



STATE OF WASHINGTON
— OFFICE OF GOVERNOR JAY INSLEE —

December 17, 2021

The Honorable Joseph R. Biden, Jr.
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, D.C. 20500

Through: Mr. Vincent Maykovich
Acting Regional Administrator
Federal Emergency Management Agency
Region X
130-228th Street Southwest
Bothell, WA 98021-9796

Dear Mr. President:

Under the provisions of Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (Stafford Act) and implemented by 44 CFR § 206.36, I request you declare a Major Disaster for the State of Washington as a result of damages incurred by a continuous series of severe winter storms, high winds, flooding, landslides and mudslides beginning November 5 through December 2, 2021. The historic and deadly disaster is of such severity and magnitude that effective response exceeds the capability of the state and impacted local governments and supplemental federal assistance is required. I am specifically requesting the Individual Assistance Program for Clallam, Skagit and Whatcom Counties. This request for assistance includes: Mass Care and Emergency Assistance, Crisis Counseling Assistance and Training Program, Disaster Unemployment Assistance, Disaster Legal Services, Disaster Case Management and the Individuals and Households Program.

Additionally, we are requesting Individual Assistance for the federally recognized Lummi Nation, Nooksack Indian Tribe and the Quileute Tribe.

Damages to public infrastructure are still being collected at this time. A request for Public Assistance and the Hazard Mitigation Grant Program will be made at a later date.

The following information highlights the severity of this disaster:

- Statewide, an estimated 1,000 primary residences were affected by flooding with more than 300 sustaining major damage;
- The storms resulted in two fatalities, hundreds of individuals rescued and more than 1,000 evacuations;
- Whatcom County experienced the largest and most severe disaster ever in its 167-year history;
- As of December 16, at least 183 individuals are still sheltered in a mix of temporary housing and lodging facilities in Whatcom County;
- Whatcom County suffered more than \$50 million in estimated damages to public infrastructure and private property;
- More than \$7,850,000 in personal property damages and \$1,466,000 in damages have been reported by businesses in Skagit County;
- Residents in Skagit County experienced the worst flood in more than 30 years with near-record flooding in several locations;
- In Clallam County, the Makah Indian Tribe and several other communities became isolated due to extensive flooding, landslides and road closures, leading to food, water, fuel and medicine shortages;
- At the peak of the event, 158,000 customers were without power;
- There were significant disruptions to life-saving, life-sustaining and essential community services, utilities and infrastructure far beyond 72 hours; and
- The severe storms caused substantial damage to hundreds of homes outside mapped flood zones with numerous uninsured home and personal property losses.

Weather Conditions

From November 5th through December 2nd, 2021, a strong, persistent area of low pressure developed over the Gulf of Alaska and directed the jet stream and primary storm track at Washington State, producing periods of high winds, prolonged intense rainfall, flooding and landslides. Equally as important, an area of high pressure persisted near the California coast throughout the period, causing warmer than average temperatures and abnormally high snow levels across Western Washington. The Gulf Low resulted in multiple damaging Atmospheric River events over a short period of time, with several occurring back-to-back. This brought severe overlapping impacts to communities in Western Washington.

Water vapor transport into Western Washington averaged 130 to 160 percent of normal during this period. This unusually warm and persistent feed of moisture was the direct result of a series of Atmospheric River events directed at the region by the strong Gulf Low located in the northeast Pacific Ocean. This moisture feed was directly responsible for the prolonged period of rainfall, including numerous periods of heavy rainfall during the 27-day period. This resulted in widespread rainfall totals between 150 and 300 percent of normal across the highest impacted areas including Clallam, Skagit and Whatcom Counties. The outlined areas experienced 8 to 16 inches of rain above average during the period, with observed precipitation totals in some areas as high as 45 inches. Several observation stations set monthly rainfall records for November,

including Bellingham, which recorded 14.57 inches. To put this anomalous situation in perspective, November is climatologically the wettest month for Western Washington.

This persistent and abundant accumulation of rainfall produced severe compounding impacts including flooding, overly saturated soils and water-logged trees. This resulted in widespread and sustained flooding and landslides, especially across Clallam, Jefferson, Skagit and Whatcom counties where preliminary record high river levels were observed on at least four rivers: the Bogachiel and Calawah Rivers in Clallam County and the Nooksack River and Olsen Creek in Whatcom County. The duration of flooding was also anomalous or unprecedented in these areas, depending on which river system was impacted. Many rivers saw prolonged time periods at above average heights. Due to the repeated inundation, soils could not desaturate the accumulated ground water. As a result, flood waters remained pooled for weeks in portions of Northwest Washington removing any chance of relief in the brief time periods between the series of atmospheric river events. In all, 20 rivers exceeded flood stage, many of these reaching major flood stage levels multiple times.

Weather Impact Timeline

From the period of November 5 through December 2, 2021, Washington State experienced a deadly series of strong atmospheric river events that produced damaging high winds, record-breaking precipitation leading to extensive and life-threatening flooding, hyper saturated soil, debris flows, mudslides and widespread power outages and disruption to other services for more than 158,000 customers. Hundreds of rescues occurred and thousands of individuals were displaced across the state as floodwaters inundated entire communities. The severe storm with floods, landslides, mudslides, and the potential for straight-line winds resulted in road closures, the need to establish alternate transportation routes, evacuations, impacts to local utility services including significant and prolonged power outages, reductions in available drinking water and widespread damages to homes and other public and private property and infrastructure. These storms caused hazardous conditions for the people of Washington, homes, property, businesses, agriculture, transportation systems and the economy of Washington State.

From the period of November 5 through December 2, 2021, the National Weather Service (NWS) issued hundreds of weather warning statements covering a large portion of the state. The NWS warning statements issued for Western Washington during this period included gale, winter storm, marine, flood, areal flood, severe thunderstorm, tornado, high surf and high wind warnings.

Beginning in late October, a series of strong storms brought heavy rainfall across Western Washington. Rivers were therefore already running higher than is typically seen this time of year in many locations and soils became moderately saturated.

The region saw little to no reprieve from the late October storms before another strong set of atmospheric rivers pummeled the state beginning November 5th. From November 5 to November 10, communities across Western Washington received heavy precipitation, resulting in increased soil saturation levels and elevated rivers. High winds and the potential for damaging waves

Landslides in Washington State October 24 – November 28, 2021

Water Year 2021-2022

The map displays the state of Washington with various geographical features and infrastructure. Major cities such as Vancouver, Seattle, Tacoma, Olympia, Portland, and Spokane are labeled. Highways like I-5, I-90, and I-170 are shown. National forests and parks, including Olympic National Park, Mount Rainier National Park, and Mount St. Helens National Volcanic Monument, are also indicated. Landslide locations are marked with colored pins and labeled with letters (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z). The dates for each landslide are listed on the left and right sides of the map.

Date	Location
11/28/2021	A
11/28/2021	B
11/27/2021	C
11/26/2021	D
11/18/2021	E
11/17/2021	F
11/17/2021	G
11/17/2021	H
11/17/2021	I
11/17/2021	J
11/17/2021	K
11/17/2021	L
11/17/2021	M
11/17/2021	N
11/17/2021	O
11/17/2021	P
11/17/2021	Q
11/17/2021	R
11/17/2021	S
11/17/2021	T
11/17/2021	U
11/17/2021	V
11/17/2021	W
11/17/2021	X
11/17/2021	Y
11/17/2021	Z
11/16/2021	AA
11/15/2021	AB
11/15/2021	AC
11/15/2021	AD
11/15/2021	AE
11/15/2021	AF
11/15/2021	AG
11/15/2021	AH
11/15/2021	AI
11/15/2021	AJ
11/15/2021	AK
11/15/2021	AL
11/15/2021	AM
11/15/2021	AN
11/15/2021	AO
11/15/2021	AP
11/15/2021	AQ
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11/15/2021	AS
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11/15/2021	BG
11/15/2021	BH
11/15/2021	BI
11/15/2021	BJ
11/15/2021	BK
11/15/2021	BL
11/15/2021	BM
11/15/2021	BN
11/15/2021	BO
11/15/2021	BP
11/15/2021	BQ
11/15/2021	BR
11/15/2021	BS
11/15/2021	BT
11/15/2021	BU
11/15/2021	BV
11/15/2021	BW
11/15/2021	BX
11/15/2021	BY
11/15/2021	BZ
11/15/2021	CA
11/15/2021	CB
11/15/2021	CC
11/15/2021	CD
11/15/2021	CE
11/15/2021	CF
11/15/2021	CG
11/15/2021	CH
11/15/2021	CI
11/15/2021	CJ
11/15/2021	CK
11/15/2021	CL
11/15/2021	CM
11/15/2021	CN
11/15/2021	CO
11/15/2021	CP
11/15/2021	CQ
11/15/2021	CR
11/15/2021	CS
11/15/2021	CT
11/15/2021	CU
11/15/2021	CV
11/15/2021	CW
11/15/2021	CX
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11/15/2021	EF
11/15/2021	EG
11/15/2021	EH
11/15/2021	EI
11/15/2021	EJ
11/15/2021	EK
11/15/2021	EL
11/15/2021	EM
11/15/2021	EN
11/15/2021	EO
11/15/2021	EP
11/15/2021	EQ
11/15/2021	ER
11/15/2021	ES
11/15/2021	ET

By November 11th, another strong atmospheric river impacted the state, bringing heavy precipitation and high winds to Western Washington communities. Abundant rain continued into November 12th, with communities recording between 5 and 10 inches of rain in a 72-hour period. Widespread aerial and river flooding created hazardous driving conditions and road closures, impacting communities across the region.

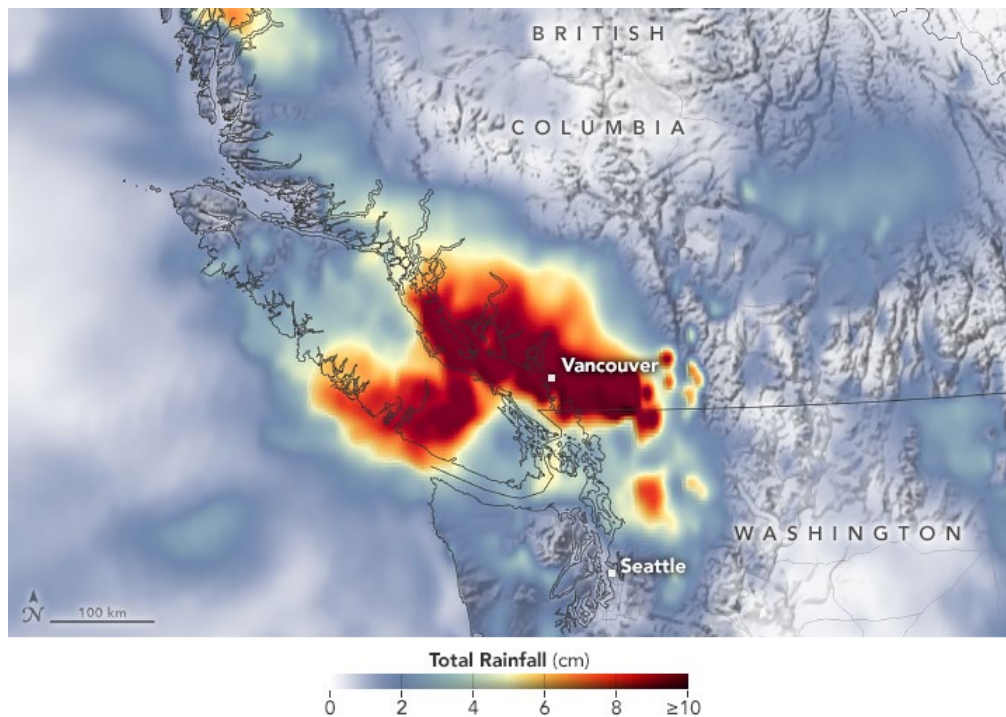


Figure 2. The map above depicts a satellite-based estimate of rainfall over the 24-hour period on November 14, 2021. Source: NASA Earth Observatory image by Lauren Dauphin and Joshua Stevens, using IMERG data from the Global Precipitation Mission (GPM) at NASA/GSF.

Warm, strong winds and high snow levels combined with heavy precipitation resulted in substantial runoff from November 13 through November 16. The excessive runoff into tributaries and creeks swelled rivers to record and near-record levels in several locations, inundating numerous downstream communities particularly those in Clallam, Skagit, and Whatcom counties. Dozens of landslides and mudslides threatened or damaged critical infrastructure, isolated entire communities and caused widespread disruption to community services. Additionally, strong damaging winds on November 14 and November 15 toppled trees onto power lines, leading to more than 160,000 customers without power across Western Washington. Due to the severity of winds on November 15, the Federal Aviation Administration (FAA) issued a “ground stop,” halting all aircraft inbound to the Seattle-Tacoma International Airport. The State Route 20 Deception Pass bridge closed on November 15 after winds pushed a semitruck over and onto the bridge railing.

By November 15, 16 rivers reached flood stage at multiple locations. Several communities saw record-breaking precipitation events, resulting in approximately 1,900 flood-damaged businesses and structures in Whatcom County alone. Residents in Clallam and Skagit counties also sustained major damages to homes, businesses, and critical infrastructure as a result of the prolonged severe weather. More than 500 individuals were forced by floodwaters to evacuate from their homes in Whatcom County. Hundreds of individuals were rescued in Clallam, Skagit and Whatcom counties as rivers overtopped their banks, breached levees, and inundated communities. A man was killed by floodwaters after high water swept him into a field while he was on his way to work. A second flood-related fatality occurred a few weeks later in Skagit

County. Public works crews and state transportation officials closed numerous roads, state highways and bridges across the region due to debris, landslides, mudslides, water over the roadway, pavement sloughing, embankment undercutting and washouts. Communities became isolated as roads became impassable due to washouts, landslides, debris, and high water.

Many locations in Western Washington received greater than 10 inches of rain, nearly double the average precipitation for this time of year. The historic amounts of rainfall caused widespread damage to public infrastructure across the state. Government buildings, schools, recreational facilities, parks and other public infrastructure sustained major damages or were destroyed entirely and public transit was significantly affected due to road closures, detours, cancellations and delays caused by widespread flooding, landslides and storm hazards. COVID-19 vaccination and testing sites were also closed in multiple locations across the state due to high winds and flooding.

National Weather Service (NWS) – November Precipitation Total in Inches			
Location	County	Observed Rainfall	Rainfall average
Forks	Clallam	35.44 (2 nd highest)	16.73
Sedro Woolley	Skagit	13.58 (2 nd highest)	6.63
Bellingham	Whatcom	14.57 (New Record)	5.2
Clearbrook	Whatcom	20.1 (New Record)	6.4

Widespread aerial flooding continued to impact hundreds of residents in Western Washington from November 17 to November 18 as flood waters reached communities downstream. Atmospheric conditions continued to bring rainfall into the region November 19 and 20 and November 23 and 24, leading to additional landslides and flooding. Levees breached by floodwaters beginning November 15 incurred additional damages due to the continued flow through the breaches and into adjacent communities even after some rivers receded below flood stage. The additional storms on November 19 and 20 and November 23 and 24 hampered emergency repairs and relief efforts across the region. As the heavy rainfall continued and with weather forecasts indicating substantial precipitation on the way, volunteer organizations helping residents with muck-outs of their homes in the City of Sumas in Whatcom County, were forced to halt disaster relief efforts.

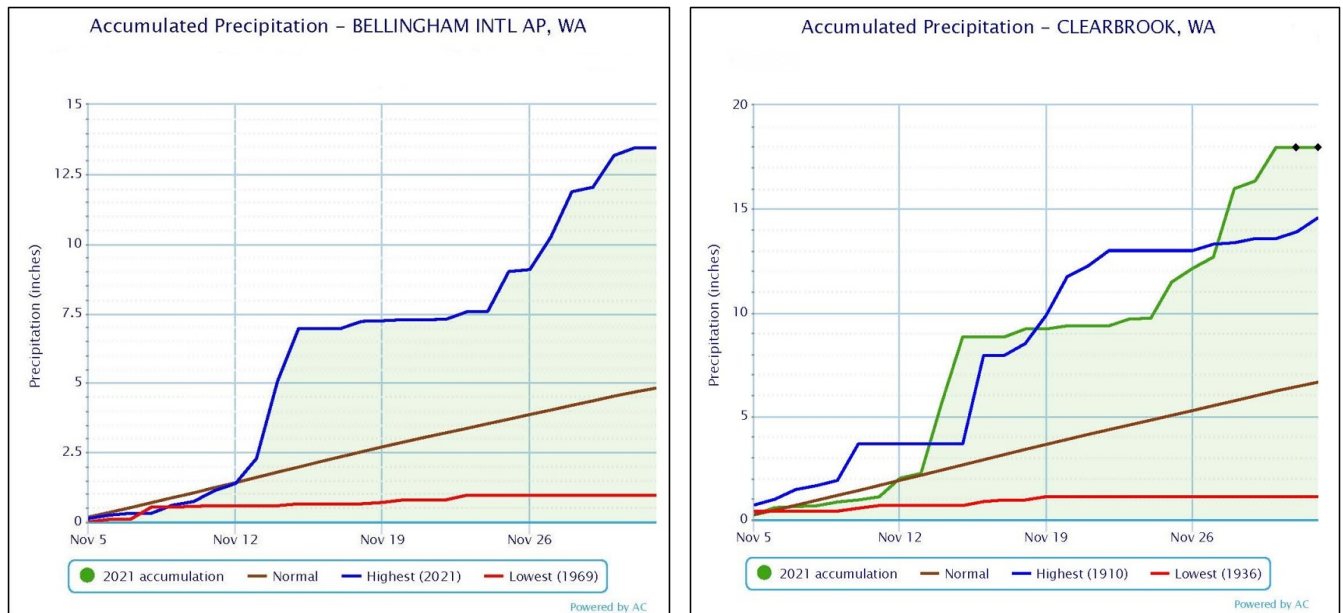


Figure 3. Total accumulated precipitation during the incident period at Bellingham International Airport, left and in the Clearbrook neighborhood near the City of Sumas in Whatcom County, right, demonstrates rainfall totals are at record levels. Source: National Weather Service

By November 26, yet another strong atmospheric river brought heavy precipitation into Western Washington. With soils already saturated and rivers still swollen, numerous landslides and flooding resulted in road closures and damages. By November 28, eight rivers reached flood stage again, causing additional damages to homes, businesses, and infrastructure. Residents that had returned to their homes to assess damages and begin the cleanup process were once again forced to evacuate as floodwaters inundated their communities. A fatality from this severe storm event was reported in Skagit County after a man who went missing on November 28 was found a few days later in the floodwaters.

Heavy rain into December kept river levels high with continued areal flooding impacting weary residents of Western Washington counties. With no place to go and continued heavy precipitation, flood waters remained in some areas within Whatcom County well into December before beginning to recede.



Figure 4. The natural-color image above shows widespread flooding along the Nooksack River in Washington State on November 16, 2021. Source: NASA Earth Observatory image by Lauren Dauphin and Joshua Stevens, using IMERG data from the Global Precipitation Mission (GPM) at NASA/GSFC and modified Copernicus Sentinel data (2021) processed by the European Space Agency.

State and Local Impacts and Response

The Washington State Emergency Operations Center (SEOC) Alert and Warning Center conducted real-time monitoring and information dissemination of all National Weather Service (NWS) weather warnings and briefings, river flood levels, evacuations, road disruptions and electrical outages and coordinated essential support to emergency activities throughout the incident period beginning November 5 through December 2, 2021. The duration of the incident is significant because multiple severe storm systems continuously impacted Washington State over the course of nearly three weeks, causing extensive cumulative damages. The unyielding storm system created significant and damaging impacts to state, tribal and local infrastructure, homes, and businesses. As a result of the severe storms and the devastating impacts, I signed Emergency Proclamation 21-18, proclaiming that a State of Emergency exists in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston and Whatcom counties in the State of Washington and directed the plans and procedures in the *Washington State Comprehensive Emergency Management Plan* be

implemented. As back-to-back storm systems continued to cause extensive damages across the state, I signed Emergency Proclamation 21-18.1 and Emergency Proclamation 21-18.2, authorizing and directing the Secretary of the Department of Social and Health Services to expand eligibility for the Family Emergency Assistance Program, provide funding through the State of Washington's Disaster Cash Assistance Program to eligible individuals and provide an exemption to driver hours of service rules for commercial motor vehicle operators delivering livestock feed and other emergency relief support to the impacted communities.

The SEOC, already activated in response to the COVID-19 pandemic, simultaneously coordinated resource requests and information in support of impacted jurisdictions as the back-to-back severe weather events slammed the state. On November 17th, the SEOC raised its activation level to a Level 1 – Full Activation as counties and Tribes became overwhelmed with responding to life safety and property preservation resource requests. The SEOC coordinated the repetitive severe atmospheric river response operations in support of impacted jurisdictions over the multi-week incident period. State agencies coordinated efforts to support transportation, mass care, logistics and external affairs related to the damaging storm systems and record-breaking flooding.

State agencies and departments utilized state resources to do everything reasonably possible to assist affected political subdivisions to respond to and recover from the event. The Washington State Military Department's Emergency Management Division, with support from the Washington National Guard, coordinated all incident-related assistance to the affected areas.

Throughout the incident period, state agencies, local jurisdictions and utility providers activated Emergency Operations Centers (EOCs) and Emergency Coordination Centers (ECCs) and declared states of emergency. This multi-week storm system resulted in at least two fatalities and caused major flooding, damaging winds, landslides, mudslides, evacuations and extensive damage to homes, businesses, electrical systems, infrastructure, and private property. The cumulative impacts of this storm system had a profound impact on the state's residents. Communities hardest hit by the severe storms experienced the worst flooding in more than 30 years with more than 1,000 primary residences damaged by floodwaters, displacing thousands of residents across the state. To assist residents with navigating the long recovery process in the most heavily impacted counties of Skagit and Whatcom, I authorized \$600,000 from the Governor's Emergency Fund for Individual Assistance and Disaster Case Management. I also authorized \$1.5 million to reimburse Whatcom County for temporary emergency housing costs.

This disaster caused major adverse impacts to public buildings including the destruction of significant damage to government offices and school buildings, interruption to medical care at hospitals and other care facilities as well as tens of millions of dollars in damages to public utilities, roads, parks, and other critical infrastructure. Four COVID vaccine clinics were closed across three days in Whatcom and Skagit counties. These impacts continue to adversely affect hundreds of businesses and residents, including individuals with disabilities and other access and functional needs. School districts across the affected counties cancelled classes and all activities for multiple consecutive days.

Across the state, the Washington State Department of Transportation continues to coordinate with the impacted jurisdictions on temporary repairs of critical roadway systems. As of December 8, potentially eligible Federal Highway Administration (FHWA) Emergency Relief funds may be applied to an estimated \$14,750,000 in damages to roadways. The Washington State Ferries, which provides transportation to tens of thousands of residents living in San Juan and Island counties was forced to cancel and delay sailings due to adverse weather conditions. The Washington State Patrol implemented emergency protective measures and conducted traffic control in hard hit areas. Major state routes were closed due to flooded roads, debris, downed power lines and landslides. Several state routes continue to be closed weeks after the initial storm impacts due to the extent of ongoing landslides and flooding. The U.S.-Canada Border was also closed in multiple locations for an extended period due to flooded roadways, causing major economic disruptions to critical transportation corridors.

The Trans Mountain Pipeline (which carries crude oil from Canada) was shut down beginning November 14 due to severe flooding and landslides in the Pacific Northwest. The Trans Mountain Pipeline transports more than 300,000 barrels per day (b/d) of crude and roughly 25,000 b/d of refined products. The pipeline supplies oil to the Vancouver region and to refineries in the US Pacific Northwest. The Trans Mountain pipeline was safely re-opened on December 5, 2021. The three-week shutdown is the longest closure in the pipeline's nearly 70-year history.

The Department of Social and Health Services (DSHS) deployed its Mobile Community Services Office (CSO) to Whatcom County on November 29. As of December 6, DSHS staff interacted with 114 disaster-affected individuals, assisting them with signing up for or replacing food and/or cash benefit cards, applying for disaster assistance and providing social services support. The DSHS also activated its Disaster Cash Assistance Program (DCAP) for residents impacted by the severe weather and flooding.

The Washington Department of Health (DOH) supplied 392 care kits to the North Sound Accountable Community of Health in response to the flooding. The DOH provided flood recovery resources and monitored resource requests from impacted jurisdictions throughout the incident period.

The Washington State Department of Agriculture (WSDA) provided technical assistance including data collection to support recovery efforts through the Dairy Nutrient Management Program and Animal Health Program and State Veterinary Office. The WSDA continues to provide ongoing support and preparedness efforts through the Food Assistance Program. Agricultural damages are still being assessed at this time. Preliminary estimates, however, indicate agricultural damages in excess of \$27 million within Whatcom County alone as a direct result of the severe weather events during the incident period.

Local non-profits, religious organizations, and Voluntary Organizations Active in Disaster (VOADs) continue to provide assistance to the impacted communities across the state. These VOADs provide crucial support to the impacted communities through monetary and goods donations (food, clothing, tools, hardware, etc.), debris cleanup and removal, mental health

services, client casework and volunteer and donations management. Some of the VOADs providing support to impacted communities include Samaritans Purse, The Salvation Army, Team Rubicon, United Methodist Committee on Relief, the American Red Cross, Tzu Chi USA, Seventh-day Adventist Disaster Services, and hundreds of individual volunteers from the region. Local private sector partners are also providing direct support to the response and recovery efforts within the impacted communities by offering personnel and equipment.

The American Red Cross supported hundreds of individual client cases to support individuals and families that experienced losses due to the series of devastating storms. The Red Cross opened a shelter on November 14 in the town of Hamilton to assist people evacuated from the rising flood waters. The shelter remained open until November 20. On November 15, the Red Cross opened a second shelter in the city of Mount Vernon as the flood waters continued to displace hundreds of residents. This shelter remained open until December 3rd. The Red Cross also supported the emergency response and sheltering needs in Whatcom County during the incident period. On November 17, the Red Cross opened an emergency shelter at the fairgrounds in the city of Lynden. This shelter closed on December 1st and transitioned to a new location in the city of Ferndale on the same day, before closing on December 3rd.

As of December 5, 2021, to support the incident response and recovery the Red Cross opened a total of nine client shelters, recording 1,092 overnight stays, served 2,513 meals and 2,354 snacks and distributed 120 cases of water. The Red Cross provided immediate relief to individuals and families impacted by this disaster through the distribution of at least 160 comfort kits, 588 cleanup kits, 349 disaster kits and 2,572 other disaster relief items. Additionally, the Red Cross has thus far served 257 clients from 514 households through its disaster casework, fielded 191 disaster calls and conducted 275 disaster mental health contacts.

Team Rubicon provided recovery assistance to multiple counties in Washington State in the form of debris and tree removal and muck-out of residences. Volunteers removed approximately 6,536 cubic feet of debris in Clallam County. Team Rubicon is also providing debris removal and muck-out services for homeowners in Whatcom County in the areas of Sumas, Nooksack, and Everson. Team Rubicon's efforts in Whatcom County were interrupted by additional atmospheric rivers flooding its housing at a church on the weekend of November 27th. The Washington Conservation Corps (WCC), an AmeriCorps program led by the Washington State Department of Ecology, supported Skagit and Clallam counties in flood response and recovery. In Skagit County, WCC crews assisted in creating thousands of sandbags with Skagit County Dike District #12. In addition to sandbagging, crews also supported shelters, managed volunteers and conducted wellness checks investing 387 service hours. In Clallam County, WCC crews conducted 24 damage assessments and muck-out services. The WCC's efforts are ongoing.

After weeks of heavy rain and an increased flood threat to communities throughout Western Washington, the USACE-Seattle District Commander declared an emergency event and activated the Emergency Operations Center (EOC) on November 10, 2021. The District EOC deployed flood teams to monitor levees and respond to requests for technical assistance from the Quileute Tribe of the Quileute Reservation, the Quinault Indian Nation, the Lower Elwha Tribal

Community and to Clallam, King, Pierce, Skagit, Snohomish, and Whatcom Counties. Utilizing its Public Law 84-99 (PL84-99) Emergency Flood-fighting and Advance Measures authorities, the USACE provided assistance in the form of materials, equipment and personnel to assist in emergency flood control measures during the incident period. The USACE-Seattle District responded to Skagit County's requests for direct assistance to address seepage issues along approximately 2,000 feet of levee in Diking District #22 and to help stabilize 150 feet of damaged levee in Diking District Number 3. Throughout the incident period, the USACE-Seattle District responded to eight requests for direct assistance, 13 requests for flood flight supplies and approximately 24 requests from different organizations requesting technical assistance. Across the affected communities, the USACE-Seattle District deployed several river basin flood teams, delivered 167,500 sandbags, 1,320 Hesco barriers and 750 super sacks to protect countless lives and property.

Disaster Impacted Population Profile

The table below shows that all three of the most heavily impacted counties have a population that is 65 years and older that exceeds the national average. Clallam County in particular, has a significantly higher percentage of the population that is 65 years and older (27.5 percent) compared to the national average (15.1 percent). All three counties also have an above-the-national-average percentage of households receiving food assistance. The population with a disability in Clallam County (20 percent) is significantly higher than the national average of 12.6 percent.

In hardest-hit Whatcom County, nearly 25 percent of the American Indian and Alaska Native population lives below the poverty line. When including all Whatcom County residents, 14.1 percent live below the poverty line, which is still higher than the national average of 13.4 percent. The Nooksack Indian Tribe of Washington and the Lummi Tribe of the Lummi Reservation, located in the geographical area of Whatcom County, also endured widespread flooding and resulting damages to their communities.

The 2019 Community Resilience Estimates provided by the U.S. Census Bureau and derived from the 2019 American Community Survey (ACS), considers the following as risk factors to a community's ability to quickly and effectively recover after a disaster: income to poverty ratio, single or zero caregiver household, crowding, communication barrier, households without full-time, year-round employment, disability, no health insurance, age 65 and older, no vehicle access and no broadband internet access. While an estimated 17.4 percent of Washington State's population was identified in the 2019 ACS as meeting three or more of these risk factors, Clallam, Skagit, and Whatcom Counties have significantly higher rates at 24.1 percent, 20.5 percent and 19.1 percent, respectively. These figures provide an early indication of the capacity for the affected individuals and households to absorb, withstand and overcome the emotional, physical, social and economic toll this disaster has taken on communities across the state.

The U.S. Centers for Disease Control's (CDC) Social Vulnerability Index (SVI) can be used to identify communities that will need additional support to recover after a disaster based on factors including poverty, lack of access to transportation and crowded housing at the census tract level.

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The SVI score ranges from 0 (lowest vulnerability) to 1 (highest vulnerability). The 2018 SVI values for Clallam, Skagit and Whatcom Counties are 0.6146 (moderate to high level of vulnerability), 0.5382 (moderate to high) and 0.4541 (low to moderate), respectively.

Impacted Population Profile					
Category	United States	State of Washington	County		
			Clallam	Skagit	Whatcom
Resident Population*	328,239,523	7,614,893	77,331	129,205	229,247
Median Household Income ⁺	\$62,843	\$73,775	\$52,192	\$67,028	\$62,984
Population 65 Years and Over ⁺	15.1%	14.4%	27.5%	19.4%	16.0%
Population Under 18 ⁺	22.3%	21.5%	16.8%	21.3%	18.8%
Population with a Disability ⁺	12.6%	12.7%	20.0%	14.2%	13.2%
Households Receiving Food Stamps (SNAP) ⁺	11.7%	11.9%	14.2% ^p	12.7%	12.2%
Below poverty level (All People, past 12 months) ⁺	13.4%	10.8%	14.5%	12.0%	14.1%
Less than 100 Percent of the Poverty Level (American Indian and Alaska Native, past 12 months) ⁺	23.0%	21.0%	22.4%	24.9%	24.9%
Pre-Disaster Unemployment Rate [#]	4.6%	5.0%	4.9%	4.5%	4.3%
Population 5 years and over, speak English less than “very well” ⁺	8.4%	7.6%	1.8%	7.0%	3.4%
Rental Vacancy Rate [^]	5.8%	3.6%	5.1% [#]	0.9%	1.0%

Table 1. A data snapshot of the impacted population suggests the hardest-hit counties will need substantial recovery support.

⁺ Source: U.S. Census Bureau 2019 ACS (American Community Survey) 5-Year Estimates

^{*} Source: U.S. Census Bureau V2019 QuickFacts data

[#] Source: Washington State Employment Security Department, October 2021 (Preliminary) Monthly Employment Report

[^] Source: University of Washington Housing Market Snapshot, Q3

[#] Source: U.S. Census Bureau 2019 ACS 1-Year Estimates Data Profiles

The availability of rental housing in the hardest hit areas of Clallam, Skagit and Whatcom counties is abysmal and poses a significant challenge to the hundreds of individuals and families forced to seek temporary and permanent housing. The rental vacancy rate in Skagit and Whatcom counties is 0.9 percent and 1.0 percent, respectively, which is exceptionally below the national rental vacancy rate average of 5.8 percent. Additionally, statewide housing affordability remains a significant challenge.

Whatcom County

From November 5 through December 2, 2021, Whatcom County sustained record-breaking extensive damages caused by several back-to-back severe atmospheric river events. The cumulative adverse effects Whatcom County residents continue to suffer due to heavy rainfall, high winds, widespread flooding, landslides, and mudslides represents the largest and most destructive disaster that has ever hit the county. More than 1,900 businesses and structures were affected by the severe storm systems over the incident period, many of them impacted multitude times as county residents struggled to recover from the unrelenting severe weather. Unfortunately, one individual died as they were swept away by fast-moving flood waters in the city of Everson. Hundreds of others were rescued throughout the incident period as emergency responders worked 24/7 rescue operations, navigating hundreds of closed roads, detours and storm hazards. Tens of thousands of customers lost power and many communities became isolated due to the extensive road closures causing major impacts to the economic and social well-being across the county. As the rains continued to fall, river headwaters, tributaries and other typically minor streams swelled to record levels and flooded properties located outside mapped flood zones. As of December 3, preliminary estimates of flood damage to public and private infrastructure and private property in Whatcom County exceeds \$50 million. According to the Whatcom County Sheriff's Office Division of Emergency Management, the magnitude of damages has surpassed any disaster that has ever occurred since the county was founded in 1854.



Figure 5. An aerial photo taken on November 15, 2021 showing severe flooding in the City of Nooksack. Source: Tyler Perry

During the incident period, Whatcom County experienced significant disruptions to life-saving, life-sustaining and essential community services, utilities and infrastructure far beyond 72 hours. Disruptions and impacts to essential community services include extensive damages to government buildings and closures of public facilities including schools, adverse impacts to food banks and significant ongoing impacts to U.S. Postal Services including delivery. The city of Sumas Post Office closed indefinitely due to flooding and the Everson Post Office was closed and its delivery services impacted due to inaccessible locations throughout its service region. Whatcom Transit Authority public transportation services were also adversely affected due to widespread flooding, road closures and detours. Urgent care facilities in Whatcom County reported closures and impacts to their services caused by extensive power outages, flooding, and the inability for staff to reach their site. The Lake Whatcom Water and Sewer District issued a Boil Water Advisory for residents around Lake Whatcom due to the extensive rainwater runoff causing a wastewater system to overflow beginning on November 15.

Swollen rivers overtopped their banks and breached levees across the county, depositing feet of sand, silt and mud into homes and businesses. In the swift creek watershed near Sumas, naturally occurring asbestos mineral deposits were transported downstream onto the flood plain, impacting several homes and other infrastructure downstream. This presents a potential health hazard to residents and additional challenges to the clean-up and recovery process.

On November 14, Whatcom County declared a State of Emergency due to the threats from the heavy rain and the high number of displaced residents. The Whatcom County Sheriff's Office Division of Emergency Management activated the Whatcom County Search and Rescue to assist with response efforts. The Whatcom County Public Works River and Flood Division and

Maintenance and Operations prepositioned sandbags at fire stations in anticipation of the historic flooding. Whatcom County established a call center for individuals impacted by the flooding who might not have internet access. To facilitate the recovery process, the county waived emergency building repair permit fees.



Figure 6. An aerial photo taken on November 15, 2021 showing severe flooding in the City of Nooksack. The Nooksack Middle School is at the top of the photo. Source: Tyler Perry

Across the county, school districts cancelled all classes and activities due to widespread flooding and road closures. An estimated 85 percent of the city of Sumas was flooded during the incident period. The city hall building sustained major damages and an elementary school was destroyed after extensive flood damages. The damaging winds and heavy precipitation destroyed school buildings and the Sumas City Hall. According to the Nooksack Valley School District, at least 160 students have been displaced from their homes due to the flooding. The school district's laptop equipment for remote learning was also damaged during the storms. Additionally, the school district's meal program has been cancelled. The flooding has caused, and continues to cause, major physical and emotional tolls and widespread community disruption on the individuals and families throughout Whatcom County.

By November 15, approximately 500 people and tens of thousands of livestock were displaced due to flooding in the north and northeast areas of Whatcom County. Independent and American Red Cross-supported shelters provided food, water, shelter and mass care services to the hundreds of individuals and families displaced from their homes during the incident period. Shelters operated for nearly three weeks in the county, serving more than 1,000 individuals. Three independent shelters opened November 15 in the county, collectively supporting an estimated 280 individuals at their peak. The Nooksack Indian Tribe of Washington provided

emergency sheltering for displaced Tribal members November 15. The Lummi Nation established an emergency shelter in the city of Bellingham and supported approximately 10 families during the incident period.

A transitional housing option was established in Sumas a week later at a location typically used for temporary worker housing for seasonal farm workers in spring and summer months. At its peak, 35 individuals were staying at this location and as of December 16, 29 individuals remain in 13 units within this transitional housing facility. Additionally, as of December 16, 183 people comprised of 54 households are still sheltering in hotels and temporary housing locations, with dozens of others believed to be temporarily staying with neighbors, friends and family members.

The USACE-Seattle District, utilizing its Public Law 84-99 (PL84-99) Emergency Flood-fighting and Advance Measures authorities, provided assistance in the form of materials, equipment and personnel to assist in emergency flood control measures during the incident period. According to a USACE-Seattle District report, the extreme flooding events exceeded the design capacity of multiple Nooksack River levees, resulting in significant levee damages and breaches. At least six USACE levees suffered damage or are anticipated to have suffered damage once inspection teams can safely access the sites to conduct inspections. Whatcom County Public Works Department requested immediate Rehabilitation Assistance from USACE under PL84-99 for the repair of several levees on the Nooksack River that sustained major damages and were breached starting on November 14th. The levees provide protection to numerous residences, agricultural properties and critical infrastructure including major transportation routes. The county is still completing its post-flood levee inspection as the water has been slow to recede due to topography and the repeated severe flooding events.



*Figure 7.
Aerial
view of
flooding in
the City of
Sumas on
November
17, 2021.
Source:
Whatcom
County
Public
Works*

On November 16, an evacuation notice was issued for residents in the city of Ferndale after river forecasts indicated the Nooksack River would likely overtop its banks. The Ferndale food bank lost two food trucks because of the flooding, resorting to borrowing from a neighboring community to continue offering food assistance. On November 29, the city of Sumas police issued a shelter-in-place order as floodwaters crested over a bridge, inundating part of the town. Twelve railroad cars derailed in Sumas after flood waters washed out the ballast beneath the tracks. Flood waters prevented crews from reaching the cars and inspecting the tracks. On November 16, the neighboring City of Abbotsford in British Columbia 15 miles north from Sumas issued an immediate evacuation order to thousands of residents due to the failure of a pump station and concern of catastrophic flooding.

The U.S.-Canada Border was closed beginning November 15 and opened to non-commercial truck traffic on December 2. The City of Sumas border crossing into Canada was closed for two weeks due water over the roadway and road damage. The city of Abbotsford in British Columbia provided back up emergency fire services to the city of Sumas while addressing historic flooding within its community as well. On November 17, the Canadian province of British Columbia declared a state of emergency due to widespread flooding and landslides affecting thousands of individuals.



Figure 8. A multi-vehicle collision on Interstate-5 in Whatcom County following a major landslide November 15. Source: Washington State Department of Transportation

Interstate 5, a major north-south route stretching along the U.S. West Coast, was repeatedly closed in several locations during the incident period due to landslides, water, and debris on the roadways. A multi-vehicle collision occurred on I-5 November 15th, after a landslide swept onto the roadway near the city of Bellingham. Several landslides and fallen trees resulted in repeated and extended closures of I-5 throughout the incident period.

The severe atmospheric river events caused extensive damages to public infrastructure across the county, amounting to tens of millions of dollars in estimated repairs. The cumulative and compounding weather impacts caused by prolonged flooding, landslides, high winds and widespread road closures and utility outages, hampered response and relief efforts across the county. State Route 9 and SR 20 closed for multiple weeks due to water over the road. At least 10 major

arterials were washed out or destroyed. Other major arterials closed during the incident period as a result of landslides, debris, flooding, sloughing, severe erosion and undercutting of the pavement surface include Interstate 5, SR 546, SR 547, SR 530, SR 20 and SR 539. Some of these roadways were closed in several locations and multiple times throughout the incident period due to the repeated onslaught by the strong atmospheric river events.



Figure 9. Excessive runoff washed out a section of State Route 544 in Whatcom County during the incident period of November 5 through December 2, 2021. Source: Washington State Department of Transportation

A 15-foot section of levee was breached by damaging floodwaters along the Nooksack River, flooding the sole access road for the Lummi Tribe of the Lummi Reservation. Floodwaters made the road impassable for days, cutting off all access for residents of the Lummi Reservation and Lummi Island. As a result, individuals working or attending medical appointments on or off the island during the day were unable to return home. The Tribe resorted to using a heavy dump truck to cross the flooded roadway and convoy Tribal clinic staff that live off the Lummi Reservation to the clinic on the island. Lummi Tribal members also reported being unable to make medical appointments, such as dialysis treatments, due to the road closures, threatening their health and well-being. An individual with a medical emergency was shuttled by boat from the island to access immediate medical services. While damages continue to be assessed, the Lummi Nation has reported at least four residences destroyed with three to four feet of water and nearly two dozen others affected by the flooding. As a result of the extensive overland flooding, stormwater runoff and untreated wastewater discharge, several shellfish operations owned by the Lummi Nation were closed and have shared concerns regarding future harvests.

The Nooksack River set record flood levels during the incident period, swiftly inundating farms, roads, and residential areas. The flooding caused major disruptions to travel across the county as roads became impassable and sustained major erosional damages. On November 15, the Nooksack River at North Cedarville broke the 2006 record. Due to flood-damaged U.S.

Geological Survey (USGS) stream gauge monitors, river forecasting was adversely affected, and communities downstream lost the ability to receive accurate flood warnings for future flooding events. Many of the homes flooded in the city of Nooksack were not in a mapped flood plain and therefore did not have flood insurance. The Nooksack Valley Food Bank reported a drop in food distribution during the incident period due to the difficulty for residents to access the site, in part because many individuals were not able to cook because of ongoing power outages. Other individuals were not able to access the food bank because the floodwaters damaged or destroyed their only vehicle.

The National Weather Service reported a record-breaking 23.55 inches of rainfall occurred in the city of Bellingham between September 1 and November 30, 2021, beating the previous rainfall record by more than 6 inches set in 1990. Bellingham also set the wettest month on record with 14.57 inches of rainfall, beating the previous record of 11.60 inches set in November 1990. Lastly, the city also broke its two-day rainfall record with more than 5 inches of rain falling between November 14 and November 15. In Bellingham, city parks staff, public works crews and emergency responders worked around the clock to maintain public health and safety, barricading streets and providing traffic control measures and conducting emergency repairs. Excessive rainfall overflowed water retention ponds, culverts and ditches, leading to historic flooding and posing significant hazards to individuals across the county. Excessive runoff in downtown Bellingham exceeded the pumping capacity of stormwater facilities, resulting in automatic overflow for nearly 8 hours and an estimated 9 million gallons of sewage discharging into Bellingham Bay. During the same time, an estimated 133 million gallons of water discharged from Whatcom Creek which turned into a raging river.

Another strong atmospheric river event impacted the county at the end of November causing additional damages. On December 2, continual rainfall leading to saturated soils and landslides caused additional road closures and adversely impacted emergency relief efforts. State Route 9 closed once again, affecting access to emergency services to the communities in the cities of Everson and Nooksack. During the Initial Damage Assessments, residents had difficulties identifying when specific damages occurred because there were several back-to-back severe atmospheric river events. Residents also shared the emotional and physical toll the repeated flooding has taken on communities with standing water, continuously closed roads and ongoing significant adverse community disruptions. Residents were unable to work for several days in a row due continued storm events and lingering flood waters. The extensive road closures and detours also resulted in increased commute times for work and personal trips. As the latest atmospheric river event approached the region, on November 27, a request to pre-position two type 3 swift water rescue teams in Whatcom County through the state mobilization process was approved by Chief John Batiste of the Washington State Patrol. On December 3, the county received a report of a large landslide affecting the bluff below a refinery and in close proximity to a natural gas storage tank. State landslide geologists are currently assessing the area.

The widespread and continued flooding caused by the repeated severe atmospheric river events has also resulted in significant physical damages to farmers and agricultural businesses. Reported agricultural impacts in Whatcom and Skagit Counties include cattle losses, major agricultural infrastructure damage, reductions to milk production, milk dumping, small row crop damage and

concerns from livestock owners regarding feed supply shortages. The United States Department of Agriculture (USDA) held a State Emergency Board (SEB) meeting on November 22 to gather preliminary information from its partner agencies on the widespread impacts to the agricultural sector in the state. Additional agricultural damages reported by individuals include livestock fencing damages and debris issues. The overtopped and breached levees in the county caused floodwaters to inundate crops, depositing debris including plastic components and other trash. Additionally, due to the heavy precipitation, many dairy lagoons in the county are near capacity. Dairy operators have reported they will need to either apply their manure on wet fields, which is typically saved to fertilize fields in the spring months, or risk overtopping their lagoons. Either scenario would likely result in the discharge of manure into ditches and streams that flow downstream and may affect nearby shellfish growing areas, risking contamination in harvested shellfish or extended closures of these shellfish areas. The shellfish industry in Washington State is valued at \$270 million. At least 12 shellfish commercial operations closed on or after November 15 for multiple weeks as a result of emergency conditions from the severe storm events, which represents millions of dollars in lost revenue to the local and tribal communities and the state as a whole.



*Figure 10. flooding impacting agricultural lands in Whatcom County on November 16, 2021.
Source: Washington State Department of Agriculture (WSDA)*

The extreme flooding and wind damaged agricultural operations, causing the indefinite closure of a major Washington-based livestock feed producer on November 17. This led to a reduced availability of livestock feed and increased transportation distances to dairy farms in western and central Washington. Additional major livestock feed suppliers have reported direct storm-related impacts to their facilities. Rail line closures along the U.S.-Canada Border have also limited the raw grain product coming into the producers, causing further adverse impacts to the agricultural industry. Without the rail line operational, companies are unable to process and transport product across the country. This reduced availability of livestock feed and increased transportation distances and times has, and continues to delay essential intrastate collection and delivery of

livestock feed products from processing facilities to dairy farms. Dairy farms in Whatcom, Clallam, King and Snohomish Counties reported near-exhaustion or complete exhaustion of their feed. Within Whatcom County, estimated costs as a result of the severe weather impacts to the agricultural industry include in excess of \$27 million impacts to livestock, in excess of \$6 million for shellfish and in excess of \$2 million for crop production.

The cleanup and recovery from this historic and deadly flooding event is immense. An estimated 1,200 volunteers cleared 325 homes across the county in a two-day period between November 20 and November 21. A disposal site is open for county residents affected by the flooding. The immense toll this disaster has taken on the county will not be fully realized for weeks to come as waters continue to recede and damage assessments are ongoing. There is a significant recovery ahead for the thousands of individuals and families affected by this disaster. Federal assistance programs are greatly needed to support the immense recovery need and to supplement state and local assistance programs which are insufficient for dealing with this level of catastrophe.



Figure 11. Extensive flooding along the Nooksack River November 20, 2021. Source: Whatcom County Government

Clallam County

Dozens of homes sustained damage as a series of severe storms caused widespread flooding, high winds, landslides, and utility outages for more than 11,000 customers across Clallam County between November 5 and December 2, 2021. Dozens of primary arterial roads were closed, isolating communities, and resulting in severe fuel shortages, food shortages and adversely affecting health and medical needs of thousands of individuals. Numerous swift water rescues and evacuations occurred during the incident period as flooding inundated homes and businesses and severely damaged or destroyed public infrastructure. U.S. Coast Guard helicopter crews successfully evacuated 10 people, including four children and one infant from a flooded residential area in the city of Forks. Many others were isolated as roadways became impassable due to landslide debris, washouts, and water. Significant impacts to vital community functions were disrupted including access to health and medical care, schools, and government services. Public transit services were also suspended due to the road and flooding impacts, significantly impacting families and employees across the county.



Figure 12. US 101 at milepost 185 south of Forks. Source: Washington State Department of Transportation

Individuals are still reporting damages to the county at this time. As of December 13, 14 homes sustained major damage, 28 homes sustained minor damage and 18 were affected in Clallam County. Clallam County Emergency Management reported at least two homes were destroyed and more than 40 homes affected by the severe weather with dozens that were evacuated and seeking shelter. Less than 3 percent of Clallam County residents have flood insurance. Most insurance policies for homeowners, renters and businesses do not include flood insurance. Additionally, according to FEMA, just one inch of floodwater can cause up to \$25,000 in damage. Residents in Clallam County will likely encounter significant difficulties in either making repairs or finding alternative affordable housing.

The Clallam County Emergency Operations Center activated on November 15 in response to the severe weather. More than 1,000 customers in the community of Sekiu and surrounding areas lost all water access due to a major water main break on November 15. The water main break

was caused by a massive 275 feet-wide landslide across State Route 112. The Clallam County Public Utilities District authorized emergency repairs and asked all Clallam Bay and Sekiu water customers to exercise extreme water conservation as a result of the water main break. Additionally, electrical and communication utility lines were damaged after flood waters inundated the Hoko pump station. Although county public works employees were able to reroute water from the Clallam Bay reservoir to customers in Sekiu, the reservoir later ran out of water, affecting Clallam Bay residents as well. A Boil Water Advisory was issued to customers in the affected areas. The Washington State Department of Health and the Department of Transportation, in coordination with the State Emergency Management Division, Clallam County Emergency Management, public utilities districts, fire districts and private vendors collaborated to distribute bottled water to people without water service in Sekiu. Residents were unable to perform essential functions such as washing and bathing for multiple days due to the outages. Additionally, the school in Clallam Bay closed due to lack of water, which subsequently cancelled the school lunch program.

On November 15, the Clallam County Disaster Airlift Response Team (DART), a voluntary agency, activated in response to the entire west end of Clallam County after it was cut off from vehicular traffic and isolated due to extensive flooding and landslides. The DART teams flew 16 flight operations and delivered 150 cases of bottled water, 11 tote containers of pharmaceuticals and three vaccine related boxes during a two day period between November 16 and November 17 to the isolated community of Sekiu. The Boil Water Advisory was lifted on November 19th after satisfactory test results, however Clallam Bay customers remained without water until November 23rd, while water crews continued to work on the 3,600-foot-long temporary bypass pipe around the large landslide. A Boil Water Advisory was again issued to customers in Clallam Bay and Sekiu as the public utilities district tested, disinfected and flushed the new system.



Figure 13. Left: After weeks of heavy rain, a massive landslide on SR 112 occurred on November 15, severely damaging the highway and destroying a water main that supplies more than 1,000

customers in a nearby community. Right: A 3,600 foot long temporary bypass pipe was installed November 23. Source: Washington State Department of Transportation

The landslide on SR 112 continues to move and therefore state transportation crews are unable to clear debris or begin repairs on the roadway. A temporary single lane gravel bypass route around the slide is being used to accommodate local traffic, but there is concern the bypass route is already beginning to deteriorate. As a result of the closure and isolation, communities began fuel rationing for emergency vehicles only. Clallam Bay Corrections Center and county law enforcement agencies reported experiencing staffing issues due to the extent of road closures which isolated staff. Additionally, food banks and grocery stores reported shortages at facilities due to disruptions in the supply chain caused by the severe road damages and flooding issues.

The Makah Indian Tribe became isolated for several days due to the landslide on SR 112 resulting in significant adverse impacts to the community. With approximately 800 gallons of fuel reserved for emergency vehicles, the Tribe experienced a severe fuel shortage and shared concerns with transporting people to and from the area for medical treatment. During the isolation, the Tribe had no access to COVID-19 vaccines and other critical pharmaceutical products such as insulin, methadone, and medical equipment. The Tribe also reported impacts to food access as a result of the prolonged road closures which isolated their community.

In addition to the major landslide blocking and severely damaging SR 112, the route was also closed in other locations due to standing water, roadway settlement and debris slides. In one location, the roadway has dropped more than 2 feet and will require an emergency contract to reopen. At the peak of the event, all state highways in Clallam County and dozens of other roads were closed due to landslides, mudslides, debris and water on the roadways and settlement. Other major routes closed during the incident period include SR 110 and SR 113. The widespread and extended road closures prevented people from travelling east and west across the county. The road closures also caused staffing issues for emergency response departments and other essential workers. Due to the extent of road closures, ambulances were unable to transport patients into the city of Port Angeles, the largest city in the county with roughly 20,000 residents.

The National Weather Service reported a record-breaking 56.77 inches of rainfall occurred in Quillayute between September 1 and November 30, 2021, breaking the previous rainfall record by nearly 5 inches set in 1975. The majority of the rainfall occurred in the month of November during the incident period.

The Bogachiel River near La Push set a new all-time record high level of 44.93 feet on November 15, beating the previous record set in 2006 by more than 2 feet. The local fire district coordinated rescues of individuals and families along the Bogachiel River. The Clallam County Emergency Operations Center requested support for helicopter rescue teams from the U.S. Coast Guard. Clallam County Emergency Management also deployed a mobile disaster recovery information center beginning December 4th to support those affected by the historic floods.

The Elwha River Bridge on U.S. Route 101 was closed beginning November 15 due to high water on the Elwha River near Port Angeles. Due to closures on SR 112 and SR 113 from

standing water, debris and landslides, there was no detour for the closure. The Washington State Department of Transportation closed the bridge as a safety precaution and to evaluate if the flood waters and debris eroded the structure. U.S. Route 101 was also closed in multiple other locations due to landslides. The closure limited access to and from the city of Forks. Search and Rescue crews supported the delivery of food and water to isolated homes during the incident period.

The Hoh Indian Tribe was also affected by the closure of U.S. Route 101 and had to use unmaintained logging roads. The Hoh Indian Tribe reported widespread power outages caused by downed power lines and trees toppled by high winds around November 15. North of the Hoh Indian Tribe, the Quileute Tribe of the Quileute Reservation reported significant damages as a result of the flooding. Although damage assessments are still ongoing, several residences are known to be destroyed and more than a dozen other sustained damages as a result of the record flooding. Due to the extent of road closures in the region, an individual in the community of La Push needed to be extricated by helicopter due to a health emergency.

Skagit County

From November 5 through December 2, 2021, Skagit County experienced several back-to-back severe atmospheric river events, delivering heavy precipitation and high winds. The severe weather caused extensive and historic-level flooding, mudslides, landslides, and high winds. As a result of the severe weather impacts, there has been at least one confirmed fatality and significant damages to homes, businesses, and public and private infrastructure. Tens of thousands of customers lost power for multiple days, hundreds of individuals and families were forced to evacuate and emergency responders rescued dozens of stranded people as record floodwaters overtopped riverbanks and threatened to breach levees protecting lives and property. The severe storms also caused widespread damages to the agricultural sector, causing major crop damages. Additionally, swift-moving water inundated fields, resulting in more than 100 livestock mortalities. Numerous farmers reported losing acreage as rivers overtopped banks and scoured flood channels, washing away the land itself and topsoil. This loss represents a significant economic and emotional impact to farmers.

Due to ongoing flooding issues and the forecast for additional extended and heavy rainfall, Skagit County requested USACE temporary measures under provision of Public Law 84-99 on November 11 to mitigate the threat of flooding to property and critical infrastructure near a damaged levee that protects the city of Mount Vernon and its residents. As of November 24th, USACE reported at least six USACE levees in Skagit County suffered significant damages. Inspection teams are in the process of verifying damages and conducting repairs. In addition to providing direct support to the diking districts in Skagit County, the USACE – Seattle District actively directed operations at the Upper Baker and Ross Dam to manage flooding on the Skagit River, reducing the peak river stage in the town of Concrete by more than 8 feet. At 60,000 cubic feet per second, the Ross Dam set a new discharge record during this multi-week storm event, beating the previous record of 50,000 cubic feet per second. The record-setting flows into the Ross Lake and Baker Lake reservoirs caused 12-foot and 14.5-foot rises, respectively. The Ross

Lake reservoir filled to 99 percent of its storage space and Baker Lake reservoir filled to 98 percent.

The American Red Cross opened a shelter in the town of Hamilton beginning November 14 as floodwaters continued to rise and heavy precipitation continued. Due to power outages, the shelter was forced to temporarily operate using only generators. A second shelter opened in the city of Mount Vernon on November 15.

On November 13, the mayor of the town of Hamilton issued an emergency proclamation due to the threats to public health and safety and to prevent imminent danger to public and private property as a result of the severe storms. The mayor of the town of Lyman also declared an emergency on November 13, authorizing the expenditure of funds required to address the damaging and life-threatening storm impacts. The mayor declared a Civil Emergency for the city of Mount Vernon on November 15, deploying flood walls in downtown and closing the downtown area including public parks. An evacuation notice was also issued for the western portion of Mount Vernon due to high flood waters. On November 16, another evacuation notice was issued for residents and business in Mount Vernon due to fears of a potential levee failure after a bulge was discovered on one of the dikes protecting the city. The National Weather Service also issued a Flash Flood Watch due to the potential for the levee failure. Residents living on Samish Island and Fir Island also received an evacuation or shelter in place notice on November 16 due to the likelihood of floodwater to inundate the only routes to and from the communities. In the city of Burlington, emergency responders rescued a bus with 28 passengers after floodwaters pushed it into a ditch. In a single day, at least 24 individuals were rescued from their homes, many forced to leave behind pets as they rapidly fled to safety. U.S. Navy helicopters flew from Naval Air Station Whidbey Island to support multiple rescue operations including in the town of Rockport after an individual escaped their vehicle and clung to a tree to escape the swift-running water over the roadway.

Due to near-record high flood waters in the Skagit River, the SR 536 bridge was closed. Debris in the river destroyed the river gauges near Mount Vernon, affecting accurate river forecasting methods while major flooding was actively occurring. Numerous other primary and secondary roads and bridges were closed throughout the county due to water over the roadway, debris, landslides, mudslides, or washouts, causing major community-wide disruptions. Skagit county Public Works reported widespread road damages and road hazards including culvert issues, roadside sloughing, water over the roadway, trees, and other debris. As of December 13, estimated damages to public infrastructure in the county exceeds \$5 million. Powerlines over the roads also impeded response operations and the reopening of roads. The impacts from the severe storms forced the reduction of many city services as staff shifted to address flood-related needs. Severe embankment erosion on a temporary bridge resulted in closure and Skagit County Public Works crews pulling the bridge to prevent it from falling in the creek. The temporary bridge was installed in June after severe flooding washed out the previous bridge in January 2021. Skagit County Public Works identified several locations on roadways with increased risk of landslide due to super-saturated soils. Skagit County Public Works urged residents and visitors to avoid traveling through the area and allow the saturated soil to settle. The National Weather Service issued a special weather statement on increased landslide risk in Western Washington.

Flooding along the Skagit and Samish Rivers was the worst the community has seen in more than 30 years. The Skagit River crested at 36.79 feet on November 16, just shy of the 1990 record of 37.37 feet. Several school districts closed and cancelled all activities for multiple consecutive days due to the widespread flooding, power outages and road closures. Skagit County senior centers also closed on November 16, including the cancellation of the Meals on Wheels delivery services to ensure the safety of drivers. Skagit public transit system cancelled trips as a result of widespread road closures, hazards and flooding disruptions. Skagit County's COVID-19 vaccination and testing sites were closed for multiple days due the flooding.



Figure 14. An aerial photo captured November 18, 2021 shows floodwaters surrounding a farm in Skagit County. Source: Washington State Department of Agriculture (WSDA)

Numerous farmers suffered immense losses because of the prolonged and repeated flooding in November. Farmers reported more than 4 feet of water on their land, inundating and destroying crops and leading to the loss of livestock. One dairy farmer alone lost 44 cows and was unable to milk the surviving cattle for 56 hours, resulting in an estimated \$20,000 in lost earnings alone. Another ranch reported at least \$30,000 in losses after the Skagit River scoured away several feet of land and turned the property into a lake for multiple days, leaving behind debris and deceased farm animals that were unable to be evacuated in time.

After yet another atmospheric river event hit the county November 28 through November 29, additional homes were flooded and suffered major damages in the town of Hamilton. The Skagit River once again reached major flood stage on November 29th as the heavy rain continued.

Washington State Recent Disasters

Washington State has experienced numerous devastating disasters over the past two years, resulting in four major disaster declarations. The current disaster caused by the repeated adverse impacts of multiple strong atmospheric river events for which I am requesting federal support comes on the heels of a series of major incidents impacting the state. The impacts from the series of record-breaking and fatal severe storms, high winds, flooding, landslides, and mudslides must be taken in the larger context of the dozens of declared and undeclared disasters that have occurred in the state in recent history.

In addition to the current public health emergency related to the COVID-19 pandemic, since January 2020 Washington State has experienced four Federal Emergency Management Agency (FEMA) Major Disaster Declarations, two FEMA Emergency Declarations, 18 Small Business Administration Declarations (SBA) and 18 FEMA Fire Management Assistance Grant (FMAGs). Additionally, in 2021 alone, I have signed 101 Governor's State of Emergency Proclamations related to current and recent emergencies in the state. To assist Washington State in the response and recovery from these incidents, other federal funding and assistance have been made available including a number of Federal Highway Administration (FHWA) Emergency Relief declarations and U.S. Army Corps of Engineers (USACE-Seattle District and USACE-Walla Walla District) PL84-99 Emergency Flood-fighting and Advance Measures operations which continue to be tallied from this latest disaster. While the assistance provided in response to the impacts from the recent disasters provides some relief for recovering communities, it does not meet the needs of our affected local and tribal jurisdictions.

Below is a brief description of some of the mostly costly and damaging events which have adversely affected the State of Washington and its residents in the past 24 months.

2021 Disasters

June & July 2021 Excessive Heat Wave and Drought

A record-breaking heat wave followed an historically dry spring and summer, affecting the entire state. Beginning June 24, 2021, Washington State experienced an unprecedented heat event, with 157 preliminary heat-related deaths from June 26th through August 31. The excessive heat caused extensive damage to road infrastructure in Adams, Asotin, Clark, Cowlitz, Douglas, Ferry, Grant, King, Kittitas, Okanagan, Pacific, Pend Oreille, Pierce, Snohomish, Spokane, Whatcom, Whitman, and Yakima counties. The unprecedented heat caused failures to concrete panels, bridge expansion joints and asphalt, as well as electrical damage requiring repairs over a large geographic area. The Washington State Department of Transportation took emergency measures to repair the roadway. The State Department of Transportation estimated the cost to repair the damage exceeded \$2,600,000. The excessive and extreme heat, combined with the prolonged drought, caused significant crop losses and depleted water sources. At least 91 deaths

have been attributed to the heat wave which set record temperatures across the state. On July 6, I signed Governor's Proclamation 21-10, proclaiming that a State of Emergency existed throughout the State of Washington and issued a temporary outdoor burn ban for all 39 counties. As the excessively dry conditions continued to impact our state, I declared a drought emergency on July 14. On July 16, I signed Governor's Proclamation 21-12, proclaiming that a State of Emergency existed in Adams, Asotin, Clark, Cowlitz, Douglas, Ferry, Grant, King, Kittitas, Okanagan, Pacific, Pend Oreille, Pierce, Snohomish, Spokane, Whatcom, Whitman, and Yakima Counties.

July 2021 Interstate Bridge Damages

On July 6, 2021, the State Route 506/108 bridge over Interstate 5 (SR 506 overpass) was severely damaged when a vehicle with an over-height load struck the SR 506 overpass where it crosses Interstate 5 near milepost 60 in Lewis County. The damage sustained to the SR 506 overpass will require replacement of one span of the structure. The Washington State Department of Transportation took emergency measures, closing travel lanes to restrict traffic from driving over the damaged girder. The State Department of Transportation estimated the cost to repair the damage from the collision is more than \$1,000,000. On July 16, 2021, I signed Governor's Proclamation 21-13, proclaiming that a State of Emergency existed in Lewis County.

September 2021 Interstate Bridge Damages

On September 27, 2021, the 12 Street NE overpass spanning Interstate 5 was severely damaged when a vehicle with an over-height load struck the overpass where it crosses Interstate 5 in Snohomish County. The damage sustained to the 12th Street NE overpass will require replacement of an overpass girder. The Washington State Department of Transportation took emergency measures, closing travel lanes to restrict traffic from driving over the damaged girder. The State Department of Transportation estimated the cost to repair the damage from the collision is more than \$1,800,000. On October 19th, 2021, I signed Governor's Proclamation 21-17, proclaiming that a State of Emergency existed in Snohomish County.

2021 Wildfires

The 2021 wildfire season was one of the worst in Washington State history, beginning unusually early among prolonged hot and dry spring conditions. More than 600,000 acres burned, and 51 homes and 200 other buildings were destroyed or severely damaged across the state. The 2021 wildfire season consisted of 21 state fire mobilizations. Under these mobilizations, the state has shouldered a significant portion of the financial burden for fire suppression, with current estimates at \$167 million. The exact state expenditures resulting from the 2021 wildfire season are still being totaled at this time. Preliminary estimates exceed \$394 million between both federal and state anticipated firefighting expenditures. Due to the high level of threat and extreme fire behavior, FEMA approved eight FMAG declarations in 2021. The Washington Department of Natural Resources (DNR) responded to 1,187 fires, which is higher than the previous 10 years of record keeping. Firefighting expenditures for DNR are currently estimated at more than \$128 million. The Washington State Patrol has reported firefighting expenditures exceeded \$14 million in 2021. The 2021 wildfire season is likely to become one of the costliest in Washington State's history.

Date	2021 State Fire Mobilizations	Impacted County / Tribe
4/19/21	Green Valley Fire	King
6/27/21	Lind Fire	Adams
6/28/21	Cedar Hills Fire	King
7/4/21	Batterman Fire	Douglas
7/5/21	Andrus Fire	Spokane
7/7/21	Asotin Complex Fire	Asotin
7/7/21	Wilma Fire	Whitman
7/13/21	Lyle Hill Fire	Klickitat
7/13/21	Red Apple Fire	Chelan
7/16/21	Goddard Road Fire	Stevens
7/20/21	Cedar Creek Fire	Okanogan
7/20/21	Cub Creek 2 Fire	Okanogan
7/22/21	Steptoe Canyon Fire	Whitman
7/23/21	Northup Canyon Fire	Grant
7/25/21	Hazard Hill Fire	Spokane
7/25/21	Hardesty Valley Fire	Spokane
8/6/21	Whitmore Fire	Okanogan
8/15/21	MuckaMuck Fire	Okanogan
8/15/21	Ford Corkscrew Fire	Stevens
8/15/21	25 Mile Fire	Chelan
8/29/21	Rooster Comb Fire	Chelan

2021 FMAG #	FMAG Name	Impacted County / Tribe
FM-5395	Andrus Fire	Spokane
FM-5401	Cedar Creek Fire	Okanogan
FM-5397	Chuweah Creek Fire	Okanogan, Confederated Tribes of the Colville Reservation
FM-5398	Red Apple Fire	Chelan
FM-5410	Muckamuck Fire	Okanogan
FM-5411	Ford Corkscrew Fire	Stevens
FM-5414	Twentyfive Mile Fire	Chelan
FM-5415	Schneider Springs Fire	Yakima

November 2021 Interstate Bridge Damages

On November 15th, 2021, the Koontz Road overpass spanning Interstate 5 was severely damaged when a vehicle with an over-height load struck the overpass where it crosses Interstate 5 in Lewis County. The damage sustained to the overpass will require replacement of an overpass girder. The Washington State Department of Transportation took emergency measures, revising travel lanes to restrict traffic from driving over the damaged girder. The State Department of Transportation estimated the cost to repair the damage from the collision is more than \$1,000,000. On December 7th, 2021, I signed Governor's Proclamation 21-19, proclaiming that a State of Emergency existed in Lewis County.

November 2021 Severe Atmospheric River Flooding

The disaster I am currently requesting a Presidential Declaration for began November 5 and continued through December 2, 2021. This major disaster is the latest in a series of significant disasters that have adversely impacted state, local and tribal governments. The back-to-back severe storm events have repeatedly unleashed record-breaking damages on local jurisdictions and tribes. The cumulative fiscal, communal and social impacts of these disasters have limited the ability of impacted jurisdictions, including the state, to adequately address the impacts caused by this latest disaster.

2020 Disasters

January 2020 Severe Winter Storm

In January 2020, severe winter weather brought high winds, heavy rain, extensive snow and ice and flooding, resulting in sporadic and extended road closures to mountain passes and major highways and isolating communities for multiple days. Heavy rainfall caused widespread coastal and inner-coastal flooding and shallow landslides, resulting in school and road closures, power outages and impacts to homes, businesses, and infrastructure. In response to the severe winter weather event, I signed Governor's Proclamation 20-01, proclaiming a State of Emergency and authorizing the exemption of certain driver hours of service rules to allow for the continuation of emergency relief efforts and to minimize the impact to the State's economy.

January and February 2020 Severe Winter Storm

From the period of January 20 through February 10, 2020, Washington State experienced a series of severe winter storms that produced damaging high winds, heavy snowfall, ice accumulation and intense precipitation, resulting in flooding on 16 rivers, hyper saturated soil, debris flows, mudslides, coastal and inland flooding and widespread power outages for more than 100,000 customers. Many rivers reached or exceeded flood stage and several locations reported record breaking precipitation events. Western Washington received more than 10 inches of rain, nearly double the average precipitation for this time of year. Dozens of homes were destroyed and extensively damaged, along with numerous businesses, roads, bridges and critical infrastructure, amounting to nearly \$60 million in damages. A Major Disaster Declaration was declared on April 23, 2020 for 15 counties across the state.

Novel Coronavirus (COVID-19) Pandemic

Washington State continues to expend extraordinary amounts of resources in response to the ongoing COVID-19 pandemic. The first confirmed case of COVID-19 in the U.S. was in Washington State, prompting a substantial response from local, state, tribal and federal public health officials. Unfortunately, our state also saw the first U.S. fatality from this virus. As of December 9, 2021, there have been 787,245 confirmed cases of COVID-19 in Washington State, of which 9,497 have died.

A national emergency was declared on March 13, 2020 (FEMA-3427-EM-WA), directing FEMA to aid the state, local and tribal governments, and other eligible entities. A Major Disaster for the state was declared on March 22nd, 2020 (FEMA-4481-DR-WA), authorizing certain Individual and Public Assistance Programs statewide.

The ongoing pandemic has placed an enormous burden on state, local and tribal government resources. As the response to the pandemic continues, local and state agencies are spending an extraordinary amount of resources to protect the public. Communities statewide are still struggling to recover from numerous recent disasters, including this latest series of severe winter storms, while responding to the COVID-19 pandemic.

Civil Unrest Response May 2020

On May 25, 2020, George Floyd was killed during an arrest in Minneapolis, Minnesota. The incident sparked civil unrest throughout the United States. Starting on May 29, 2020, multiple rallies and demonstrations throughout the state of Washington took place. While most protests were peaceful, some protests turned violent and resulted in the burning, looting and vandalism of multiple businesses in several cities. In response to these demonstrations, I authorized the activation of the Washington National Guard statewide and submitted a disaster declaration request on September 14 to the Small Business Administration (SBA). An SBA Declaration of Economic Injury was issued on September 16.

2020 Wildfires

The 2020 wildfire season was exceptionally busy and resulted in 23 state fire mobilizations. In excess of 1,600 wildfires burned more than 800,000 acres, affecting approximately 362,220 acres of threatened critical Sage-Grouse habitat. Due to the high level of threat and extreme fire behavior, FEMA approved 10 FMAG declarations in 2020. At the time of the declarations, the 10 FMAG fires alone threatened approximately 4,200 homes, imperiling the lives of more than 8,000 people. Washington State Patrol received 24 requests for Washington fire service resource mobilization and approved 23 of these requests. Under these mobilizations, the state has shouldered a significant portion of the financial burden for fire suppression. Initial estimates of fire suppression costs incurred by the state for fire service mobilizations in 2020 are approximately \$6,300,000.

The Washington Department of Natural Resources confirmed costs of \$29,378,000 for fires through July 2020. These numbers do not include billings from federal agencies for fire suppression assistance nor do they include costs for fires that have occurred since July 31, 2020. We anticipate that firefighting costs will likely exceed \$100,000,000 and expect that 2020 will be among the costliest fire years in the history of Washington State.

Date	2020 State Fire Mobilizations	Impacted County / Tribe
4/11/20	COVID-19 (All hazard mobilization)	All
5/30/20	Seattle Demonstration / Civil Unrest (All hazard mobilization)	King
7/11/20	Road 11 Fire	Douglas
7/13/20	Sunset Fire	Chelan
7/24/20	Colockum Fire	Chelan
7/31/20	Moses Coulee Fire	Douglas
8/14/20	Sunset Frontage Fire	Spokane
8/16/20	Chief Timothy Fire	Whitman
8/16/20	Badger Lake Fire	Spokane
8/19/20	Palmer Fire	Okanogan
8/28/20	Bartholomew Fire	Spokane
9/1/20	Evans Canyon Fire	Yakima
9/7/20	Pearl Hill/Cold Springs Fire	Okanogan and Douglas counties, The Confederated Tribes of the Colville Reservation
9/7/20	Colfax Fire	Whitman
9/7/20	Whitney Fire	Lincoln
9/7/20	Apple Acres Fire	Chelan
9/7/20	Babb Road Fire	Spokane, Whitman
9/7/20	Euclid Track Fire	Spokane
9/8/20	244 th Command Fire	Pierce
9/8/20	Sumner Grade Fire	Pierce
9/8/20	Bourdeaux Fire	Thurston
9/9/20	Big Hollow Fire	Skamania
9/12/20	Wawawai Canyon	Whitman

2020 FMAG #	FMAG Name	Impacted County / Tribe
FM-5320	Road 11	Douglas
FM-5323	Anglin	Okanogan
FM-5330	North Brownstown	Yakima/ Confederated Tribes and Bands of the Yakama Nation
FM-5337	Palmer	Okanogan
FM-5342	Evans Canyon	Yakima
FM-5351	Cold Springs / Pearl Hill	Okanogan, Douglas / Confederated Tribes of the Colville Reservation
FM-5352	Apple Acres	Chelan
FM-5355	Babb	Spokane, Whitman
FM-5359	Bordeaux Road	Thurston
FM-5360	Sumner Grade	Pierce

September 2020 Drought, Straight-Line Winds and Extreme Fire Behavior

From September 1 through September 19, 2020, extreme fire conditions combined with severe and damaging winds resulted in multiple large wildfires across the state. More than 200 homes were destroyed along with hundreds of other structures across the state. Electrical transmission, distribution lines and other critical infrastructure throughout the state were severely damaged or destroyed. In some areas, such as in the town of Malden in Whitman County, the extensive level of destruction resulted in a complete loss of community services.

As a result of the impacts from the extreme wildfire and straight-line winds, the state requested federal assistance. You approved a Major Disaster (FEMA-4584-DR-WA), authorizing Public Assistance for the most heavily-impacted counties and tribal reservations. The disaster caused devastating impacts to communities across the state. Combined with the ongoing response to the COVID-19 pandemic, this past wildfire season limited the local and state ability to adequately address the immediate and long-term recovery needs of communities across the state. The state, local jurisdictions and tribal governments impacted by this destructive wind and extreme wildfire event continue to navigate the long recovery process.

December 2020 and January 2021 Severe Winter Storm, High Winds, Flooding, Landslides and Mudslides

A prolonged and severe winter storm system from December 29, 2020 through January 16, 2021, impacted several counties across the state, resulting in widespread inland and coastal flooding, high winds, erosion, landslides and mudslides. This severe storm system caused significant damages to homes, businesses, public utilities, public facilities, electrical power systems and other infrastructure. The severe storm system resulted in two fatalities, search and rescue operations and road closures and detours of major travel corridors. A Major Disaster for the state was declared on April 8, 2021 (FEMA-4593-DR-WA), authorizing the Public Assistance Programs for 16 counties.

Other Disasters

Additional disasters that have adversely impacted our state in the past two years include historic wildfires, landslides, severe weather, drought, flooding, agricultural disasters, including the discovery of the invasive Asian giant “murder” hornets and major public health emergencies, the first 2020 human cases of West Nile virus in two counties and the ongoing COVID-19 pandemic. While most of these incidents did not qualify the state to receive Major Disaster Declarations - Public Assistance or Individual Assistance, cumulatively they have led to hundreds of millions of dollars in response and recovery costs.

Below is a list of the federally declared disasters and other undeclared incidents for the state during the past two years:

FEMA Declared Major Disasters & Emergencies 2020-Present	
Declaration Date	Event
March 2020	Tulalip Tribes of Washington COVID-19 (EM-3507)
March 2020	Washington COVID-19 (EM-3427)
March 2020	Washington COVID-19 (DR-4481)
April 2020	Washington Severe Storms, Flooding, Landslides and Mudslides (DR-4539)
February 2021	Washington Wildfires and Straight-Line Winds (DR-4584)
February 2021	Confederated Tribes and Bands of the Yakama Nation COVID-19 (DR-4481-CYTN)
April 2021	Washington Severe Winter Storm, Straight-line Winds, Flooding, Landslides and Mudslides (DR-4593)

Undeclared (and other Federal Agency declared) Emergencies and Disasters 2020-Present	
Incident Date	Event
January 2020	Winter Weather (<i>State of Emergency & SBA Declarations</i>)
February 2020	Winter Weather (<i>State of Emergency</i>)
March 2020	Drought (<i>USDA Declaration</i>)
March 2020	COVID-19 Pandemic (<i>State of Emergency & SBA Declarations</i>)
April 2020	Drought (<i>USDA Declaration</i>)
April 2020	Drought (<i>USDA Declaration</i>)
May 2020	Civil Unrest (<i>SBA Declaration</i>)
August 2020	Wildfires (<i>State of Emergency</i>)
September 2020	Wildfires (<i>State of Emergency</i>)
September 2020	Wildfires (<i>USDA & SBA Declarations</i>)
December 2020	Severe Storms (<i>FHWA-ER Pending</i>)
March 2021	Drought (<i>USDA Declaration</i>)
April 2021	Drought (<i>USDA Declaration</i>)
May 2021	Drought (<i>USDA Declaration</i>)
June 2021	Drought (<i>USDA Declaration</i>)
July 2021	Drought (<i>USDA Declaration</i>)
July 2021	Wildfires (<i>State of Emergency</i>)
July 2021	Excessive Heat (<i>State of Emergency</i>)
July 2021	State Route 506/108 Overpass Damage (<i>State of Emergency</i>)
July 2021	Multi-Unit Apartment Complex Fire (<i>SBA Declaration</i>)
October 2021	12 th Street NE Overpass Bridge (Interstate 5) (<i>State of Emergency</i>)

Fisheries Disasters

Fisheries in western Washington have experienced sudden and unexpected large decreases in fish stock biomass multiple times in recent years. The economic impact from these fisheries disasters has significantly impacted several tribes and dozens of communities across the state. Many fisheries have been unable to operate multiple years in a row as a result of low fish returns, causing detrimental impacts to annual fishery income. The low fish stock biomass also impacts the availability of fish for important ceremonial and subsistence food source purposes that many community and tribal members depend on in the winter months. During the past 24 months, multiple Commercial Fisheries Disasters have been declared or requested for Washington State under section 308(b) of the Interjurisdictional Fisheries Act and section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act. Approved and requested federal Commercial Fishery Disaster Declarations includes the following Tribes and fisheries:

Fisheries Disaster	Impacted Tribe(s) / Region	Approval Date
Washington Fraser River Sockeye and Puget Sound Fall Chum Salmon Fisheries (2020)	Port Gamble S’Klallam Tribe	Pending
Washington Ocean Salmon Fisheries (2020)	Non-Tribal West Coast Region Fisheries	Pending
Washington Columbia River, Willapa Bay, Puget Sound Salmon Fisheries (2019)	Non-Tribal West Coast Region Fisheries	Pending
Washington Fraser River Sockeye and Puget Sound Chum and Coho Salmon Fishery (2014 and 2019)	Port Gamble S’Klallam Tribe	Pending
Washington Puget Sound Fall Chum Salmon Fishery (2019)	Squaxin Island Tribe	Pending
Washington Green River Chinook, Chum, Coho and Pink Salmon Fishery (2019)	Muckleshoot Indian Tribe	Pending
Washington Fraser River Sockeye, Chum, Coho and Pink Salmon Fishery (2015, 2016, 2017 and 2019)	Lummi Nation	Pending
Washington Fraser River & Skagit River Salmon Fisheries (2019)	Swinomish, Tulalip and Upper Skagit Tribes	Pending
Washington Chehalis River Spring Chinook Salmon Fishery (2019)	Confederate Tribes of the Chehalis Reservation	06/29/2021
Washington Puget Sound Coho Salmon Fishery (2018)	Port Gamble S’Klallam Tribe	06/29/2021

Federal Assistance

Washington State has received substantial federal assistance for disasters from 2020 to present. Due to the numerous recent disasters in our state, the exact amounts of federal assistance provided to the State are unknown at this time. Federal assistance provided to Washington State since 2020 includes the following:

Federal Assistance Provided to Washington State Since 2020		
Federal Amount	State Amount	Qualifying Event / Federal Assistance
\$26,464,165	\$3,780,595	Washington Severe Winter Storm, Straight-line Winds, Flooding, Landslides and Mudslides (DR-4593)
\$64,331,300	\$21,443,767	Washington Wildfires and Straight-Line Winds (DR-4584)
\$127,307,431	\$18,186,776	Washington Severe Storms, Flooding, Landslides and Mudslides (DR-4539)
\$8,616,214	N/A	Washington COVID-19 Pandemic (DR-4481 Individual Assistance Program)
\$2,387,918,644	N/A	Washington COVID-19 Pandemic (DR-4481 Public Assistance Program)
\$19,428,158	\$3,553,451	Federal Highway Administration (FHWA) Estimated Expenditures for Emergency Relief, not including recent disaster
\$99,692,100*	N/A	U.S. Small Business Administration (SBA) (estimated*, excludes the Paycheck Protection Program – see below)
\$27,265,800	\$3,646,900	United States Army Corps of Engineers PL84-99 Emergency Flood Fighting Measures / Emergency Operations – Seattle District & Walla Wall District (Estimated 2019-2021)
\$2,661,331,712	\$47,058,038	Total Federal Funding Provided to Date (estimated)

Additionally, through the Paycheck Protection Program (PPP), the SBA has approved 195,286 loans for a total of \$18,300,000 in federal assistance since the start of the year through December 13th, 2021.

Individual Assistance

On November 30, 2021, the state requested a joint FEMA-State Preliminary Damage Assessment (PDA) for Individual Assistance with FEMA Region X. The three counties included in the PDA request were: Clallam, Skagit, and Whatcom. The joint FEMA-State PDA was conducted virtually and began on December 1, 2021 and was completed on December 15. The joint FEMA-State PDA teams validated that November severe weather impacts caused substantial uninsured and personal property losses. All three of the hardest hit counties have poverty rates and

households receiving food assistance at higher than the national average. Additionally, all three counties have a higher than the national average percentage of their population 65 years and over and population with a disability. Skagit and Whatcom counties have extremely low rental vacancy rates which will make finding an affordable and available home in the area enormously challenging for the hundreds of individuals displaced by this disaster.

These issues and others are not specific to any one area. Many of the individuals and families in the affected counties are struggling to recover from this disaster. Some disaster-affected individuals are unlikely to come forward to report damages for a variety of reasons. Therefore, the number of homes assessed for damages and the number of individuals and families impacted by this disaster are likely significantly higher than shown below.

This disaster has, and continues to cause significant impacts to community infrastructure, including to life-saving and life-sustaining services, essential community services and transportation infrastructure and utilities.

A complete table of the findings from the joint FEMA-State PDA is in Enclosure A. Key findings during the joint FEMA-State PDA are noted in the table and text below.

County	Destroyed	Major	Minor	Affected	Totals
Clallam	-	14	28	18	60
Skagit	2	30	17	43	92
Whatcom	4	271	354	151	780
Totals	6	315	399	212	932

- The jurisdiction with the greatest number of major and destroyed homes is Whatcom County.
- A total of 932 homes were assessed during the Joint PDA, with eight homes inaccessible.
- An estimated 15 percent of the 212 affected dwellings will be eligible for the Individuals and Households Program (IHP). During the Joint PDA, many of the flood-impacted residents reported damages to crawl spaces and/or basements, as well as substantial damage to numerous attached structures including porches, carports, garages and outbuildings which require rental and/or repair assistance made available through the Individuals and Households Program.
- Total estimated cost of Housing Assistance and Other Needs Assistance is \$6,570,145.
- Rental vacancy rates in multiple disaster-affected counties are exceptionally low. With limited housing options available in the area, especially affordable housing, most impacted residents are likely living in their damaged homes, staying with family/friends or depleting their savings by staying in hotels and eating out for meals.

- While the Total Taxable Resources (TTR) in Washington State and the IHP Cost-to-Capacity (ICC) Ratio may appear low, this disaster must be taken into consideration with the unprecedented burden that recent disasters and the on-going response to the COVID-19 pandemic have placed on local and state resources. The communities that were most heavily impacted by this series of severe winter storms, historic flooding, high winds, landslides, and mudslides are entirely overwhelmed and unable to address the immense recovery needs of individuals who lost homes and businesses and have experienced significant trauma.

In accordance with 44 CFR § 201.4, FEMA approved the Washington State Enhanced Hazard Mitigation Plan on October 1st, 2018. I certify that state and local government obligations and expenditures for this incident comply with all cost share requirements.

I have designated Stacey McClain of the Washington Military Department, Emergency Management Division, as the State Coordinating Officer for this request. He will work with FEMA and is authorized to provide any further information, assurances, requests, or justifications on my behalf.

Very truly yours,



Jay Inslee
Governor

Attachments (5)

- 1: OMB No. 1660-0009/FEMA Form 010-0-13
- 2: NWS-Seattle Weather Statement
- 3: State Emergency Proclamations
- 4: December 3, 2021, Letter to FEMA Administrator Criswell
- 5: December 14, 2021, Time Extension Approval

Enclosures (3)

- A: Estimated Stafford Act Requirements for Individual Assistance and Preliminary Damage Assessment Cost Estimate Worksheet
- B: Estimated Stafford Act Requirements for Public Assistance and Preliminary Damage Assessment Cost Estimate Worksheet
- C: Estimated Assistance from Other Federal Agency Programs

ENCLOSURE A TO MAJOR DISASTER REQUEST

Estimated Stafford Act Requirements for Individual Assistance and Preliminary Damage Assessment Cost Estimate Worksheet

Preliminary Damage Assessments (PDA) - Individuals and Households Program (IHP) Cost Calculator												
STATE/TRIBE/TERRITORY:	Washington											
INCIDENT START DATE(S):	11/5/2021											
INCIDENT TYPE:	FLOOD ONLY											
What percent of the Affected damage level dwellings will be eligible for IHP?	15%											
County Name	Destroyed	Major	Minor	Affected	Affected Getting Assistance	Total	% Owner	(Flood Only) Flood Insurance	% Low Income	HUD FMR for 2 bedroom - 1 month (Link)	HUD FMR for 2 bedroom - 2 month	
Clallam	-	14	28	18	3	45	89.7%	2.9%	14.5%	\$ 1,127.00	\$ 2,254.00	
Skagit	2	30	17	43	6	55	86.2%	22.3%	12.0%	\$ 1,307.00	\$ 2,614.00	
Whatcom	4	271	354	151	23	652	70.8%	30.9%	14.1%	\$ 1,280.00	\$ 2,560.00	
TOTAL/AVERAGE	6	315	399	212	32	752	82.2%	18.7%	13.5%	\$ 1,238.00	\$ 2,476.00	

National Average Award Amount and Comparison		
Average Minor Damage Award Amount		Comparison
\$	3,587.86	\$ 3,587.86
Rounded Average ONA Amount		Comparison
\$	1,600.00	\$ 1,600.00
Average Major Damage Award Amount		Comparison
\$	16,051.37	\$ 16,051.37
Average Affected Damage Award Amount		Comparison
\$	1,500.00	\$ 1,500.00
Destroyed Max Award Amount (Replacement Assistance)		\$ 37,900.00
ONA Referral Rate		100%

Preliminary Damage Assessments (PDA) – Individuals and Households Program (IHP) Cost Estimates by County													
County	HOUSING ASSISTANCE (HA) COST ESTIMATE												
	TEMPORARY HOUSING (RENTAL ASSISTANCE) COST ESTIMATE				REPAIR COST ESTIMATE						REPLACEMENT COST ESTIMATE		TOTAL HA
	Eligible Rent (Pre-Disaster Renters) - 2 month	Rent (Pre-Disaster Renters) - 2 Month Cost Estimate	Eligible Rent (Owners w/Minor, Major, or Destroyed) - 2 month	Rent (Owners w/Major or Destroyed) - 2 month Cost Estimate	Eligible Repair (Owners w/Affected)	Repair Costs (Owners w/Affected Cost Estimate	Eligible Repair (Owners w/Minor)	Repair Costs (Owners w/Minor) Cost Estimate	Eligible Repair (Owners w/Major)	Repair Costs (Owners w/Major) Cost Estimate	Eligible Replacement (Owners w/Destroyed)	Replacement Cost (Owners w/Destroyed) Cost Estimate	
Clallam	4	\$ 9,016.00	38	\$ 85,652.00	2	\$ 3,000.00	24	\$ 86,108.64	12	\$ 192,616.44	0	\$ -	\$ 376,393.08
Skagit	7	\$ 18,298.00	42	\$ 109,788.00	4	\$ 6,000.00	11	\$ 39,466.46	20	\$ 321,027.40	1	\$ 37,900.00	\$ 532,479.86
Whatcom	184	\$ 471,040.00	445	\$ 1,139,200.00	11	\$ 16,500.00	173	\$ 620,699.78	133	\$ 2,134,832.21	2	\$ 75,800.00	\$ 4,458,071.99
TOTAL/AVERAGE	195	\$ 498,354.00	525	\$ 1,334,640.00	17	\$ 25,500.00	208	\$ 746,274.88	165	\$ 2,648,476.05	3	\$ 113,700.00	\$ 5,366,944.93

Preliminary Damage Assessments (PDA) – Individuals and Households Program (IHP) Cost Estimates by County						
County	OTHER NEEDS ASSISTANCE (ONA) Cost Estimate					Total Estimated HA and ONA (100%)
			TOTAL ONA			
	Eligible ONA (All Renters and Owners w/Affected, Minor, Major, Destroyed)	ONA (All Renters and Owners w/Affected, Minor, Major, Destroyed) Cost Estimate				
				Total Estimated Federal Share (75%)	Total Estimated State Share (25%)	
Clallam	45	\$ 72,000.00	\$ 72,000.00	\$ 54,000.00	\$ 18,000.00	\$ 448,393.08
Skagit	55	\$ 88,000.00	\$ 88,000.00	\$ 66,000.00	\$ 22,000.00	\$ 620,479.86
Whatcom	652	\$ 1,043,200.00	\$ 1,043,200.00	\$ 782,400.00	\$ 260,800.00	\$ 5,501,271.99
TOTAL/AVERAGE	752	\$ 1,203,200.00	\$ 1,203,200.00	\$ 902,400.00	\$ 300,800.00	\$ 6,570,144.93

Preliminary Damage Assessments (PDA) - Individuals and Households Program (IHP) Cost Estimates Summary				
STATE/TRIBE/TERRITORY:		Washington		
INCIDENT START DATE(S):		11/5/2021		
INCIDENT TYPE:		FLOOD ONLY		
ESTIMATED HOUSING ASSISTANCE (HA)	NUMBER OF HOUSEHOLDS (Uninsured)	COST	TOTAL COST	CATEGORY TOTAL COST
TEMPORARY HOUSING				\$ 1,832,994.00
Rent (Pre-Disaster Renters) (Owners w/Minor, Major or Destroyed) - 2 month	720		\$ 1,832,994.00	
REPAIR ASSISTANCE				\$ 3,420,250.93
Repair Costs (Owners w/Affected)	17	\$ 1,500.00	\$ 25,500.00	
Repair Costs (Owners w/Minor)	208	\$ 3,587.86	\$ 746,274.88	
Repair Costs (Owners w/Major)	165	\$ 16,051.37	\$ 2,648,476.05	
REPLACEMENT ASSISTANCE				\$ 113,700.00
Replacement Cost (Owners w/Destroyed)	3	\$ 37,900.00	\$ 113,700.00	
Total Estimated Housing Assistance (HA)	1,113		\$ 5,366,944.93	\$ 5,366,944.93
ESTIMATED OTHER NEEDS ASSISTANCE (ONA)	NUMBER (Uninsured)	COST	TOTAL COST	CATEGORY TOTAL COST
ONA (All Renters and Owners w/Affected, Minor, Major, and Destroyed)	752	\$ 1,600.00	\$ 1,203,200.00	
Total Estimated Other Needs Assistance (ONA)	752		\$ 1,203,200.00	\$ 1,203,200.00
Total Estimated Federal Share (75%)		\$ 902,400.00		
Total Estimated State Share (25%)		\$ 300,800.00		
Total Estimated HA and ONA (75% Federal Share)			\$ 6,269,344.93	
Total Estimated HA and ONA (100% Costs)			\$ 6,570,144.93	

ENCLOSURE B TO MAJOR DISASTER REQUEST

(To be submitted as a separated request by the State of Washington)

ENCLOSURE C TO MAJOR DISASTER REQUEST

Estimated Assistance from Other Federal Agency Programs

County / Tribal Area	SBA Home Loans	SBA Business Loans	FSA Loans	NRCS	FHWA	USACE	BIA	OTHER
Clallam	TBD	TBD	TBD	TBD	TBD	\$100,000	TBD	TBD
Skagit	TBD	TBD	TBD	TBD	TBD	\$1,800,000	TBD	TBD
Whatcom	TBD	TBD	TBD	TBD	TBD	\$3,200,000	TBD	TBD
Totals	TBD	TBD	TBD	TBD	\$14,750,000	\$5,100,000	TBD	TBD

Note: Extent of other federal assistance is not known at this time

10. Joint Preliminary Damage Assessment*

☒ Individual Assistance Dates Performed **Requested** Nov 30, 2021 **Start** Dec 1, 2021 **End** Dec 16, 2021

Individual Assistance Accessibility Problems (Areas that could not be accessed, and why)
As a result of the severe flooding and road damages, 8 homes were inaccessible during the Joint PDA.

☒ Public Assistance Dates Performed **Requested** Dec 9, 2021 **Start** Dec 14, 2021 **End** Dec 21, 2021

Public Assistance Accessibility Problems (Areas that could not be accessed, and why)
The Joint PDA for Public Assistance is ongoing at this time. A separate request for Public Assistance will be made once FEMA and the State have validated damages to public infrastructure.

11. Programs and Areas Requested

Individual Assistance ☐ N/A ☒ Individuals and Households Program ☒ Crisis Counseling Program ☒ Disaster Unemployment Assistance

☒ All ☒ Disaster Case Management ☒ Disaster Legal Services ☒ Small Business Administration (SBA) Disaster Assistance

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)) If additional space is needed, please enclose additional documentation).

I am requesting all Individual Assistance programs for Clallam, Skagit, and Whatcom counties. I am also requesting all Individual Assistance programs for the Quileute Tribe of the Quileute Reservation, the Lummi Tribe of the Lummi Reservation, and the Nooksack Indian Tribe of Washington.

For States, identify Federally-recognized Tribes in the requested counties (if applicable).

Quileute Tribe of the Quileute Reservation, Lummi Tribe of the Lummi Reservation, and the Nooksack Indian Tribe of Washington, Lower Elwha Tribal Community, Jamestown S'Klallam Tribe, Makah Indian Tribe of the Makah Indian Reservation, Samish Indian Nation, Sauk-Suiattle Indian Tribe of Washington, Upper Skagit Indian Tribe of Washington, Swinomish Indian Tribal Community

Please see **Enclosure A: Supplemental Information for Individual Assistance** for additional information in support of this request*.

**Not Required for Emergency Declaration Request*

11. Programs and Areas Requested (Continued)

Public Assistance ☐ N/A ☐ Debris Removal (Category A) ☒ Emergency Protective Measures (Category B) ☐ Permanent Work (Categories C-G)* (not available for Emergency Declaration Requests)

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)). If additional space is needed or your request includes different categories of work for different jurisdictions; please enclose additional documentation.

The state is in immediate need of FEMA's Transitional Sheltering Assistance Program, and Non-Congregate Sheltering in a COVID environment, under the Public Assistance Program, Category B Emergency Protective Measures.

For States, identify Federally-recognized Tribes included in the requested counties (if applicable).

Please see **Enclosure B: Supplemental Information for Public Assistance** for additional information in support of this request*.

Indemnification for Debris Removal Activity

☒ I do not anticipate the need for debris removal.

I anticipate the need for debris removal, which poses an immediate threat to lives, public health and safety. Pursuant to Sections 403 and 407 of the Stafford Act, 42 U.S.C. §§ 5170b & 5173, the State or Indian tribal government agrees to indemnify and hold ☐ harmless the United States of America for any claims arising from the removal of debris or wreckage for this disaster. The State or Indian tribal government agrees that debris removal from public and private property will not occur until the landowner signs an unconditional authorization for the removal of debris.

Request for Direct Federal Assistance

☐ I do not request direct Federal assistance at this time.

☒ I request direct Federal assistance for work and services to save lives and protect property, and:

a. I request the following type(s) of assistance:

The state is in immediate need of FEMA's Transitional Sheltering Assistance Program, and Non-Congregate Sheltering in a COVID environment, under the Public Assistance Program, Category B Emergency Protective Measures. Additionally the state is in need of the Mass Care and Emergency Assistance Program to include sheltering services.

b. List of reasons why State and local or Indian tribal government cannot perform, or contract for, required work and services.

c. In accordance with 44 C.F.R. § 206.208, the State or Indian tribal government agrees that it will, with respect to direct Federal assistance: (1) Provide without cost to the United States all lands, easements, and rights-of-ways necessary to accomplish the approved work; (2) Hold and save the United States free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work; (3) Provide reimbursement to FEMA for the non-Federal share of the cost of such work in accordance with the provisions of the FEMA-State or FEMA-Tribe Agreement ; and (4) Assist the performing Federal agency in all support and local jurisdictional matters.

Request for Snow Assistance

☒ N/A ☐ I request snow assistance.

Snow assistance for the following jurisdictions (Specify counties, independent cities or tribes and/or tribal areas).

Please see **Enclosure D: Historic and Current Snowfall Data** for additional information in support of this request*.

*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)

Hazard Mitigation* ☒ Statewide

OR

For the following specific counties, parishes, independent cities or tribes and/or tribal areas.

12. Mitigation Plan Information*

a. Mitigation Plan Expiration Date 10/01/2023

b. Type of Plan



Enhanced



Standard

13. Other Federal Agency Programs

☐ I do not anticipate requirements from Other Federal Agencies☒ I do anticipate requirements from Other Federal AgenciesPlease see **Enclosure C**: Requirements for Other Federal Agency Programs for additional information in support of this request*.

14. Findings and Certifications

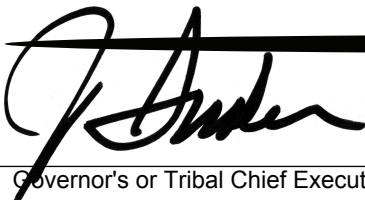
☒ I certify the following:

a. I have determined that this incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local government or Indian tribal government and that supplementary federal assistance is necessary.

b. In response to this incident, I have taken appropriate action under State or tribal law and have directed the execution of the State or Tribal Emergency Plan on Nov 15, 2021 in accordance with the Stafford Act.

c. The State and local governments, or Indian tribal government will assume all applicable non-Federal share of costs required by the Stafford Act.

15. List of Enclosures and Supporting Documentation

☒ Cover Letter ☒ Enclosure A (Individual Assistance)*☐ Enclosure B (Public Assistance)*☒ Enclosure C (Requirements for Other Federal Agency Programs)☐ Enclosure D (Historic and Current Snowfall Data)☒ Additional Supporting Documentation State Emergency Proclamations, NWS-NOAA Executive Weather Statement, Extension Letter

Governor's or Tribal Chief Executive's Signature

12/17/2021

Date

If anyone except the Governor or Tribal Chief Executive signs this document, please provide the documentation that establishes that this individual has the legal authority to act on behalf of the Governor or Tribal Chief Executive.

*Not Required for Emergency Declaration Request



Executive Weather Summary

Severe Winter Storms, High Winds, Flooding, Landslides, and Mudslides

5 November - 2 December 2021

For FEMA Region X Preliminary Damage Assessment - Washington

Justin Pullin, Senior Meteorologist; **Brent Bower**, Senior Service Hydrologist

National Weather Service, Seattle, Washington

Treena Jensen, Warning Coordination Meteorologist; **Andy Bryant**, Senior Service Hydrologist

National Weather Service, Portland, Oregon

Event Synopsis

From 5 November - 2 December, a strong, persistent area of low pressure developed over the Gulf of Alaska and directed the jet stream and primary storm track at Washington State, producing periods of high winds, prolonged intense rainfall, flooding, and landslides (**Figure 1**). Equally as important, an area of high pressure persisted near the California coast throughout the period (**Figure 1**), causing warmer than average temperatures and abnormally high snow levels across Western Washington. The Gulf Low

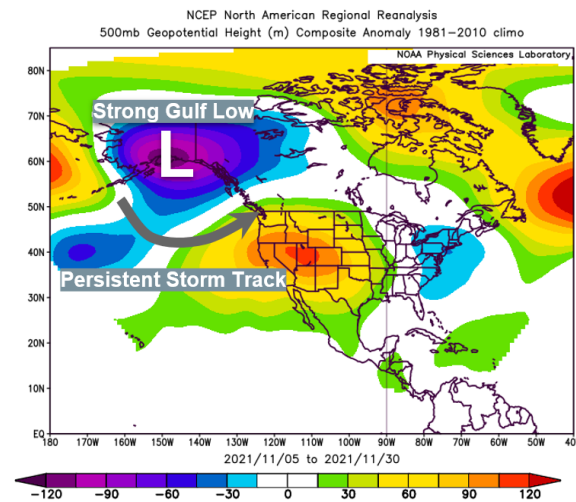


Figure 1: Upper level (500mb) Weather Pattern Anomalies between Nov 5 - Nov 30 based on the NCEP North American Regional Analysis. A strong and persistent Gulf of Alaska Low directed the storm track at northwest Washington State during this period.

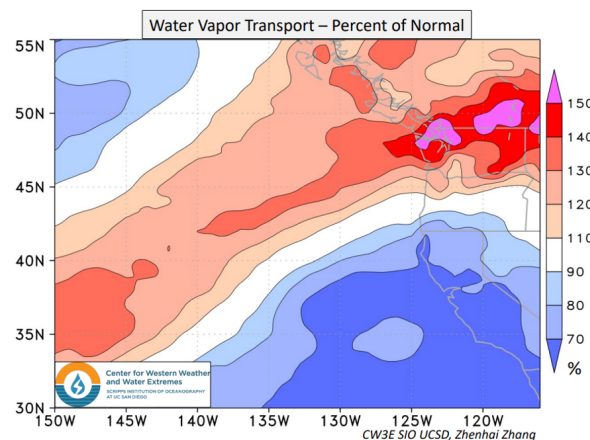


Figure 2: Average water vapor transport as a percentage of normal conditions (1990-2019) during 5 Nov - 2 Dec based on NCEP CFSR/CFSv2 analysis. Image courtesy of the Center for Western Weather and Water Extremes.

resulted in multiple damaging Atmospheric River events over a short period of time, with several occurring back to back. This brought severe overlapping impacts to communities in Western Washington. Water vapor transport into Western Washington averaged 130 - 160% of normal during the period of 5 November - 2 December 2021 (**Figure 2**). This unusually warm and persistent feed of moisture was the direct result of a series of Atmospheric River events directed at the region by the strong Gulf Low located in the northeast Pacific Ocean.

This moisture feed was directly responsible for the prolonged period of rainfall, including numerous periods of heavy rainfall during the 27-day period (**Figure 3**).

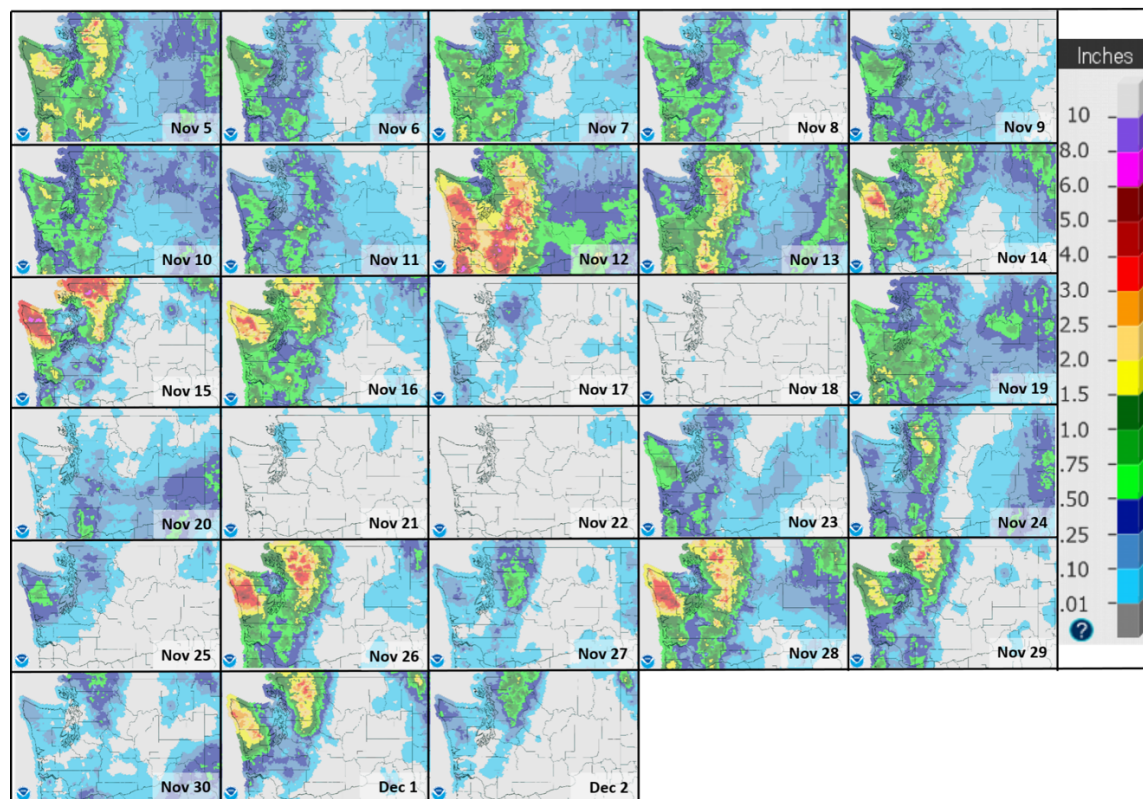


Figure 3: Individual daily 24-hour precipitation analyses for Washington State from Nov 5 to Dec 2, 2021. Data values are in inches with a datascale to the right. Measurable precipitation fell on nearly every day in Western Washington during the 27-day period. There were locations with daily precipitation amounts greater than 4 inches on eight days: Nov 12, 13, 14, 15, 16, 26, 28, and 29. Locations saw daily precipitation amounts greater than 5 inches on four days: Nov 12, 15, 26, and 28. Total precipitation in some locations in portions of the Olympic Peninsula and the Central and Northern Cascades were greater than 20 inches over this period. Data is from the National Weather Service Advanced Hydrologic Prediction System (AHPS).

This resulted in widespread rainfall totals between 150% and 300% of normal (**Figure 4a**) across the highest impacted areas including Clallam, Skagit, and Whatcom Counties. The outlined areas in (**Figure 4b**) averaged 8 to 16 inches of rain above average during the period, with observed precipitation totals in some areas as high as 45 inches (**Figure 5**). Several observation stations set monthly rainfall records for November, including Bellingham, which recorded 14.57 inches. To put this anomalous situation in perspective, November is climatologically the wettest month for Western Washington.

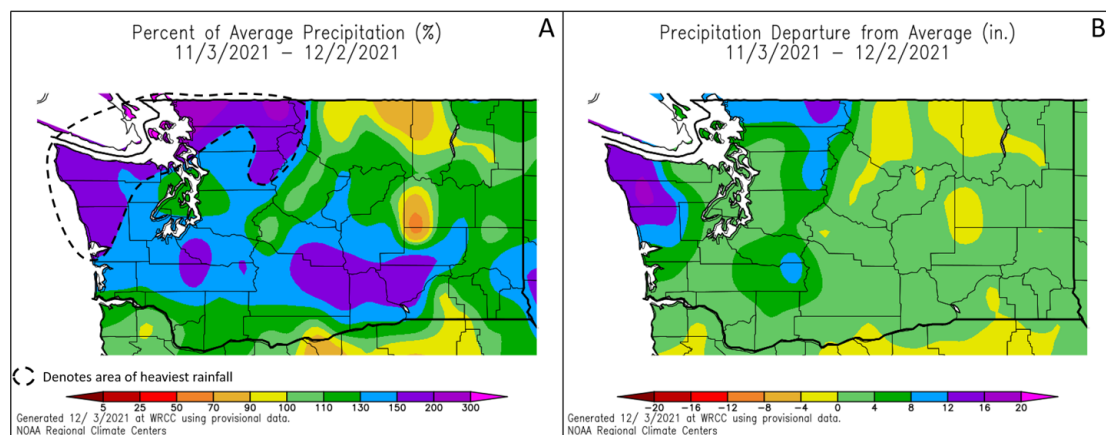


Figure 4a, 4b: Observed precipitation as a percentage of average (left) and precipitation departure from average in inches (right) for Nov 3 - Dec 2, 2021. Widespread precipitation totals ranged from 150% to over 300% of average in northwest Washington. This equated to a widespread 8-16 inches of rain above normal for Nov, with parts of the Olympic Peninsula seeing up to 20 inches above normal. Data courtesy of the Western Region Climate Center.

rainfall. Total rainfall amounts for this period generally ranged from 5 to 8 inches across Western Washington. Soils reached the point of saturation as a result of this rainfall, causing rises in rivers across the area, some flooding, and setting the stage for prolonged flooding through the remainder of the month.

Meteorological Timeline & Impacts - November 11-19:

With high pressure holding steady over the Intermountain West, the Gulf Low directed a substantial Atmospheric River around the periphery of the area of high pressure and into Western Washington on November 11 (**Figure 1**). Water vapor transport into Western Washington averaged 160 - 200% of normal during the period of 11 November - 16 November (**Figure 7**), leading to a period of substantial impacts across the region. Heavy rainfall spread across the region on the night of the 11th through November 12, with the heaviest rain starting across Southwest Washington and slowly shifting to the north through the day. Rainfall totals ranged from 5 to 10 inches in spots from Clark County north to Grays Harbor, Thurston, and Pierce Counties, leading to areal and river flooding, including major flooding on the middle Cowlitz River. Heavy rainfall expanded northward from this line into the West Central and Northwest Washington Counties on the night of the 11th, setting the stage for greater impacts in these areas with additional excessive rainfall in the days to follow.

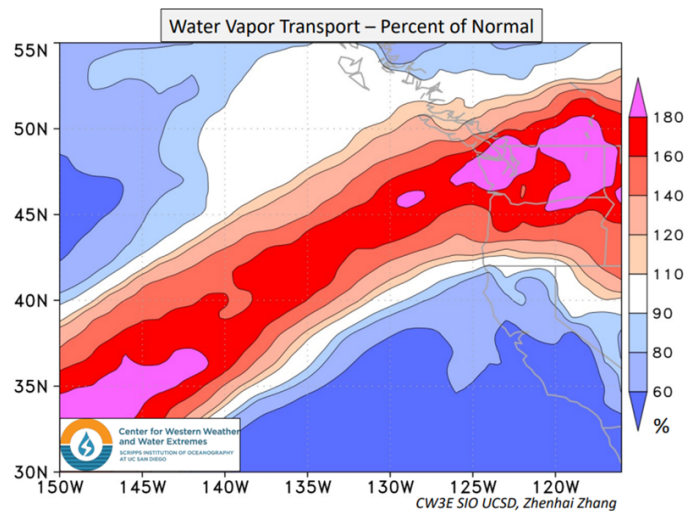


Figure 7: Average water vapor transport as a percentage of normal conditions (1990-2019) during 11 Nov – 16 Nov based on NCEP CFSR/CFSv2 analysis. Image courtesy of the Center for Western Weather and Water Extremes.

Rainfall totals ranged from 5 to 10 inches in spots from Clark County north to Grays Harbor, Thurston, and Pierce Counties, leading to areal and river flooding, including major flooding on the middle Cowlitz River. Heavy rainfall expanded northward from this line into the West Central and Northwest Washington Counties on the night of the 11th, setting the stage for greater impacts in these areas with additional excessive rainfall in the days to follow.

Heavy, persistent rainfall associated with the Atmospheric River shifted northward across Western Washington on November 13 before stalling over northwest Washington November 14 through 16. Between 5 and 10 inches of rainfall fell across portions of Clallam, Jefferson, Grays Harbor, Whatcom and Skagit Counties in this 72 hour period. With warm strong winds and high snow levels in place, rain fell at elevations as high as 8,000 to 10,000 feet at times during this period. This caused runoff from excessive rain and snowmelt that fed into river systems across these counties. As a result, 16 rivers reached flood stage by November 15, with four rivers reaching major flood stage: Bogachiel, South Fork Nooksack, mainstem Nooksack, and the Skagit Rivers. Based on preliminary data, at least four rivers set new record crests, including the Bogachiel, Calawah, main stem Nooksack Rivers (**Figure 8**), and Olsen Creek in Bellingham. Significant flooding on the Nooksack River also overflowed at the City of Everson where flood waters flowed north along an old Nooksack floodway and Johnson Creek where it flooded the cities of Everson and Nooksack, WA, then combined with flooding from the Sumas River and

flooded the City of Sumas, WA. Over 85% of homes in Sumas sustained water damage as a result. This significant flooding spread as far north as Abbotsford, British Columbia, closing the international border for several days. Numerous evacuation orders resulted in the displacement of hundreds of residents, including portions of the City of Mount Vernon. Hundreds of water rescues took place during this time period, including a high profile air rescue of 10 individuals near the town of Forks, WA. One fatality occurred in Everson, WA and another fatality occurred near the City of Sedro-Woolley, WA due to flooding. Heavy

rainfall rates triggered at least 40 landslides across Western Washington between 11 and 19 November, with the most notable resulting in the temporary closures of both lanes of I-5 near Bellingham, State Route 9 adjacent to I-5 in Whatcom County, portions of US 101 in Clallam and Jefferson Counties, as well as State Route 112 in Clallam County. Numerous other local road closures were reported due to flood waters overtaking roads, landslides, and washouts across Clallam, Jefferson, Grays Harbor, San Juan, Island, Whatcom, Skagit, Snohomish, and Lewis Counties. River flooding persisted for days after the heaviest rain ceased, particularly along the Skagit and Nooksack Rivers.

This Atmospheric River event also featured a period of strong, damaging winds on 14 to 15 November. Gusts ranging from 50 to 70 mph (**Figure 9**) were reported across portions of Western Washington resulting in downed trees and numerous power outages. Approximately 160,000 electrical customers were out of power with most of those being residents of Clallam, Jefferson, Island, and Snohomish Counties.

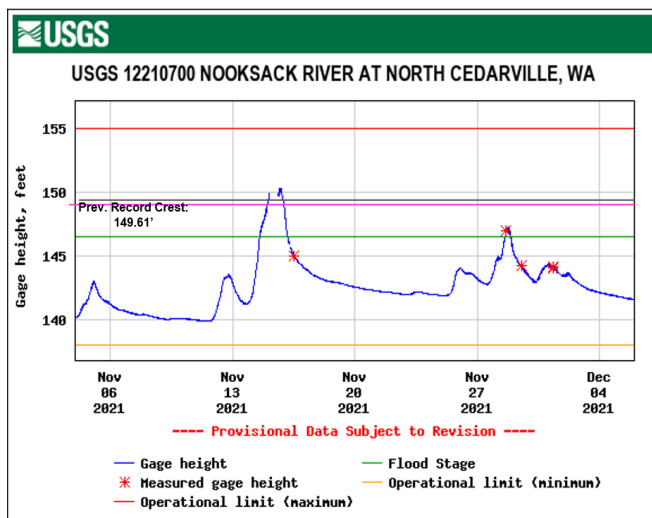


Figure 8: Observed hydrograph (blue line) from the Nooksack River near North Cedarville, WA. The river rose above flood stage (green line) several times from 5 Nov - 2 Dec, including a record high crest of 150.25 ft on 16 Nov. Previous record high crest denoted by the pink line.

Peak Winds November 14-15, 2021			
Location	MPH	Location	MPH
Point Wilson	71	Port Townsend	53
Whidby Island NAS	63	Ferndale	52
New Dungeness Lighthouse	62	Tacoma	52
Hoquiam Airport	60	Morton	52
Paine Field Everett	58	Port Angeles Airport	51
Sea-Tac Airport	58	Arlington	51
Marrowstone Point Light	58	Sequim	48
Camano Island	55	Shelton	47
Olympia	55	Quillayute	46
Bellingham Airport	54	Humptulips	46

Figure 9: Selected observed peak wind speeds in miles per hour (MPH) for Nov 14-15, 2021.

Meteorological Timeline & Impacts - November 20-25:

Flooding continued across Whatcom and Skagit Counties as flood waters were slow to recede. The ground was overly saturated due to the great amount of rainfall and massive flooding that had just occurred. The persistent Gulf Low led to additional periods of persistent rainfall on 19-20 Nov, as well as 23-24 November, keeping soils saturated and primed for additional runoff and landslides from the next heavy rain event to occur. The additional rainfall this period also caused increased surface runoff, recharging the

pooled flood waters; and with the usual areas of floodplain storage still full of water, there was nowhere for the water to go. Together with rivers and streams flowing at high levels (**Figure 10**), additional flood damage and impacts continued to occur.

The high water also continued to change the Nooksack River channel and transport sediment. This resulted in lost channel capacity in the Nooksack River below North Cedarville, making it more susceptible to flooding at lower river levels. In addition, overflow flooding from the main stem Nooksack River persisted for days. And since the rainfall and flooding from the November storms was also severe just to the north in British Columbia, the Fraser River was running too high for the Sumas River and the flood waters there to drain into it; this produced additional flooding in the Sumas area during this time, prompting continued flood fight and rescue response in the Everson to Sumas corridor (**Figure 6**). Culverts, blocked with flood debris, had to be torn up out of roads in order to move flood waters out of areas that needed to be accessed. Some portions of northern Whatcom County, particularly in the Marietta area and the Everson to Sumas corridor, had flood waters persist into early December, with flooding reinvigorated by the next set of Atmospheric Rivers that began Nov 26 (**Figure 11**).

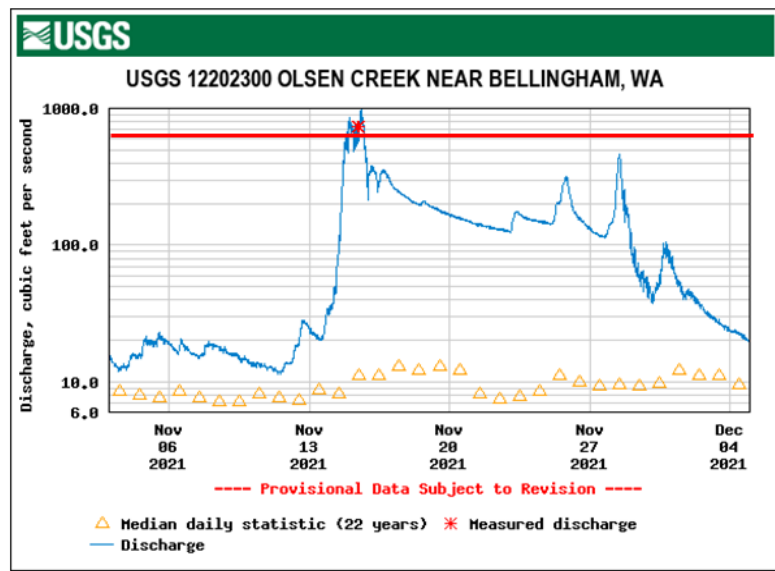


Figure 10: Observed hydrograph (blue line) from Olsen Creek near Bellingham, WA. The creek remained well above average discharge for the duration of 5 Nov - 2 Dec, including a record high discharge on 15 Nov. Previous record was 695 cfs. This shows the urban/small stream flooding and the continued residual flooding after the heavy rain period of 11-16 November.

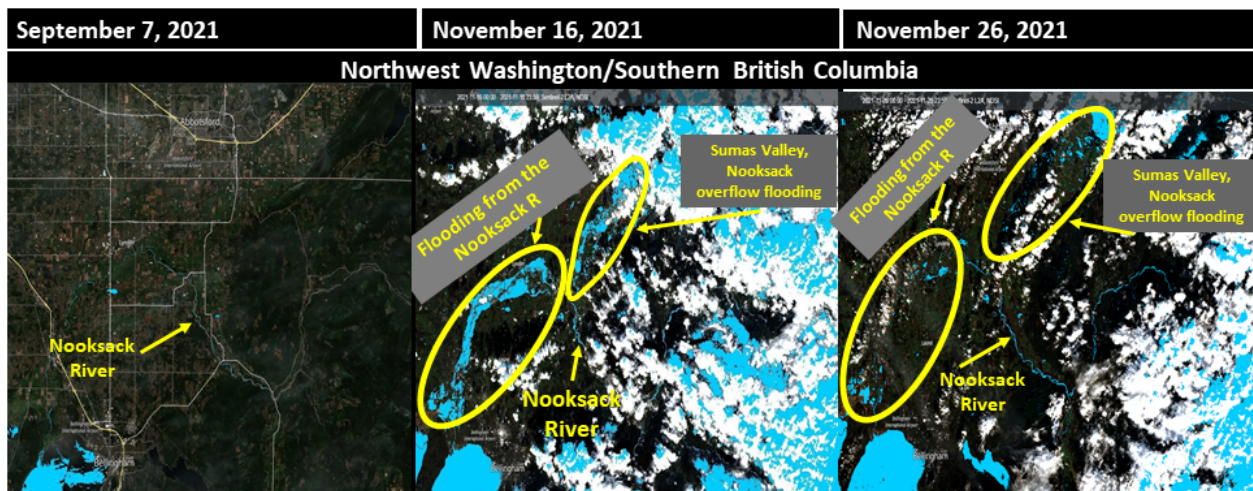
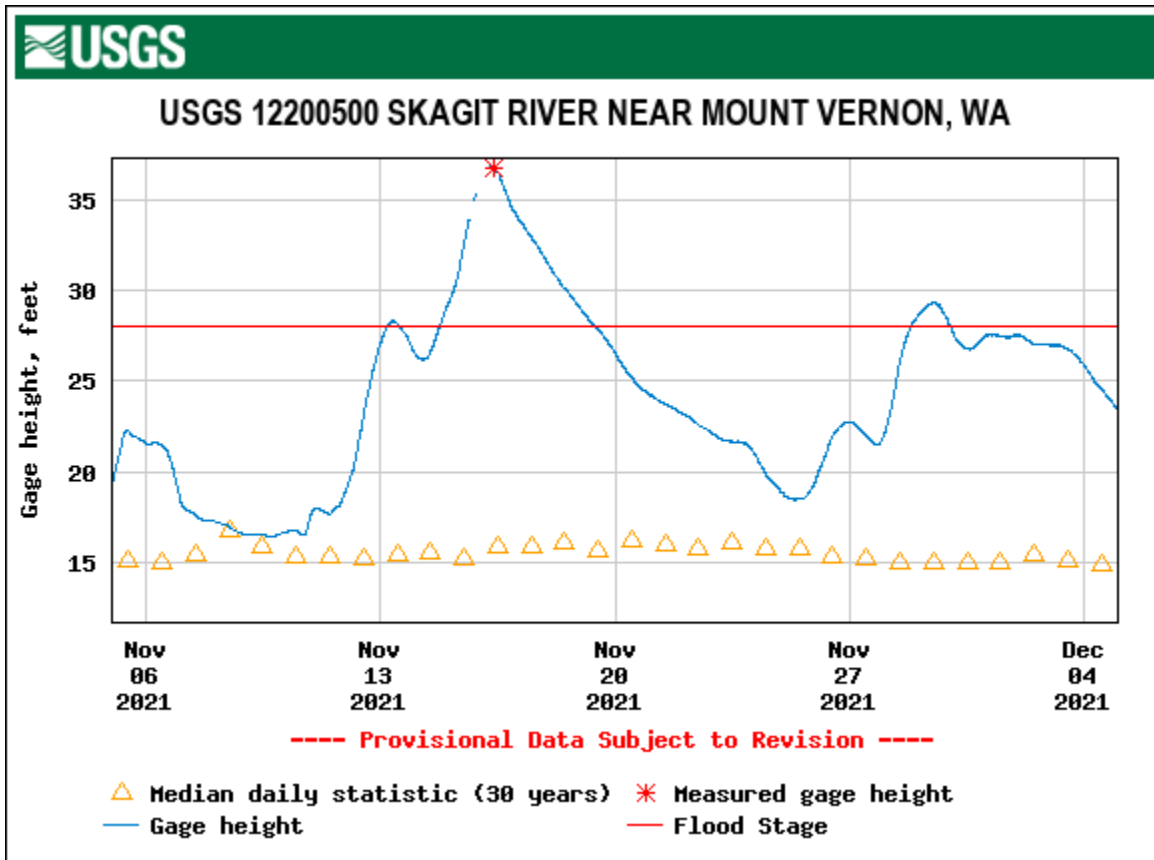


Figure 11: Enhanced Satellite pictures of the flooding across Northwest Washington and Southwest British Columbia from 16 Nov to 26 Nov. Bodies of water are highlighted in light blue, including flooded land surfaces. The image from September 7 shows normal conditions. Cloud cover across the area partially obscured the extent of flooding on both days. Data is from the Sentinel-2 Satellite operated by the European Space Agency.

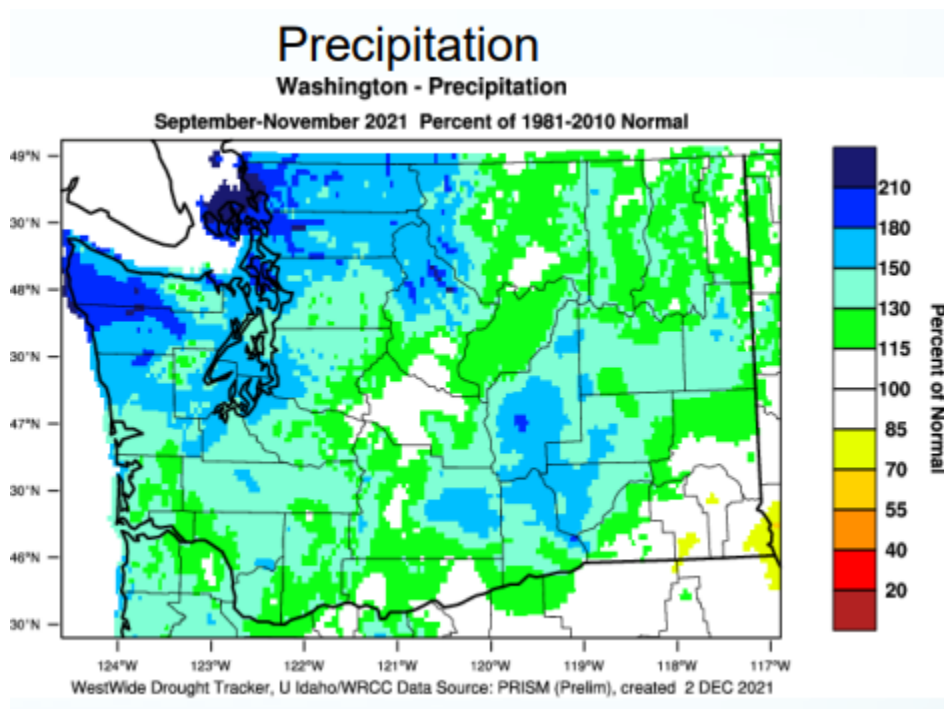
Meteorological Timeline & Impacts - November 26-December 2:

The persistent Gulf Low directed another substantial Atmospheric River into Western Washington on 26 November, with heavy rain spreading across many of the same areas significantly impacted by flooding and landslides in the 11 through 16 November period. Several days of 3 to 4 inches of rainfall accumulation were observed across Clallam, Jefferson, Whatcom, Skagit, and portions of Snohomish and Grays Harbor Counties on 26, 28 through 29 Nov, and 1 Dec. This led to another wave of flooding on top of the ongoing flooding, with 8 rivers again reaching minor flood stage, and exacerbating the flooding across portions of Whatcom County, particularly in the Everson to Sumas Corridor. The main stem of the Nooksack River reached moderate flood stage on 28 November, resulting in another Everson overflow which continued and added to the flooding in the communities of the Everson to Sumas corridor in Whatcom County. Flooding along the Nooksack and the Skagit Rivers, two of the hardest impacted areas in November, continued into early December before waters receded back into the banks of these rivers.

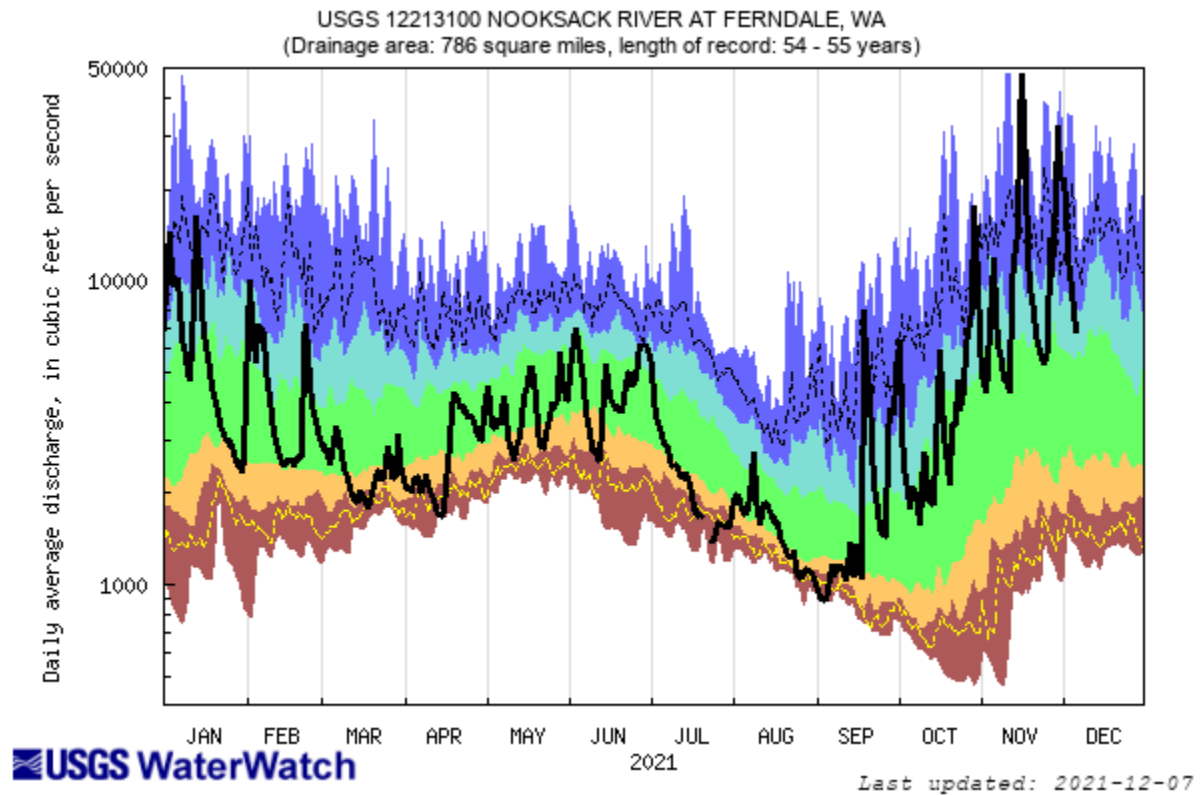
Supplemental Graphics



Skagit River remained above normal the entire period and much of it much above normal. Approximately 14 days near or above flood stage.



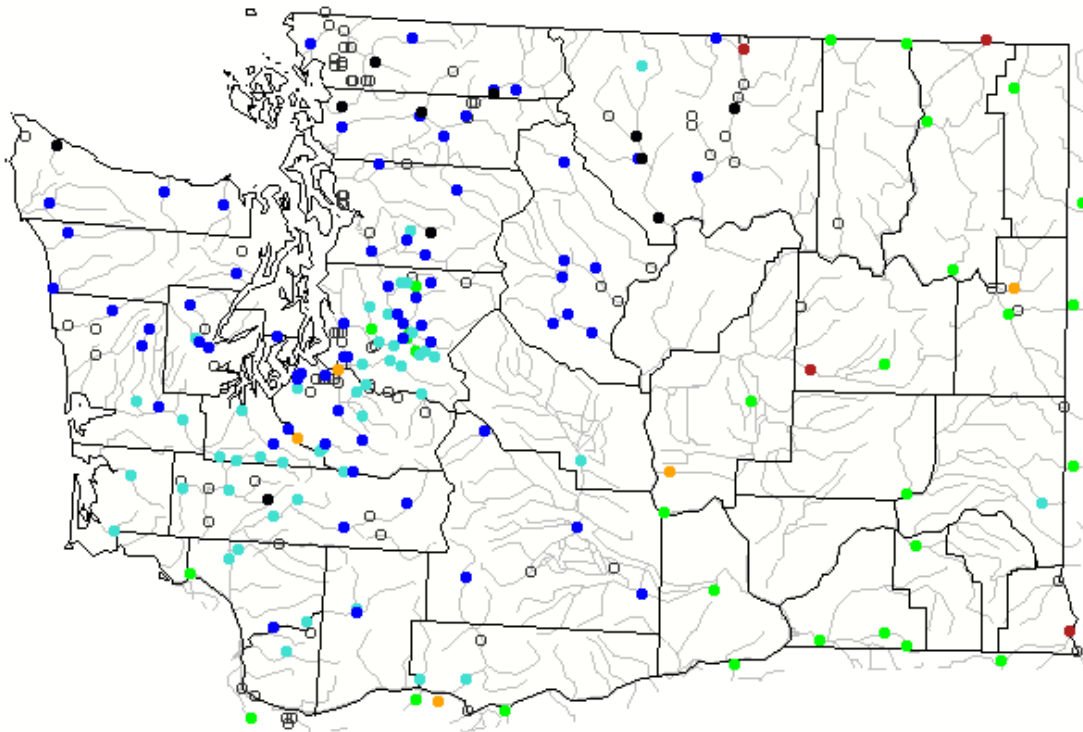
SeaTac AP, Bellingham, and Quillayute measured their wettest Sept-Nov on record, setting up lower soil moisture thresholds going into the November events



Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal	Flow	

Extreme prolonged event with the Nooksack River staying well-above normal for the period, much of the time above the 95th percentile or greater.

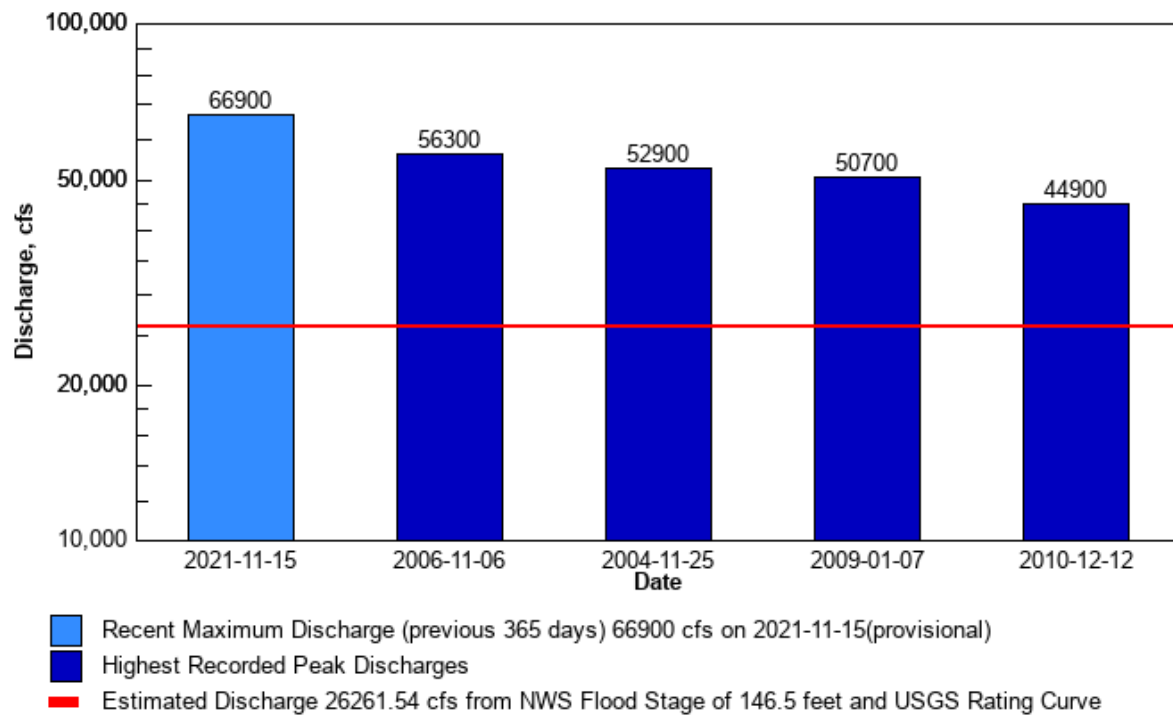
November 2021



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Prolonged extreme event with most rivers much above normal for the month and some classified as high (highest reading on record).

USGS 12210700 NOOKSACK RIVER AT NORTH CEDARVILLE, WA

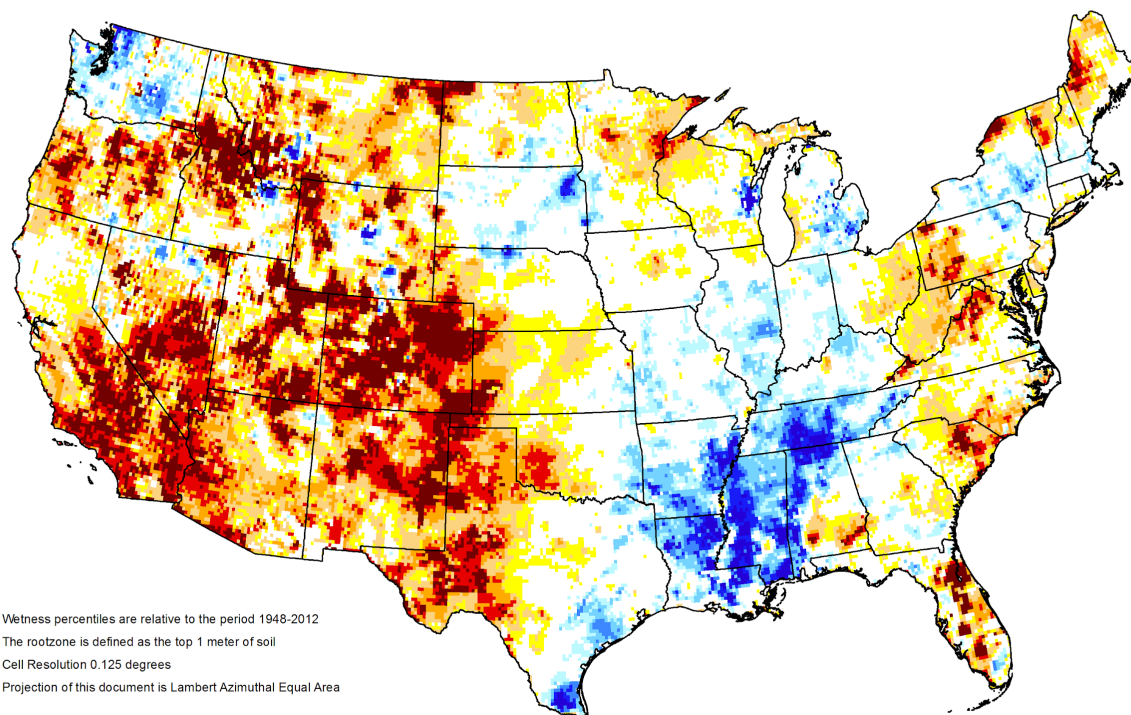


Preliminary record Flood on the Nooksack at North Cedarville.



GRACE-Based Root Zone Soil Moisture Drought Indicator

November 29, 2021



Wetness percentiles are relative to the period 1948-2012

The rootzone is defined as the top 1 meter of soil

Cell Resolution 0.125 degrees

Projection of this document is Lambert Azimuthal Equal Area



<https://nasagrace.unl.edu>

Soil moisture in much of western Washington at the end of the month was above the 90th percentile and some areas above the 98th percentile; indicative of the persistent rainfall and flooding that had occurred that month.



STATE OF WASHINGTON
— OFFICE OF GOVERNOR JAY INSLEE —

EMERGENCY PROCLAMATION BY THE GOVERNOR

21-18

Severe Weather Damage

WHEREAS, a severe wind and rainstorm event that began on November 12, 2021, and is forecast to last several days is producing extensive flooding in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston, and Whatcom counties, causing hazardous conditions for the people of Washington, homes, property, businesses, agriculture, transportation systems, and the economy of Washington State; and

WHEREAS, a weather pattern that began on October 27, 2021 has resulted in saturated soils, which when combined with the significant precipitation during the event beginning on November 12, 2021, has created flooding conditions on multiple rivers, and forecasted rain along with anticipated rain and snow at mountain elevations are expected to exacerbate flooding conditions; and

WHEREAS, the severe storm with floods, landslides, mudslides, and the potential for straight-line winds is causing and is anticipated to cause road closures, the need to establish alternate transportation routes, evacuations, impacts to local utility services including significant power outages, localized reductions in available drinking water, and damage to homes and other public and private property and infrastructure; and

WHEREAS, a number of landslides have already occurred covering roadways and other infrastructure, and an elevated risk of landslides will continue during and after the November 12, 2021, weather event subsides; and

WHEREAS, the flooding and wind damage is causing and is anticipated to cause injuries to the people of Washington and to severely affect the agriculture, supply chain, transportation infrastructure, and the economy throughout the state; and

WHEREAS, the threat of damage from this situation and its effects impact the life and health of our people as well as the property and infrastructure of Washington State, all of which is a public disaster that affects life, health, property, or the public peace; and

WHEREAS, state agencies and local jurisdictions are coordinating resources to address damaged property and infrastructure, assess damage caused by the storms, and implement repairs; and

WHEREAS, the Washington State Military Department has activated the State Emergency Operations Center to implement the *Washington State Comprehensive Emergency Management Plan* and is coordinating resources to support local jurisdictions in alleviating the immediate impacts to people, property, and infrastructure as a result of this disaster, and is continuing to assess impacts resulting from the incident.

NOW, THEREFORE, I, Jay R. Inslee, Governor of the state of Washington, as a result of the above-noted situation, and under Chapter 38.52 and 43.06 RCW, do hereby proclaim that a State of Emergency exists in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston, and Whatcom counties in the State of Washington, and direct the plans and procedures in the *Washington State Comprehensive Emergency Management Plan* be implemented. State agencies and departments are directed to utilize state resources and do everything reasonably possible to assist affected political subdivisions in an effort to respond to and recover from the event. Additionally, the Washington State Military Department, Emergency Management Division, with the support of the Washington National Guard's available resources, is instructed to coordinate all incident-related assistance to the affected areas.

Signed and sealed with the official seal of the state of Washington this 15th day of November, A.D. Two Thousand and Twenty-one at Olympia, Washington.

By:

/s/
Jay Inslee, Governor

BY THE GOVERNOR:

/s/
Secretary of State



STATE OF WASHINGTON
— OFFICE OF GOVERNOR JAY INSLEE —

**EMERGENCY PROCLAMATION BY THE GOVERNOR
AMENDING PROCLAMATION 21-18**

21-18.1

**Severe Weather Damage, Emergency Assistance and
Truck Driver Hours Waiver**

WHEREAS, a severe wind and rainstorm event that began on November 12, 2021, produced extensive flooding in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston, and Whatcom counties, causing hazardous conditions for the people of Washington, homes, property, businesses, agriculture, transportation systems, and the economy of Washington State; and

WHEREAS, a weather pattern that began on October 27, 2021, has resulted in saturated soils, which, when combined with the significant precipitation during the event beginning on November 12, 2021, has created flooding conditions on multiple rivers, and rain and snow at mountain elevations exacerbated flooding conditions; and

WHEREAS, the severe storm with floods, landslides, mudslides, and the potential for straight-line winds has caused road closures, the need to establish alternate transportation routes, evacuations, impacts to local utility services including significant power outages, localized reductions in available drinking water, and damage to homes and other public and private property and infrastructure; and

WHEREAS, a number of landslides have already occurred covering roadways and other infrastructure, and an elevated risk of landslides will continue during and after the November 12, 2021, weather event; and

WHEREAS, the flooding and wind damage has caused injuries to the people of Washington and severely affected the agriculture, supply chain, transportation infrastructure, and the economy throughout the state; and

WHEREAS, the damage and threat of ongoing damage from this situation impact the life and health of our people as well as the property and infrastructure of Washington State, all of which is a public disaster that affects life, health, property, or the public peace; and

WHEREAS, state agencies and local jurisdictions are coordinating resources to address damaged property and infrastructure, assess damage caused by the storms, and implement repairs; and

WHEREAS, Washington State individuals and families without children are also suffering significant economic hardship from the flooding and other impacts of this event and require

assistance, but individuals and families without children normally are not eligible to receive benefits under the Family Emergency Assistance Program; and

WHEREAS, under RCW 74.04.660(6), during a state of emergency the Governor is authorized to extend eligibility for benefits under the Family Emergency Assistance Program to individuals and families without children; and

WHEREAS, the Governor's authority under RCW 74.04.660(6), was amended to clarify the Governor's authority in Substitute House Bill 1151, Section 1, (Chapter 9, Laws of 2021) which took effect on March 31, 2021, and gives the Governor the authority "during a state of emergency and pursuant to an order from the governor under this subsection," to extend benefits to individuals and families without children and to all for more than one period of time within any consecutive 12-month period, that is separate from, and in addition to, the authority established in RCW 43.06.220; and

WHEREAS, funding for the State of Washington's disaster cash assistance program has been made available through December 18, 2021; and

WHEREAS, the extreme flooding and wind have damaged agricultural operations, including causing the indefinite closure of a major Washington-based livestock feed producer, leading to reduced availability of livestock feed and increased transportation distances to dairy farms in western and central Washington; and

WHEREAS, the reduced availability of livestock feed and increased transportation distances and times caused by road closures and other damage from the severe weather event have delayed, and will continue to delay, essential intrastate collection and delivery of livestock feed products by motor carriers and drivers of commercial motor vehicles from processing facilities to dairy farms; and

WHEREAS, the increased transportation distances and times have created an emergency situation because commercial drivers cannot complete deliveries of livestock feed within the time limits prescribed by commercial motor vehicle driver hours of service rules, and available trucks with livestock feed cannot be dispatched because commercial drivers have exhausted their current hour limitations, leading to shortages in livestock feed; and

WHEREAS, the Washington State Military Department has activated the State Emergency Operations Center to implement the *Washington State Comprehensive Emergency Management Plan* and is coordinating resources to support local jurisdictions in alleviating the immediate impacts to people, property, and infrastructure as a result of this disaster, and is continuing to assess impacts resulting from the incident; and

WHEREAS, due to the above-noted conditions, the time limits prescribed by the commercial motor vehicle driver hours of service rules impede the necessary delivery of supplies critical to state agricultural needs by preventing drivers of these trucks from making timely deliveries; and

WHEREAS, the effect of these disruptions to the agricultural needs continues to impact the life and health of people, as well as the property, economy, and transportation infrastructure of

Washington State, and is a public disaster that affects life, health, property, or public peace.

NOW, THEREFORE, I, Jay R. Inslee, Governor of the state of Washington, as a result of the above-noted situation, and under Chapter 38.52 and 43.06 RCW and pursuant to RCW 43.06.220(2)(c) and RCW 74.04.660(6), do hereby proclaim that a State of Emergency continues to exist in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston, and Whatcom counties in the State of Washington, and direct the plans and procedures in the *Washington State Comprehensive Emergency Management Plan* be implemented. State agencies and departments are directed to utilize state resources and do everything reasonably possible to assist affected political subdivisions in an effort to respond to and recover from the event. Additionally, the Washington State Military Department, Emergency Management Division, with the support of the Washington National Guard's available resources, is instructed to coordinate all incident-related assistance to the affected areas.

FURTHERMORE, I authorize and direct the Secretary of the Department of Social and Health Services to expand eligibility for the Family Emergency Assistance Program to include individuals and families with or without children living in the counties listed above, and order that it be made available, within the funds available for this benefit, to eligible individuals and families, who may apply and receive benefits monthly. This authorization and order for expansion is effective from November 22, 2021, until 11:59 pm on December 18, 2021.

FURTHERMORE, I also hereby find, based on the above, that motor carriers and drivers of commercial motor vehicles delivering livestock feed to dairy farms are providing emergency relief during an emergency under 49 CFR § 390.23 and, therefore, are exempt from application of the driver hours of service rules in 49 CFR § 395, adopted pursuant to RCW 46.32.020 and WAC 446-65-010, effective immediately and until the earlier of 11:59 pm on December 18, 2021, or the end of the emergency declared in Proclamation 21-18.

FURTHERMORE, under the provisions of RCW 43.06.220(1)(h), to preserve and maintain life, health, property or the public peace, I also impose restrictions on application of the driver hours of service rules exemption by prohibiting application of the exemption as follows:

1. Motor carriers are prohibited from operating under the terms of this exemption if either of the following conditions exists:
 - a. They have an out-of-service order in effect; or
 - b. They do not possess a current safety rating of "Satisfactory" or better by the Federal Motor Carrier Safety Administration or the State in which the carrier has its principal place of business.
2. Motor carriers I have not prohibited from operating under the terms of this exemption are prohibited from:
 - a. Requiring or permitting a fatigued or ill driver to operate a commercial motor vehicle; and
 - b. Requiring or permitting a driver to operate a commercial motor vehicle after the has informed the carrier (verbally or in writing) that he or she needs immediate rest unless the driver has first received at least ten consecutive hours off-duty documented in

- writing by the motor carrier; and
- c. Requiring or permitting a driver to operate a commercial motor vehicle after the driver has been on duty for more than 96 hours any eight consecutive days, unless the has first received at least 34 consecutive hours off-duty documented in writing by motor carrier.

I ask the motor carriers for the agricultural industry to use their best judgment in operating under this exemption in a manner that ensures public health safety. Drivers operating under this exemption should carry a copy this Proclamation.

Signed and sealed with the official seal of the state of Washington on this 19th day of November A.D., Two Thousand and Twenty-one at Olympia, Washington.

By:

/s/
Jay Inslee, Governor

BY THE GOVERNOR:

/s/
Secretary of State



STATE OF WASHINGTON
OFFICE OF GOVERNOR JAY INSLEE

**EMERGENCY PROCLAMATION BY THE GOVERNOR AMENDING
PROCLAMATION 21-18, et seq.**

21-18.2

**Severe Weather Damage, Emergency Assistance and
Truck Driver Hours Waiver**

WHEREAS, a severe wind and rainstorm event that began on November 12, 2021, initially produced extensive flooding in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston, and Whatcom counties, and has also produced extensive flooding in Cowlitz County, causing hazardous conditions for the people of Washington, homes, property, businesses, agriculture, transportation systems, and the economy of Washington State; and

WHEREAS, a weather pattern that began on October 27, 2021, has resulted in saturated soils, which, when combined with the significant precipitation during the event beginning on November 12, 2021, and continuing thereafter, has created flooding conditions on multiple rivers, and rain and snow at mountain elevations exacerbated flooding conditions; and

WHEREAS, the severe storm with floods, landslides, mudslides, and the potential for straight-line winds has caused road closures, the need to establish alternate transportation routes, evacuations, impacts to local utility services including significant power outages, localized reductions in available drinking water, and damage to homes and other public and private property and infrastructure; and

WHEREAS, a number of landslides have already occurred covering roadways and other infrastructure, and an elevated risk of landslides will continue during and after the November 12, 2021, weather event; and

WHEREAS, the flooding and wind damage has caused injuries to the people of Washington and severely affected the agriculture, supply chain, transportation infrastructure, and the economy throughout the state; and

WHEREAS, the damage and threat of ongoing damage from this situation impact the life and health of our people as well as the property and infrastructure of Washington State, all of which is a public disaster that affects life, health, property, or the public peace; and

WHEREAS, state agencies and local jurisdictions are coordinating resources to address damaged property and infrastructure, assess damage caused by the storms, and implement repairs; and

WHEREAS, Washington State individuals and families without children are also suffering significant economic hardship from the flooding and other impacts of this event and require assistance, but individuals and families without children normally are not eligible to receive benefits under the Family Emergency Assistance Program; and

WHEREAS, under RCW 74.04.660(6), during a state of emergency the Governor is authorized to extend eligibility for benefits under the Family Emergency Assistance Program to individuals and families without children; and

WHEREAS, the Governor's authority under RCW 74.04.660(6), was amended to clarify the Governor's authority in Substitute House Bill 1151, Section 1, (Chapter 9, Laws of 2021) which took effect on March 31, 2021, and gives the Governor the authority "during a state of emergency and pursuant to an order from the governor under this subsection," to extend benefits to individuals and families without children and to all for more than one period of time within any consecutive 12month period, that is separate from, and in addition to, the authority established in RCW 43.06.220; and

WHEREAS, funding for the State of Washington's disaster cash assistance program has been made available through December 18, 2021; and

WHEREAS, the extreme flooding and wind have damaged agricultural operations, including causing the indefinite closure of a major Washington-based livestock feed producer, leading to reduced availability of livestock feed and increased transportation distances to dairy farms in western and central Washington; and

WHEREAS, the reduced availability of livestock feed and increased transportation distances and times caused by road closures and other damage from the severe weather event have delayed, and will continue to delay, essential intrastate collection and delivery of livestock feed products by motor carriers and drivers of commercial motor vehicles from processing facilities to dairy farms; and

WHEREAS, the increased transportation distances and times have created an emergency situation because commercial drivers cannot complete deliveries of livestock feed within the time limits prescribed by commercial motor vehicle driver hours of service rules, and available trucks with livestock feed cannot be dispatched because commercial drivers have exhausted their current hour limitations, leading to shortages in livestock feed; and

WHEREAS, the Washington State Military Department has activated the State Emergency Operations Center to implement the *Washington State Comprehensive Emergency Management Plan* and is coordinating resources to support local jurisdictions in alleviating the immediate impacts to people, property, and infrastructure as a result of this disaster, and is continuing to assess impacts resulting from the incident; and

WHEREAS, due to the above-noted conditions, the time limits prescribed by the commercial motor vehicle driver hours of service rules impede the necessary delivery of supplies critical to state agricultural needs by preventing drivers of these trucks from making timely deliveries; and

WHEREAS, the effect of these disruptions to the agricultural needs continues to impact the life and health of people, as well as the property, economy, and transportation infrastructure of Washington State, and is a public disaster that affects life, health, property, or public peace.

NOW, THEREFORE, I, Jay R. Inslee, Governor of the state of Washington, as a result of the above-noted situation, and under Chapter 38.52 and 43.06 RCW and pursuant to RCW 43.06.220(2)(c) and RCW 74.04.660(6), do hereby proclaim that a State of Emergency continues to exist in Clallam, Grays Harbor, Island, Jefferson, Lewis, King, Kitsap, Pierce, Mason, San Juan, Skagit, Snohomish, Thurston, and Whatcom counties in the State of Washington, and also is declared to exist in Cowlitz County in the State of Washington, and direct the plans and procedures in the *Washington State Comprehensive Emergency Management Plan* be implemented. State agencies and departments are directed to utilize state resources and do everything reasonably possible to assist affected political subdivisions in an effort to respond to and recover from the event. Additionally, the Washington State Military Department, Emergency Management Division, with the support of the Washington National Guard's available resources, is instructed to coordinate all incident related assistance to the affected areas.

FURTHERMORE, I continue to authorize and direct the Secretary of the Department of Social and Health Services to expand eligibility for the Family Emergency Assistance Program to include individuals and families with or without children living in the counties listed above, and order that it be made available, within the funds available for this benefit, to eligible individuals and families, who may apply and receive benefits monthly. This authorization and order for expansion is effective from November 22, 2021, until 11:59 pm on December 18, 2021.

FURTHERMORE, I also hereby continue to find, based on the above, that motor carriers and drivers of commercial motor vehicles delivering livestock feed to dairy farms are providing emergency relief during an emergency under 49 CFR § 390.23 and, therefore, are exempt from application of the driver hours of service rules in 49 CFR § 395, adopted pursuant to RCW 46.32.020 and WAC 446-65-010, effective immediately and until the earlier of 11:59 pm on December 18, 2021, or the end of the emergency declared in Proclamation 21-18, et seq.

FURTHERMORE, under the provisions of RCW 43.06.220(l)(h), to preserve and maintain life, health, property or the public peace, I also continue to impose restrictions on application of the driver hours of service rules exemption by prohibiting application of the exemption as follows:

1. Motor carriers continue to be prohibited from operating under the terms of this exemption if either of the following conditions exists:
 - a. They have an out-of-service order in effect; or
 - b. They do not possess a current safety rating of "Satisfactory" or better by the Federal Motor Carrier Safety Administration or the State in which the carrier has its principal place of business.
2. Motor carriers I have not prohibited from operating under the terms of this exemption continue to be prohibited from:

- a. Requiring or permitting a fatigued or ill driver to operate a commercial motor vehicle; and
- b. Requiring or permitting a driver to operate a commercial motor vehicle after the driver has informed the carrier (verbally or in writing) that he or she needs immediate rest unless the driver has first received at least ten consecutive hours off-duty documented in writing by the motor carrier; and
- c. Requiring or permitting a driver to operate a commercial motor vehicle after the driver has been on duty for more than 96 hours any eight consecutive days, unless the has first received at least 34 consecutive hours off-duty documented in writing by motor carrier.

I ask the motor carriers for the agricultural industry to use their best judgment in operating under this exemption in a manner that ensures public health safety. Drivers operating under this exemption should carry a copy this Proclamation.

Signed and sealed with the official seal of the state of Washington on this 1st day of December A.D., Two Thousand and Twenty-one at Olympia, Washington.

By:

/s/

Jay Inslee, Governor

BY THE GOVERNOR:

/s/

Secretary of State



STATE OF WASHINGTON
— OFFICE OF GOVERNOR JAY INSLEE —

December 3, 2021

The Honorable Deanne Criswell
Administrator
Federal Emergency Management Agency
500 C Street, SW
Washington, DC 20472

Dear Administrator Criswell:

Thank you for making time last month for our phone call regarding the significant damage and hardship that severe flood events have recently caused in Washington and throughout the Pacific Northwest. I am writing as a follow up to our conversation and to respectfully request swift consideration by the Federal Emergency Management Agency (FEMA) once Washington completes a formal damage assessment and submits our request for federal assistance under the Stafford Act. I anticipate doing so in the coming days.

Since these severe rainstorms first began on November 12, I have met with flood victims in Whatcom County and have had ongoing conversations with local elected officials, tribal government leaders, emergency response personnel, and community stakeholders from around Northwestern Washington. Through these engagements, one thing I have heard consistently is collective shock in the magnitude of these atmospheric events, causing historic water levels and damage in impacted communities.

The record-breaking storms have included flooding, landslides, mudslides, and straight-line winds, causing evacuations, displacement, road and highway closures, and significant power outages. These have had a tremendous impact on people, businesses, agriculture, transportation systems, and the economy of Washington. Here are examples of how these meteorological events are unique and historic, according to the National Weather Service:

- Seattle, SeaTac,ⁱ Bellingham, and Quillayute all recorded their wettest meteorological fall season (September 30-November 1) on record.ⁱⁱ
- Bellingham experienced its wettest November on record, eclipsing its previous record by nearly 3 inches.ⁱⁱⁱ

The storms have damaged public and private property, including residences. I visited with one family in Everson, Washington whose house was flooded with so much debris and silt from the

The Honorable Deanne Criswell

December 3, 2021

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Nooksack River that it was damaged beyond repair. This had been the place they called home for the past 18 years. This is just one of countless stories of loss from around the state.

Washingtonians are resilient, strong people, and we will bounce back from recent storms. Public Assistance (PA) and Individual Assistance (IA) as provided by the Stafford Act will help ensure that we do so as quickly as possible.

I very much appreciate the ongoing collaboration between my office and the Biden Administration, including FEMA. Thank you for considering this letter in advance of the state's report. If you have any questions, please direct them to Jim Baumgart, Senior Policy Advisor for Emergency Management (Jim.Baumgart@gov.wa.gov, 360-902-0559) and Geoff Potter, Deputy Director of Federal and Interstate Affairs (Geoff.Potter@gov.wa.gov, 360-867-8690).

Very truly yours,

A handwritten signature in black ink, appearing to read "Jay Inslee", with a stylized, flowing script.

Jay Inslee
Governor

ⁱ National Weather Service, November 28, 2021

ⁱⁱ National Weather Service, December 2, 2021

ⁱⁱⁱ National Weather Service, December 1, 2021

U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472

**FEMA****DEC 14 2021**

The Honorable Jay Inslee
Governor of Washington
P.O. Box 40002
Olympia, Washington 98504-0002

Dear Governor Inslee:

This is in response to your December 9, 2021, request for a time extension to submit a request for a major disaster declaration for the State of Washington as a result of a severe storm, straight-line winds, flooding, landslides, and mudslides during the period of November 6-19, 2021.

You indicated that additional time is needed to complete the Initial Damage Assessment, verification, and analysis of the damage. You further indicated that a joint FEMA-State Preliminary Damage Assessment (PDA) for Individual Assistance is being conducted at this time, and a PDA for Public Assistance is tentatively scheduled for December 13-17, 2021, to determine whether a major disaster declaration request is appropriate.

Your request for an extension is approved until January 18, 2022. Should you have any questions or concerns regarding your deadline, please contact Vincent Maykovich, Acting Regional Administrator, FEMA Region X at (425) 487-4767.

Sincerely,

A handwritten signature in blue ink, appearing to read "Anne Bink", with a long, sweeping horizontal line extending to the right.

Anne Bink
Associate Administrator
Office of Response and Recovery