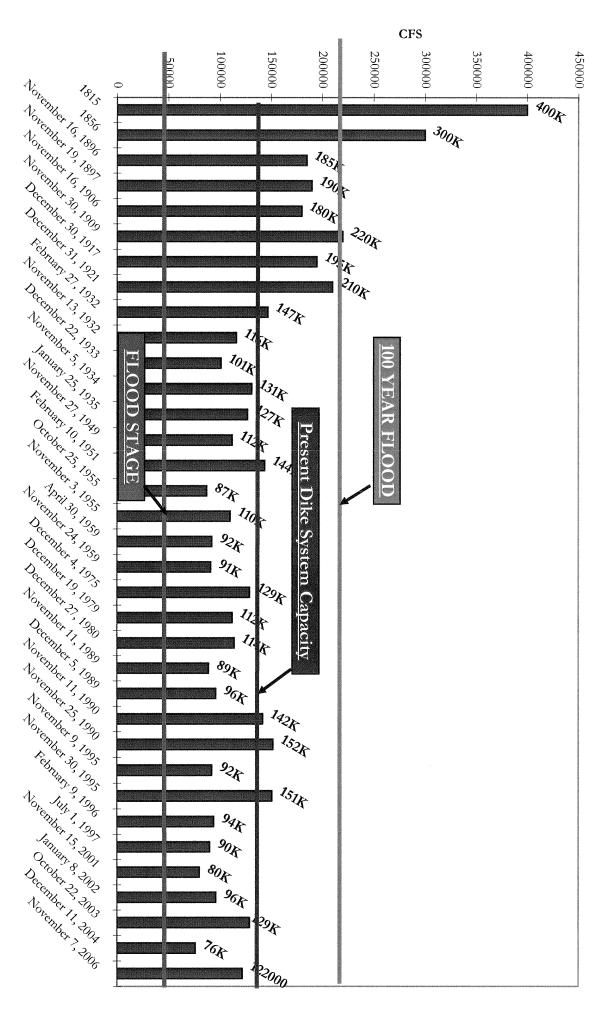
DOCKET TR-070696 PREFILED WRITTEN TESTIMONY OF MARK WATKINSON

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EXHIBIT "C"

SKAGIT RIVER RECORDED DISCHARGES

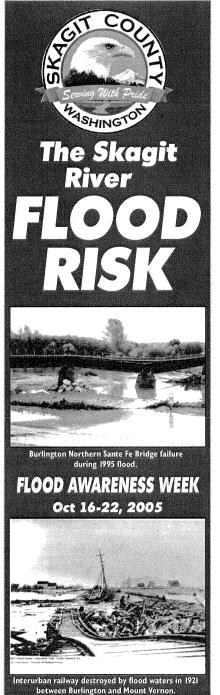
SKAGIT RIVER RECORDED DISCHARGES 1815 TO 2006



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	Exhibit No	(MW-5)

EXHIBIT "D"

SKAGIT RIVER ANNUAL FLOOD RISK AWARENESS





Hamilton, Washington. 2003 Skagit River Flood, a Federal Disaster.

Will You Be Prepared When DISASTER STRIKES?

More than 30,000 Skagit County residents live in the Skagit River 100-year flood plain. The Skagit River has reached flood stage more than 60 times during the last 100 years for an average of once every 1.5 years. Our levee systems are not adequate for flood protection during a large flood

Skagit County Government has been working diligently to find a long-term solution for flood control with our state and federal government for more than 80 years with little success. Although we have made progress in many areas, we still do not have adequate protection from major floods.

Since 1990, Skagit County has suffered more than \$78 million dollars in flood damage, and loss of human life. In light of the disaster that has struck our Gulf Coast, the incredible loss of life and billions of dollars of damage, we must realize that it can happen here.

Please read and study this publication so that you know what to do when, not if, a major catastrophic event strikes the Skagit

Skagit County has fought many gallant flood fights in the past, and thanks to the diligent efforts of many, lives and properties have been saved, but we must not become complacent. A 100-year flood could cause catastrophic loss of life and potentially billions of dollars of damage. In 2003, the flood season began in mid-October. Be prepared for an emergency

EMERGENCY INFORMATION

Keep this information in an easy-to-find place!

RADIO: Tune into the local Emergency Broadcast System:

- KBRC (1430 am) Mount Vernon
- KLKI (1340 am) Anacortes
 KAPS (660 am) Mount Vernon

PHONE NUMBERS:

Flood Emergency

Skagit County Dept. of Emergency Management
• Emergency shelters

- Special transportation problems
- Evacuation

Skagit County Public Works

Road closures/dike district/levee information River level information

- American Red Cross

 Skagit Valley Chapter

 Anacortes/San Juan Chapter
- City of Burlington

 Flood fight headquarters

Planning

(360) 428-3250

(360) 336-9400

(360) 419-3425

(360) 424-5291 (360) 293-2911

(360) 757-3484

City of Mount Vernon, Development Services Dept.

Personal Contact:

Uniformed law enforcement or fire service agent will contact residents.

Public Address:

Mobile sirens, police, fire, or other public address systems will sound.

Information Available Online:

Skagit County - www.skagitcounty.net

Federal Emergency Management Agency - www.fema.gov Red Cross - www.redcross.org

Look for the following links under services:

- Family disaster planning Children & disasters
- Special needs & concerns (elderly, handicapped)
- Animals
- Financial preparations
- Pet first aid
- Business & Industry guide
- Power outage





What we know about the Skagit River and the potential for devastation and loss of life when DISASTER STRIKES!

- The Skagit River has flooded more than 60 times in the last century causing loss of human life and tens of millions of dollars of damage.
- Of the 108,000 people who live in Skagit County, more than 30,000 live in the 100-year flood plain and would need to be evacuated in a 100-year flood.
- The cities of Burlington and Mount Vernon are protected by a levee system that may NOT ADEQUATE for large floods that HAVE OCCURRED and are predicted to OCCUR IN THE FUTURE.
- In 2003, the Town of Hamilton and the communities of Cape Horn and Shangri La were severely flooded. 34 homes were DESTROYED and 115 received MAJOR DAMAGE. 141 homes received minor damage.
- In 2003, 3,425 persons were evacuated from Hamilton, Cape Horn, Shangri La, Burlington and Mount Vernon.
- Floods reported, the size of 1917 and 1921 could breach the levees in Burlington and Mount Vernon. A 100-year flood in all probability would cause loss of human life and a predicted 1.3 billion dollars in damage.
- A 100-year flood would close down Interstate 5 and State Route 20, probably take out the Burlington-Northern Sante Fe railroad bridge, disrupt oil distribution from our refineries, cut off the water system for Fidalgo and Whidbey Island, NAS Whidbey and the Town of LaConner, flood our municipal waste water treatment plants in Burlington, Mount Vernon and Sedro-Woolley and severely damage the sewage collection system for 40 percent of Burlington and Mount Vernon.



1995 Flood fight



Fir Island dike breach, 1990.

FLOOD SAFETY

In the event of an evacuation:

- Remember, a supply of drinking water, emergency food, first aid kit, and flashlights are essential.
- Secure your home before leaving: turn off electricity, gas, and water.
- Fill your car's gas tank, as gasoline pumps will not be working if electricity has been cut off.
- If there is time, take the following: prescription drugs, food (especially if you require a special diet), eyeglasses, clothing (enough for at least 24 hours), personal items (toiletries, documents, photo albums, etc.), bedding, baby or child supplies (food, diapers, toys), money and identification.



West Mount Vernon flooded in 1990.



Flood fight in Conway, 1990.

Flood **Preparedness** Information

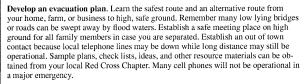
Complete, comprehensive emergency preparedness booklets can be obtained from the Skagit Valley Chapter of the American Red Cross. These booklets cover a wide variety of issues including: Family Disaster Plan, Disaster Supplies Kit, Emergency Preparedness Checklist, Checklist for People with Mobility Problems, Helping Children Cope with Disaster, Food and Water in an Emergency, Pets and Disasters, Can You Afford to Lose Everything, and many others. (see emergency section for information on how to acquire).

iore

If you're a newcomer to the area, find out if you live or work in a flood-prone area. (see map on pages 4 and 5) Study the maps included in this pamphlet, talk to your neighbors, especially those living in

Skagit County during the 1990 and 1995 floods, or call Skagit County Public Works Surface Water Management at 360-336-9400. Remember that the next flood could be larger than previous floods.

Find out if there is a neighborhood notification system for your area. If there is not, consider organizing one. Pay particular notice to contacting and helping the elderly and handicapped.



Make an itemized list of personal property, including valuables, furnishings, and clothing. Photograph your home inside and out. Keep your list, photos, and any insurance policies in a secure place, such as a safe deposit box, outside the flood plain. Consider keeping duplicates with a relative or friend outside the area.

Buy Flood Insurance. Protection against floods is not covered under a homeowner's policy. Any property owner in Skagit County is eligible to obtain flood insurance that covers flood damage from ponding, drainage, snowmelt, runoff, and surface water. Contact an insurance agent about your eligibility for flood insurance offered through the National Flood Insurance Program (NFIP). Do not wait until the last minute there is usually a 30-day waiting period before the policy is effective.

In a Flood Watch:

Tune to your local Emergency Broadcast Station. A Flood Watch from the National Weather Services means conditions are favorable for flooding. The Skagit County Department of Emergency Management will coordinate the public notification when required. The Emergency Broadcast System (EBS) is activated when necessary and include the local radio stations listed in the Emergency Information section on page 1.

In a Flood Warning:

- Evacuate if you're told to do so. A Flood Warning from the National Weather Service means flooding is occurring or will occur soon.
- · Secure your home before leaving. Turn off electricity, gas, and water if pos-
- Fill your car's gas tank. Gasoline pumps will not be working if electricity has been turned off.
- If there is time, here are some items to take with you:
- Prescription drugs
- 2. Food, especially if you require a special diet
- 3. Eyeglasses
- 4. Clothing enough for at least 1 day
 5. Personal items toiletries, documents, photo albums, etc.
- 6. Bedding sleeping bags, blankets, pillows
- 7. Baby or child supplies
- 8. Money cash, credit cards, checks 9. Proper Identification especially important for small children

Información Del Estado de preparación De la Inundación

Los libretes completos, comprensivos del estado de preparación de la emergencia se pueden obtener del capítulo del valle de Skagit de la Cruz Roja americana. Estos libretes cubren una variedad amplia de ediciones incluyendo: El plan del desastre de la familia, kit de materiales consumibles del desastre, lista de comprobación del estado de preparación de la emergencia, lista de comprobación para la gente con problemas de la movilidad, los niños que ayudan hace frente a desastre, al alimento y a agua en una emergencia, animales domésticos y desastres, puede usted permitirse perder todo, y muchos otros (véase la sección de la emergencia para la información sobre cómo adquirir).

Información de Emergencia En Una Inundacion

¡GUÁRDELO SALUDABLE!

Preparación para inundación inundación súbita

Esto es lo que puedes hacer para prepararte contra tales emergencias. AVERIGÜA qué esperar.

Conoce los riesgos de inundación de tu área. Si no estás seguro, llama a la oficina local de la Cruz Roja, a la oficina de administración de emergencias o al ministerio de planificación y zonificación de tu localidad.

Si ha habido lluvia fuerte durante varias horas, o lluvia continua durante varios días, estáte alerta a la posibilidad de una inundación.

Escucha las emisoras locales de radio o de televisión para recibir información sobre inundaciones.

Las inundaciones pueden tomar desde varias horas a días en desarrollarse--Reduce los daños de las inundaciones-

Levanta el calentador de agua y el panel eléctrico si están en un área de la casa que pueda inundarse.

Consulta con un especialista para obtener más información sobre las medidas que se pueden tomar para reducir los daños. inundaciones pueden tomar entre varias horas y varios días en desarrollars

Una ADVERTENCIA de inundación significa que es posible que ocurra una inundación en su área.

Un AVISO de inundación significa que una inundación está ocurriendo u ocurrirá pronto en su área.

Las inundaciones súbitas pueden tomar entre pocos minutos y pocas horas en desarrollarse

Una ADVERTENCIA de inundación súbita significa que es posible que ocurra una inundación súbita en su área.

Un AVISO de inundación súbita significa que una inundación súbita está ocurriendo u ocurrirá muy pronto.

Haz un plan familiar contra desastres

Verifica si tienes una póliza de seguro que cubra inundaciones. De no ser así, averigüa cómo obtener una póliza de seguro contra inundaciones.

Manten las pólizas de seguro, los documentos y otros objetos de valor en una caja de seguridad.

Prepara un equipo de suministros para desastres que contenga:

Botiquín de primeros auxilios, y

medicamentos esenciales

Comida enlatada y un abrelatas. Por lo menos tres galones de agua por persona.

Ropa de protección, impermeables, y ropa de cama o sacos de dormir.

Radio a pilas, linterna y pilas de repuesto. Artículos especiales para bebés, ancianos, o familiares descapacitados.

Instrucciones escritas sobre cómo desconectar la electricidad, el gas, y el agua si las autoridades le aconsejan hacerlo. (Recuerde, necesitará que un especialista vuelva a conectar el servicio de gas natural.)

Identifica dónde puedes ir si te dicen que tienes que desalojar tu vivienda. Elije varios lugares....la casa de un amigo en otra ciudad, un motel o un refugio

Si emiten una ADVERTENCIA de inundación...

Traslada tus muebles v obietos de valor a las plantas más altas de tu vivienda.

Llena el tanque de tu automóvil con gasolina, por si se da un aviso de desalojamiento. . Si emiten un AVISO de inundación...

Escucha las emisoras locales de radio y televisión para recibir información y

consejo. Si te dicen que debes desalojar la vivienda, házlo lo antes posible.

Si emiten una ADVERTENCIA de inundación súbita...

Estáte alerta a las señales de inundación súbita y estáte preparado para desalojar tu vivienda al instante.

Si emiten un AVISO de inundación súbita...

O si tú piensas que ya ha comenzado la inundación, desaloja tu hogar Puede que inmediatamente. tengas segundos para escapar. ¡Actúa rápidamente!

Véte a un terreno más alto lejos de ríos, arroyos, riachuelos y desagües de tormentas. No manejes alrededor de barricadas...están ahí para tu seguridad.

...continùe a pàgina 6



Skagit County's Petroleum Refining Industry A large flood would have a huge impact on

refining industry. The most significant threat to the operations of the Tesoro NW the movement of product by truck, rail, and pipeline would be seriously compromised would have an economic impact of national significance on Skagit County's petroleum and Shell Puget Sound Refining Company refineries is their need for water. In addition, during a 100-year flood.

Plant. Flood fight operations went into action in 1990, 1995, and 2003 to save this facility. This plant is in jeopardy with even · WATER - Tesoro and Shell draw more than 60 percent of the finished water proa 4-year flood event and could be out of water supply, the refineries would have to duced by the Anacortes Water Treatment ission for weeks. Without this primary shut down until the service is restored. · TRANSPORTATION - In the event of a major flood, major transportation corridors including Highway 20. Interstate 5, and the Burlington Northern Railroad would be shut down. Skagit County's refineries depend or

A significant flood event on the Skagit River rail and tanker trucks for transportation, 75 percent of refinery workers live off Fidalgo Island and would be unable to get to work by conventional means.

• INFRASTRUCTURE. - Electrical ser-vice, natural gas, and pipeline service could be interrupted. Financial losses could run as high as \$1 million per day.

is a major hub of the state petroleum indus-try. Total payroll of the refining industry in employing 809 workers. A shutdown caused a major flood would exceed a direct cost more than \$1 million per day, with the ECONOMIC IMPACT - Skagit County Skagit County was \$57 million in 2000. regional impact being substantially larger.

"No water, no roads, no power, no gasoline," said Commissioner Ken Dahlstedt. "These pale in comparison to the significant public safety crisis a major flood will bring. It's not a question of 'if' but 'when'

Waste water and sewer systems will fail in a large flood event

ding and pipe collapse. It is especially a serious concern hydraulic connection to the Skagit River. The increased in Mount Vernon where much of the aging sewer system The water table within the 100-year flood plan has a direct pressure causes failure of pipe joints, erosion of pipe bedis located in the 100-year flood plain.

stormwater pumping systems will cease to function in Floods larger than a 25-year event have the potential to cause levy failure downstream of the Mount Vernon Woolley's plants are also threatened. The bottom line There are 40 miles of sewer pipe within the Mount Vernon system that are in the 100-year flood plain. Most of the Wastewater Treatment Plant. Burlington and Sedrois that sewers, waste water treatment plants, and major a major flood situation. The damage will be extensive. Burlington system is in the 100-year flood plain. These facilities would be down for weeks and create a major health risk, costing millions to get back on line. Do you live in the 100 year Flood plain?

A 100-year flood will close I-5 from Conway to Bow Hill

In the event of a 100-year flood, I-5 will be closed from Conway to Bow Hill. Hopefully our warning systems will allow for adequate evacuation, but at the flood's peak, significant portions of our primary transportation routes will be under water.

- International Commerce activity between Washington State and exports to Canada were approximately \$6.6 billion and overland imports exceeded \$14.3 billion. 95 percent of all commercial goods Canada is substantial. In 2000, annual overland Washington State are shipped overland. This would come to a grinding halt!
- Major Highways will be closed completely during a 100-year flood event. Interstate 5 and State Routes 20, 9 and 536 lie on the flood plain and supply the transportation network for not only the local and regional economy but escape routes for evacuation.
- flood in 1995, a pier was undermined and closed the bridge for two weeks. The BNSF trestle would likely fail in a 100-year flood as it Burlington Northern Santa Fe and Amtrak operate a primary railroad that would be devastated in a 100-year flood. BNSF currently runs 13 trains across the Skagit River each day. In a much smaller did in 1916.

Flood Awareness Week is October 16-22 in Skagit County

Brookings, Flude appointed flood fight coordinators

The Skagit County Commissioners have signed a resolution appointing Public Works Administrator Dave Brookings and Assistant County Engineer Steve Flude as Flood Fight Coordinators for the coming flood season. They also have proclaimed October 16-22 as Flood Awareness Week in Skagit County. The proclamation stated that flooding is historically the most prevalent type of natural disaster to affect Skagit County and the roles and responsibilities of the Skagit County Public Works Department must be clearly understood during a ing flood that was declared a national disaster by President George W. Bush. Skagit County experienced more than \$17 million of damage. Fortunately there flood disaster event. In October 2003, the Skagit Valley experienced a devastat was no loss of human life. The Commissioners defined that role during a flood event as to maintain County transportation facilities, roads and bridges, and to provide materials and equipment to Flood Fight Operations to maintain the levee systems during an event.

of the Department's resources for a flood fight, as well as work in cooperation with other federal, state and local entities to reduce flood damages as much as The role of the Department's Flood Fight Coordinators is to coordinate the use

In preparation for the potential flood fight this fall. Skagit County Public Works has scheduled several training sessions for staff memebers.

IMPORTANT FLOOD DEFINITIONS

ccur; usually to the flood FLOOD STAGE: A site-specific river level at which flood damage may start to occur; it or above the top of the riverbank. Flood heights are often measured relative to stage elevation. At the Concrete and Mount Vernon gauges, flood stage is 28 feet.

FLOOD WATCH: The first of two basic advisories issued by the National Weather Service. A flood watch is issued when conditions are favorable for flooding. A watch does not mean that flooding will definitely occur, but it does give a community an early notice of potential flooding and allows the community to review flood safety steps. FLOOD WARNING: The second basic advisory issued by the Mainonal Weather Service. A flood varning is issued when thodding conditions are expected to develop. In some cases, the food warning will be viver suge or height reading. The Mainonal Weather Service tries to flood warning will be river stage or height reading. The National Weather Service tries to issue flood forceasts with an exeruncy of plus or minus one food. But there are many variables that can enter into this forceast. Some of the variables are difficult to predet, yet have great impacts on flood forecasts.

FLOOD INSURANCE: The insurance coverage provided through the National Flood Insurance Program

SKAGIT COUNTY 100 YEAR FLOOD PLAIN

FEMA 100 Year Flood Plain

FLOOD INSURANCE RATE MAP (FRM): An official map of a community on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk permium zone applicable to the community. RMS typically foreinfy the edvation of the one-precisal manual chance food and the areas that would be introduced by that level of the one-precisal manual chance food and the areas that would be introduced by that level of flooding, they are used to determine food insurance rates and for floodplain management. FIRM maps are available at the Skagit County Planning and Permit Center

100-YEAR FLOOD: A term commonly used to refer to the one-percent annual chance flood. The term 100-year flood should not be taken literally as there is no guarantee that the 100-year flood will occur at all within a 100-year period or that it will not recur several times. It is simply shorthand way of saying the theory of a one-tin-a-hundred chance that a particular major flood will occur in a given win. will occur in a given CUBIC FEET PER SECOND (CFS). The rate of flow past a given point is measured in orbic feet pre second. One orbite foot of water equals about 7 gallors. One cfs is equivalent to about 450 gallors; Dre cfs is equivalent to about

Gauge Heights and Phase

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Skagit River Gauge near Concrete	28.0 to 32.0 This USGS gauge is located near the community of Concrete at river mile 54.1 on the Skazit River.
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Skagit River Ga	This USGS gauge is loca

You may monitor Skagit River gauge levels at (360) 419-3425 or www.skagitcounty.net.

Note: Gauge heights (measured in feet) indicate level at which the flood phase begins at the gauge location. Flood severity may significantly increase as the flood moves from the upstream to the downstream locations.

35.6 to 40.0+ Phase Ranges in Feet 32.0 to 35.6 This USGS gauge is located at the Riverside Bridge on the main stem at river mile 17.0. Skagit River Gauge near Mount Vernon

Natural Functions of Flood Plains

Natural flood plain areas help reduce our flood damage by allowing floodwaters to spread over a large area. This reduces flood velocity and provides flood storage to reduce peak flows downstream. Natural flood plains reduce wind and wave impact, and their vegetation stabilizes soils during flooding.

ARE YOU PREPARED FOR WHEN DISASTER STRIKES?



Flood **Preparedness** Information

Complete, comprehensive emergency preparedness booklets can be obtained from the Skagit Valley Chapter of the American Red Cross. These booklets cover a wide variety of issues including: Family Disaster Plan, Disaster Supplies Kit, Emergency Preparedness Checklist, Checklist for People with Mobility Problems, Helping Children Cope with Disaster, Food and Water in an Emergency, Pets and Disasters, Can You Afford to Lose Everything, and many others, (see emergency section for information on how to acquire).

During a Flood

The most important consideration during a flood is the safety of you and your family. Flood waters can rise very rapidly. Be prepared to evacuate before waters reach your property. A long period of rain and/or melting snow can cause a river to overflow its banks. In some cases, flood waters may rise slowly, and it can take hours or even days before flooding occurs. A dam or levee failure can cause a quick dramatic rise in rivers. Keep your radio tuned to your local Emergency Alert System (Emergency Broadcast System) to find out if your need to evacuate and how much time you have.

OOD WATERS - The Most Dangerous

Rushing water from floods and flash floods is extremely deceptive and dangerous. On average flooding kills as many people every year as lightning, tornadoes, and hurricanes combined!

Remember:

- · Police Barricades are there for your protection. Do not drive around them!
- · Wading or driving through flood waters is extremely deceptive and dangerous! Even six-inches of fast-moving water can knock you off your feet and a depth of two feet will float most cars! The roadbed may be washed out under the water and the pavement could collapse under your vehicle!
- PLAN AHEAD: Identify where to go if told to evacuate. Go to HIGHER GROUND
- If advised to evacuate, do so immediately,

Construction Requirements:

A permit is required by ordinance for any development in the flood plain. Always check with Skagit County Planning and Development Services at 336-9410 (or your city building department for city residents) before you build on, alter, regrade, or place fill on your property. A permit may be needed to ensure that projects do not cause problems on other properties. If you see construction without a permit sign posted, contact Skagit County Planning and Permit Center or your city building depart-

All substantial improvements to existing buildings in the flood plain require the building be treated as a new building. A substantial improvement is when the value of an addition, repair, or reconstruction project exceeds 50% of the value of the existing building. Contact Skagit County Planning and Development Services or your city building department for more information on substantial

After a - 000

- · Do not use food or water that has been exposed to flood waters. Flood waters will be con
- Until the public water system or your private well has been declared safe, water for drinking and food preparation should be boiled vigorously for ten minutes.

RE-ENTERING YOUR HOME

- · Before entering, check for structural damage that could cause collapse. Turn off any outside gas lines at the meter or tank and let the house air for several minutes.

 Do not strike a match when entering your home. There may have been a gas leak
- Be careful about turning the power on again. Watch for electrical shorts or live wires. Do not use water-damaged appliances.
- Document your flood losses and contact your insurance agent for flood loss claims
- Follow procedures for safe clean up of household items, food, water supply, and property.
 Dry your house slowly. Carpets and drywall may have to be removed. Remember, water can
- be trapped between walls and will not dry.
- If your home or business has received extensive structural damage, this may be the time to elevate or flood proof the structure.

Flood Protection Information

Property Protection

Skagit County Planning and Development Services (336-9410) or your city building department can help you decide how to best protect your property from flood damage. Some options to consider

- Elevating buildings so water does not enter the structure Constructing barriers out of fill or concrete between buildings and floodwaters.
- "Dry Floodproofing" to make the building walls and floors watertight so water does not
- 'Wet Floodproofing" to modify the structure and relocate the contents so floodwaters do little or no damage. Keep materials like sandbags, plywood, plastic sheeting, and lumber on hand for emergency
- waterproofing.

Drainage Ditch Maintenance

Do not dump or throw anything in ditches or streams. A plugged channel cannot carry water, so the water has to go elsewhere when it rains. Even grass clippings and branches can accumulate and plug channels and culverts. If your property is near a ditch, please keep the banks clear of brush and debris. Call 336-9400 if you see illegal dumping in Skagit County, or your city staff if you see dumping in the cities.

✓ Información Del Estado de preparación De la Inundación

...continùado de pàgina 3

Si tu automóvil se detiene en aguas que están creciendo rápidamente, abandónalo inmediatamente y vé a tierras más altas.

Tu contacto local es:

¿Estás preparado para una inundación o una inundación súbita?

Las lluvias continuas durante varios días o un atasco de hielo pueden hacer que un río o un arroyo crezca e inunde las áreas circundantes. La inundación súbita de una represa o de un dique que se rompe o después de lluvias intensas de una pulgada (o más) por hora, con frecuencia pilla desprevenidas a las personas.

No obstante, la regla para estar seguro es simple: dirígete a tierras más altas y manténte lejos del agua. Incluso aguas de poca profundidad, pero con corriente veloz, tienen más fuerza de lo que la mayoría de la gente se imagina. Lo más peligroso que puedes hacer es tratar de caminar, nadar o manejar a través de dichas aguas rápidas.

Sin embargo, puedes tomar medidas para prepararte contra dichos tipos de emergencias. Haz que varios miembros de tu familia realicen cada uno de los puntos en la siguiente lista de verificación. Luego reúnanse para discutir y concluir su plan familiar contra inundaciones.

Determina si vives en una zona de inundaciones.

Zona de inundación: □ Sí

☐ No

Si vives en una zona

de inundaciones, ¿tu póliza de seguros-de propiedad o de alquiler-cubre una inundación? (La mayoría de las pólizas de seguro excluyen específicamente las inundaciones de aguas crecientes.) Seguro contra inundación:

□ Sí

Si tu póliza de propiedad o de alquiler no cubre una inundación, obtén una póliza por separado que cubra inundaciones.

Compañía de seguros:

Manten copias actualizadas de todos tus documentos importantes y objetos de valor en una caja de seguridad.

Ubicación de la caja de seguridad:

Prepara un equipo de suministros para desastres en una caja bien identificada y fácil de

Ubicación del equipo de suministros para desastres:

Escribe las instrucciones de cómo y cuándo desconectar los públicos-electricidad, servicios gas y agua.

Instrucciones escritas:

(fecha)

Decide a dónde se dirigirá tu familia si deben desalojar su vivienda. Dá a conocer tu plan a los parientes o amigos con quienes piensas quedarte o vé a un refugio de la Cruz Roja. Obtén también un mapa extra y marca dos rutas alternativas para llegar a tu destino. Incluye el mapa en tu equipo de suministros para desastres.

Plan de desalojamiento terminado el: (fecha)

Y recuerda...si ocurre una inundación, un tornado, un terremoto, un incendio u otra emergencia en tu comunidad, puedes contar con que la oficina local de la Cruz Roja Americana de tu localidad estará allí presente para ayudarte a ti y a tu familia. La Cruz Roja no es una agencia gubernamental y depende de tus donaciones de tiempo, dinero y sangre

Para más información, pónte en contacto con la oficina local de la Cruz Roja de tu localidad, la oficina del Servicio Nacional de Meteorología o la oficina de administración de emergencias. También puedes visitar los siguientes sitios de

Cruz Roja Americana (American Red Cross): www.redcross.org

Servicio Nacional de Meteorología (National Weather Service): www.nws. noaa.gov

La Radio del Tiempo de la NOAA (NWR): http://weather.gov/nwr/indexsp.

Agencia Federal para la Administración de Emergencias (Federal Emergency Management Agency): www.fema.gov/

LLAME EL DEPARTMENT DE SALUD DE CON-DADO DE SKAGIT PARA MÁS INFORMACIÓN A (360) 336-9380 O VISIT EL WEBSITE A WWW.SKAGITCOUNTY.NET



Efforts to relocate Town of Hamilton moving forward

The Town of Hamilton began relocation efforts years ago by successfully moving the town's water system, shop and fire station to high ground. During the past 12 months, they have been working with Skagit County and Community Action on detailed planning efforts initiated to address the many legal and practical details with moving residents, services, and businesses out of the floodway. The program being developed is voluntary, and residents won't be forced to participate.

Last year, the Town created a Public Development Authority (PDA), and appointed a volunteer board to help manage the overall project. This structure enables the program to access expertise and resources from different organizations beyond what the Town can offer. The board has 11 seats, with five currently being occupied. Currently, both Hamilton and Skagit County has two seats each, with Community Action in the fifth.

The next steps for the PDA over the next 12 months include:

Appraising prospective relocation site properties.

Preparing the existing water system for relocation and expansion

Planning for other infrastructure needs.

Pursuing State and Federal grant funds for site purchase development.

Developing the mechanisms to purchase and transfer development rights at fair market value.

Coordinating with Skagit County flood mitigation efforts.

Refining town management practices to govern a growing community.

"This is a very positive collaborative effort with Hamilton, Skagit County and Community Action to make a difference in the lives of Hamilton residents," said Skagit County Commissioner Ted Anderson. "The 2003 Flood was devastating. We were fortunate there wasn't more damage or loss of life."

Skagit County Earns CRS 6 Rating

SKAGIT COUNTY - Skagit County residents already enjoy reduced flood insurance premiums as a result of their county's active participation in the National Flood Insurance Program (NFIP) Community Rating System (CRS). According to FEMA Regional Director John Pennington, they're about to pay even less.

"The CRS rewards communities for implementing programs and policies which protect their citizens from flooding," said Pennington. "Such activities can range from mapping, regulations and flood damage reduction to flood preparedness and public awareness programs. Skagit County's higher regulatory standards and innovative community outreach initiatives earned a CRS Class 6 rating."

Skagit County Surface Water Management's CRS Coordinator Delores McLeod agrees. "With the recent flood event, awareness has never been more important," said McLeod. "We can't stop the rain - but we can help protect our citizens from the worst effects of flooding, and that's what the CRS is all about."

Flood insurance premium reductions resulting from "above and beyond the minimum" initiatives run in five percent increments, from five percent to 45 percent. Class ratings range from Ten to One. The higher the flood protec-

tion activity, the lower the Class rating. Skagit County's new 6 rating has earned policyholders a 20 percent reduction on flood insurance premiums. Policyholders collectively will save more than \$200,000. The average annual policy in Skagit County is approximately \$550. The new classification saves each policyholder an average of \$110.

On March 1, 2003, FEMA became part of the U.S. Department of Homeland Security. FEMA's continuing mission within the new department is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages Citizen Corps, the National Flood Insurance Program and the U.S. Fire Administration.



Defores McLeod displays a plaque recognizing Skagit County's improved CRS rating. She is pictured with Skagit County Commissioners Don Munks and Ken Dahlstedt



Doty home on Sauk River.

Bank Erosion from River Channel Migration

Besides risk from losses due to flooding, another risk from living near a river can be losses due to bank erosion from channel migration. Recently, some landowners along the Sauk and upper Skagit Rivers have experienced property losses, not from being flooded but from severe bank erosion. In at least one instance an entire residential structure on the Sauk River was lost. The home, built on a bank well above the river's surface, even during flood events, and hundreds of feet back from the river's edge at the time, toppled into the river following severe bank erosion from channel migration in 2003. There have been other recent occurrences where structures built years ago and hundreds of feet back from the river's edge, suddenly become 'river front' property and at risk due to bank erosion. These landowners have subsequently learned that their losses may not be covered by federal disaster assistance from the Federal Emergency Management Agency (FEMA). In some cases, insurance coverage can help, but it depends on the specific language in the insurance policy. With more development occurring along the rivers as Skagit County continues to grow, landowners along the Sauk River and upper Skagit River concerned about this are advised to check carefully their insurance coverage ahead of time to be sure they will be eligible should they suffer property losses from bank erosion due to river channel migration.

Historical flood newspaper articles and documents available online

A vast collection of newspaper articles on floods on the Skagit River has been collected, indexed and archived by Larry Kunzler, Josef Kunzler, and Dan Berentson, and is now available the the public. The threesome undertook a massive research endeavor by leafing through every available page of the Argus, Burlington Journal, Sedro-Woolley Courier Times, and the Skagit Valley Herald. They are currently working on the Concrete Herald. Articles date from 1897 to 2005.

In addition to the historical newspaper archives now available online at www.skagitcounty.net listed under "flood information", there is also an index with hyperlinks to the Skagit Valley archive for current flood stories from 1997 to present. This index was completed thanks to the hard work of Josef Kunzler.

Larry Kunzler, a local flood expert who has been studying the Skagit River since 1975, has launched his own website entitled www.skagitriverfloodhistory.com. This site includes a combined index of the above mentioned flood articles, plus several articles on Skagit River flooding authored by Kunzler. It also contains scores of pertinent documents from several government agencies on Skagit River Flood issues. Kunzler, with the help of his son Josef, have created a resource for citizens, government and agency and officials which is receiving a significant amount of traffic and interest.

Recently Skagit County received a "Project of the Year" award for "Project of Historical Significance" from the Washington Branch of

the American Public Works Association, for a historical newspaper archive on Skagit River floods. The Kunzlers worked with Skagit County Communications Director Dan Berentson on the project.

The Skagit County Commissioners recognized Larry Kunzler for more than 30 years of research and community activism on issues pertaining to Skagit River floods. "We recognize your diligence, tenacity, intelligence and generosity in sharing your valuable work," said Commissioner Ken Dahlstedt.

Josef Kunzler was recognized for his work as a Skagit County Public Works intern processing, organizing and posting vital information for public use.

"We plan to continue with this research by completing the Concrete Herald this year. Providing the historical information to the public is a worthy endeavor," said Berentson. "We can't thank the Kunzlers enough for their hard work."



Copies of the historical articles on Skagit River Floods.





Skagit County continues efforts to increase dam storage during catastrophic flood events on Skagit River

The recent events on the Gulf Coast magnify the importance of finding a long-term solution for flood control in the Skagit Valley. "In the event of a 100-year-flood, Mount Vernon and Burlington will very likely look just like New Orleans," said Skagit County Commissioner Ken Dahlstedt. "It's time to stop talking, studying, and pontificating and put more flood protection in place."

After a significant investment in research and studies, the Skagit Commissioners convinced that utilizing available flood storage behind dams in the Skagit River system is critical to protect property and life. Skagit County is committed to obtaining additional storage in the Baker Project, and in Ross Lake in the Skagit system through existing licensing agreements.

The utilization of additional storage also requires improved management of dam levels so that water is released in ample time before the peak of the flood keeping the pools behinds the dam low to allow the maximum amount of storage when flood danger is at its peak.

In addition to preventing substantial flood damage and loss of life, significant scientific research shows that additional storage will

Puget Sound Energy, the license holder for the Lower Baker Dam, Skagit County negotiated for:

Continuation of 74,000 acre feet of storage behind Upper Baker Dam plus operational buffers and drawdown in advance of an imminent flood.

Addition of 29,000 acre feet of storage in Lower Baker plus operational buffers, contingent on Corps of Engineers approval.

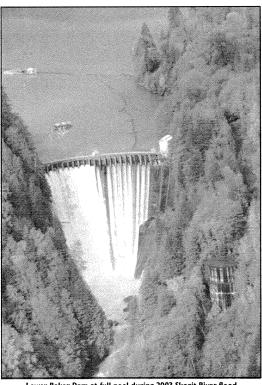
"We've spent a substantial amount of time, energy and resources trying to find a longterm solution for flood control. The process has been extremely frustrating," said Dahlstedt. "We've looked at a diversion channel, more storage behind the dams, setting back the levees, and overtopping. We need to come together a find a solution to prevent a major catastrophe

Skagit County is encouraged by Puget Sound Energy's willingness to partner with the county to continue the lobbying at the federal level to implement flood control consistent with the

reduce scouring of salmon redds. agreement. "The Baker system In fact, an Interim Protection Plan can be operated effectively for now in place already requires additional storage.

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Ken Dahlstedt. "It is unfortunate that officially established flood control in the Baker system could be years away."



Lower Baker Dam at full pool during 2003 Skagit River flood

Skagit County receives "StormReady" designation

The Skagit County Department of Emergency Management completed the application process to make Anacortes, Burlington, Concrete, Hamilton, La Conner, Lyman, Mount Vernon, Sedro-Woolley and unincorporated Skagit County StormReady Communities. The Washington State StormReady Advisory Board approved the application and has hereby recognized all of Skagit County as a StormReady

StormReady communities are better prepared to save lives from the onslaught of severe weather through better planning, education, and awareness. No community is storm proof, but StormReady can help communities save lives. This designation as a StormReady Community allows each of the jurisdictions in Skagit County who have participated in the National Flood Insurance – Community Rating System to apply for additional points (which will hopefully help to provide a further reduction in flood insurance rates).

The Department of Emergency Management is working with Skagit County Public Works to schedule the recognition ceremony during the Flood Awareness Week in October of this year.

For questions about this program, please contact Karla Strand at 360-428-3250 or visit http://www.nws.noaa. gov/stormready.

NOAA (National Oceanic and Atmospheric Administration) weather radios distributed in Skagit County

The Skagit County Department of Emergency Management recently placed NOAA Weather Radios in local school district offices, city halls, and other governmental offices in Skagit County. The placement of these radios will help insure emergency warning notifications are disseminated in a timely fashion to help prevent the loss of lives and

NOAA Weather Radio is an All-Hazards radio network that provides comprehensive and emergency information. Allweather

Hazardswarningmessagesmay be issued via NOAA Weather Radio for the following types of events: Flood, Earthquake, Severe Storm Event, Tornado, Hurricane, Chemical Release, Oil Spill, Maritime Accident, Train Derailment, AMBER Alert, and Terrorist Attacks.

Weather is directly available to approximately 70 to 80 percent of the U.S. population. Coverage depends on the location of the transmitter. local terrain and the quality and location of the receiver. NOAA Weather Radio capability is

currently available on some automobile, aircraft, marine, citizens band, and standard AM/FM radios. Weather Radios, with or without special alerting features, are available from several manufacturers and can be purchased online or at most stores carrying electronics.

For more information about NOAA Weather Radios, please visit the National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS) website at: http://

Skagit County e-news service has 2,250 subscribers

If you would like to receive e-mails directly from Skagit County as news and information comes available, join 2,250 others who have already subscribed to this free service. Topics include:

- Skagit County Planning and Development News
- Skagit County Press
- · Skagit County Emergency Information
- · Skagit River Flood Project · Guemes Island Ferry
- Information
- Skagit County Road Closures
- Skagit County Health Department Food and Environmental Health News

This is another tool to

distribute vital information to Skagit County citizens in an efficient and affordable manner," said Skagit County Communications Director Dan Berentson

To sign up, go to www. skagitcounty.net and click "email subscription lists" under "General Information" and then follow the instructions.

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PREFILED WRITTEN TESTIMONY OF MARK WATI	KINSON	
	Exhibit No.	_(MW-6)

EXHIBIT "E"

SKAGIT COUNTY EVACUATION ROUTES

