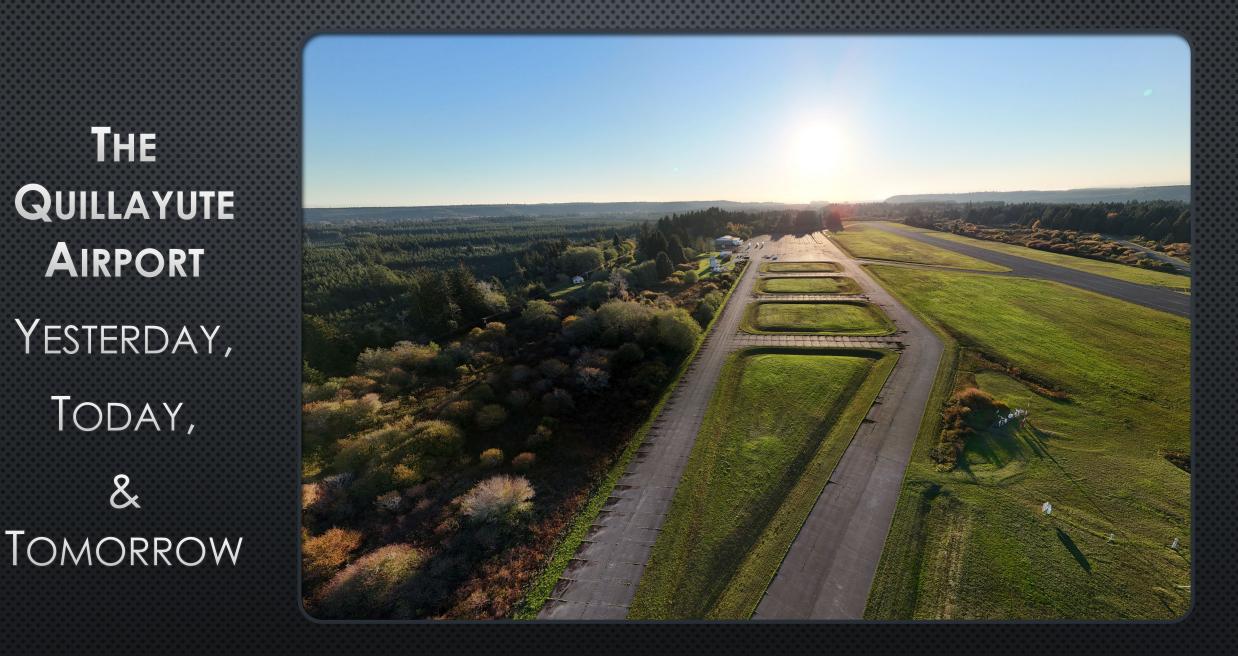
THE QUILLAYUTE **AIRPORT** YESTERDAY, TODAY,



THE
QUILLAYUTE
AIR STATION
STARTS AS A
SECRET
PROJECT



The Quillayute Air Station Timeline

Quillayute Naval Auxiliary Air Station Timeline

1930s

Concerns grow over world affairs

1935

Coast Guard Air Station at Ediz Spit commissioned

<u> 1940</u>

Quillayute Prairie evaluated in Navy report November - purchase of acreage recommended

1941

April - property taken by eminent domain

May - initial work started

October - gravel landing strip completed

December 7 - Pearl Harbor attacked

1942

April - Army gains permission to expand Navy fields

September - Lieutenant Commander Dobbins assumes role

November - Quillayute NAAS designated as training center

December - Quillayute NAAS responsibilities expanded

The Quillayute Air Station Timeline

1943

January - Army Engineers sign construction contract

February - Navy and Army officials hold joint conference

April - Navy office approves Mt. Vernon NAAS

May - Navy office cancels Mt. Vernon NAAS

May 4 - Quillayute NAAS OC reports expanded needs

May 30 - Quillayute NAAS expansion costs estimated

August - Housing for personnel at Quillayute NAAS considered

October - Army halts improvement plans for Quillayute NAAS

1944

January - Army withdraws guard detachments

February 22 - War Manpower Survey Board pays a visit

February 19 - Commissioning Day

March - 10-acre wildfire threatens Quillayute Elementary School

April - Electrification and equipment installation

June - Water supply failure

July - Public Works to oversee essential structures

August - Increase to total station personnel

September 18 - Final agreement between the Army and Navy















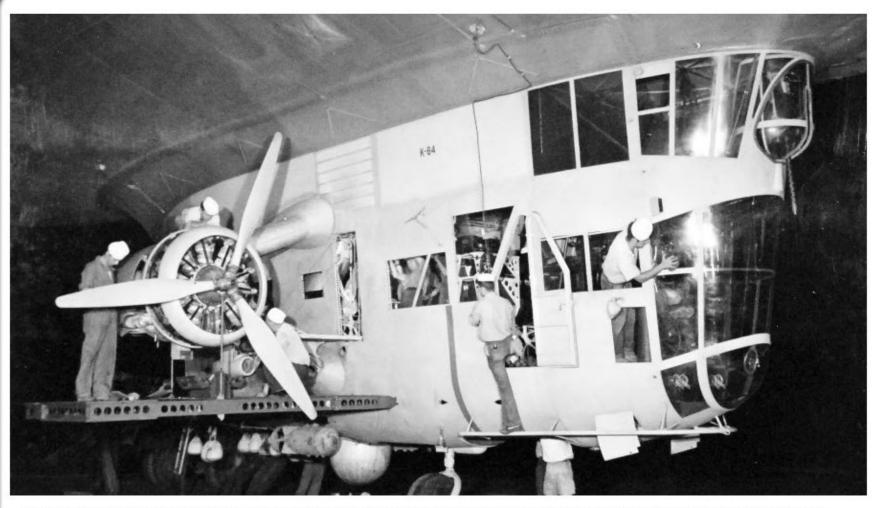








Quillayute Naval Air Station is Commissioned



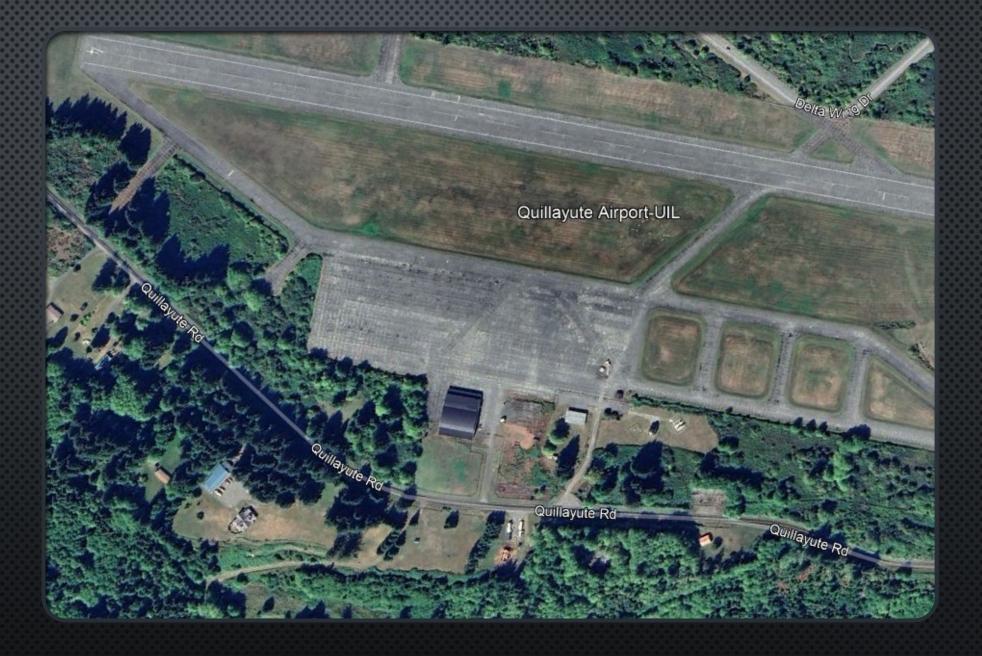
The 10 crew members of K-Ships served in vital anti-submarine roles during WWII in the Atlantic. Ground crew are shown here preparing a K-ship before a patrol. Photographed October 8-14, 1943. [Courtesy: National Archives and Records Administration]



THIS WAS THE QUILLAYUTE AIRPORT IN ITS HEYDAY 1944



THIS IS THE
QUILLAYUTE
AIRPORT
IN 2024



The Quillayute Air Station Timeline

1945

January - Historical Officer appointed

August 14 - Japan surrenders

September - Station is placed on caretaker status

<u> 1947</u>

War Assets Administration declares non-essential buildings

1960-1961

Ownership is transferred to the General Services Administration for disposal without restriction

1962

Most of the property is acquired by the State of Washington for use as an emergency landing field.

<u> 1964 - 1975</u>

The site is used as a clubhouse and campsite for a flying club.

1977

Runway Number 1 is closed.

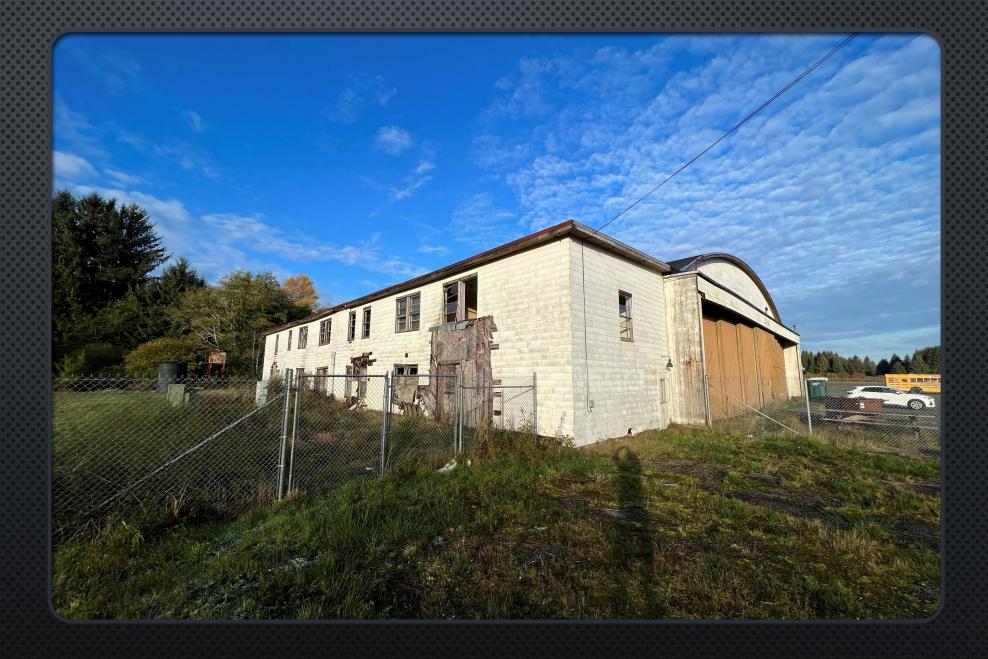
<u> 1997</u>

City of Forks acquires former Quillayute NAAS













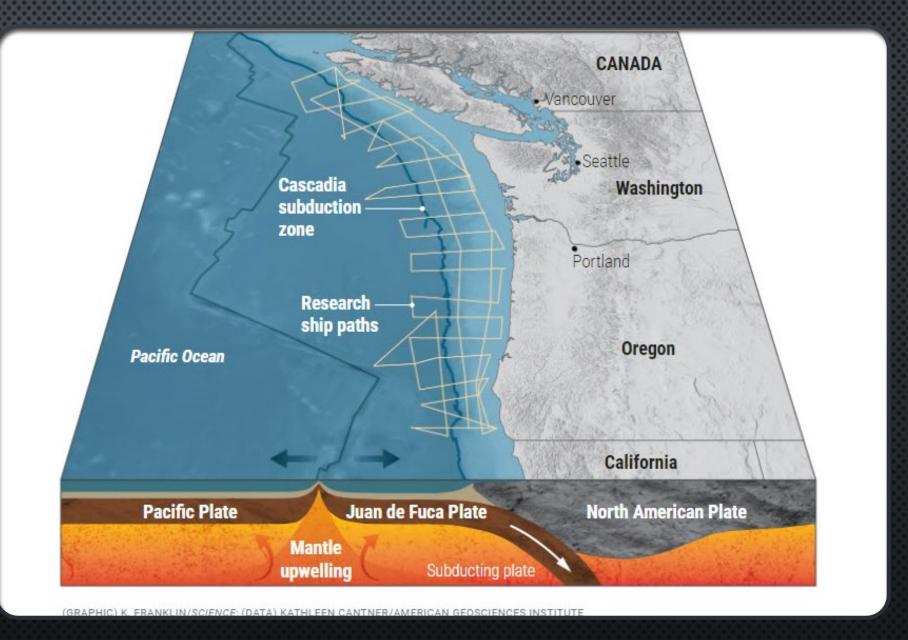


THE QUILLAYUTE **AIRPORT** TODAY Is in SAD SHAPE

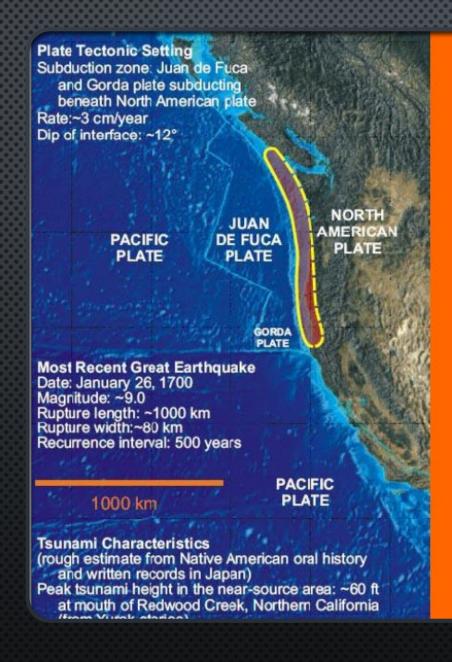
What Does It Matter?



WHERE THE
PACIFIC,
JUAN DE FUCA,
AND NORTH
AMERICAN
PLATES MEET



ESTIMATE:
10% - 37%
CHANCE OF
HAPPENING
WITHIN THE
NEXT 50 YEARS



THE 9.2 QUAKE

Location: 130 miles off coast

Length of Rupture: 600 miles

Width of Rupture: 50 miles

Duration: 6.5 minutes

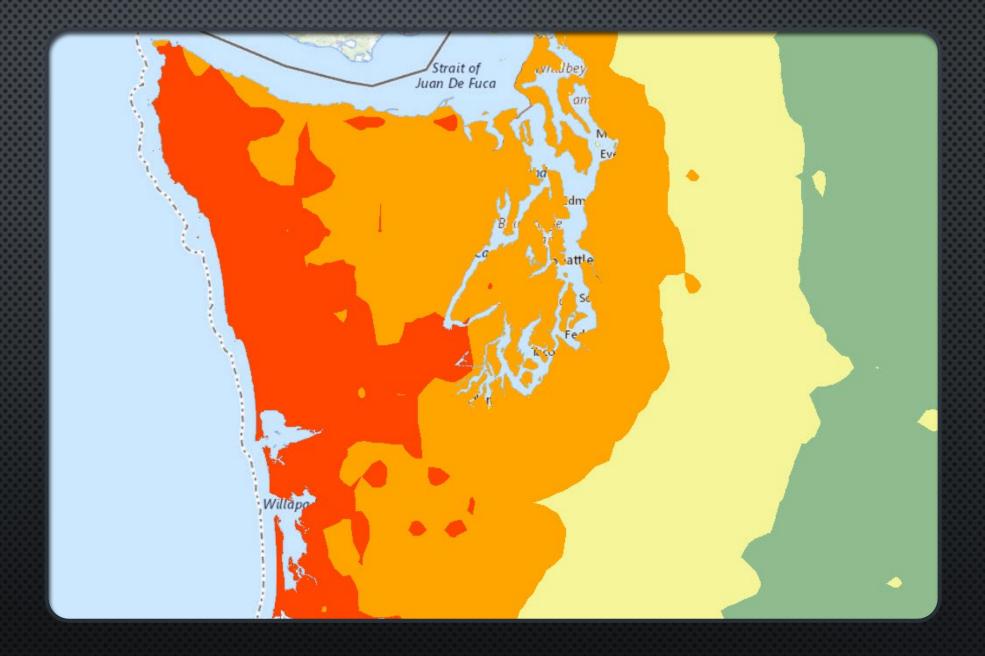
Magnitude at rupture: 9.2

PGA on Oly Pen: 25 to 50% G

PGA near I-5: 30 to 40% G

Shaking Intensity

- 4 Light
- 5 Moderate
- 6 Strong
- 7 Very Strong
- 8 Severe



QUILLAYUTE TSUNAMI FLOOD ZONE **2023 DNR** STUDY



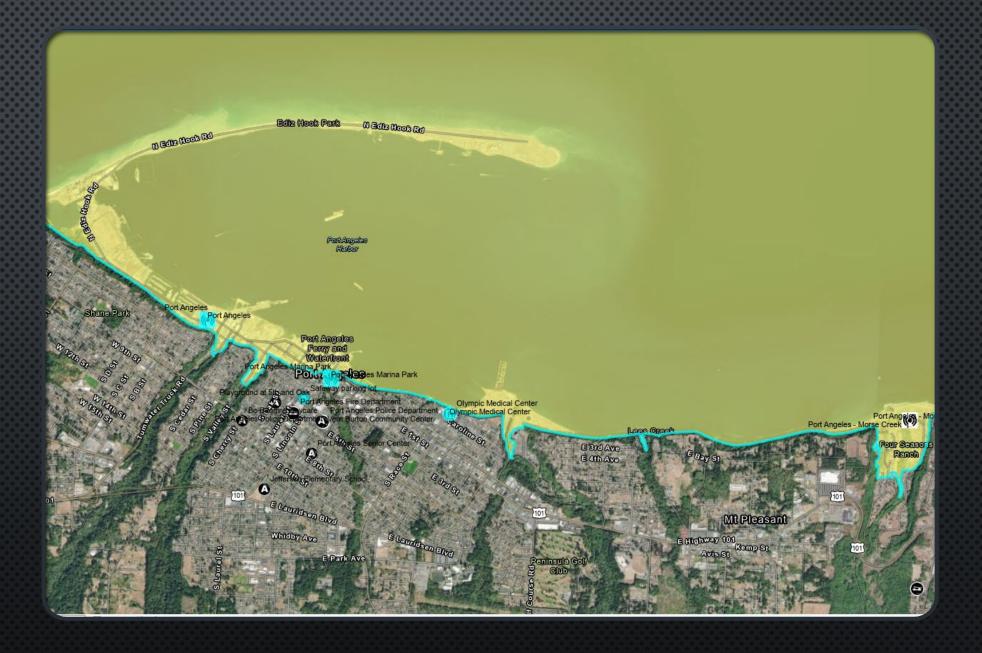
NEAH BAY TSUNAMI FLOOD ZONE **2023 DNR** STUDY



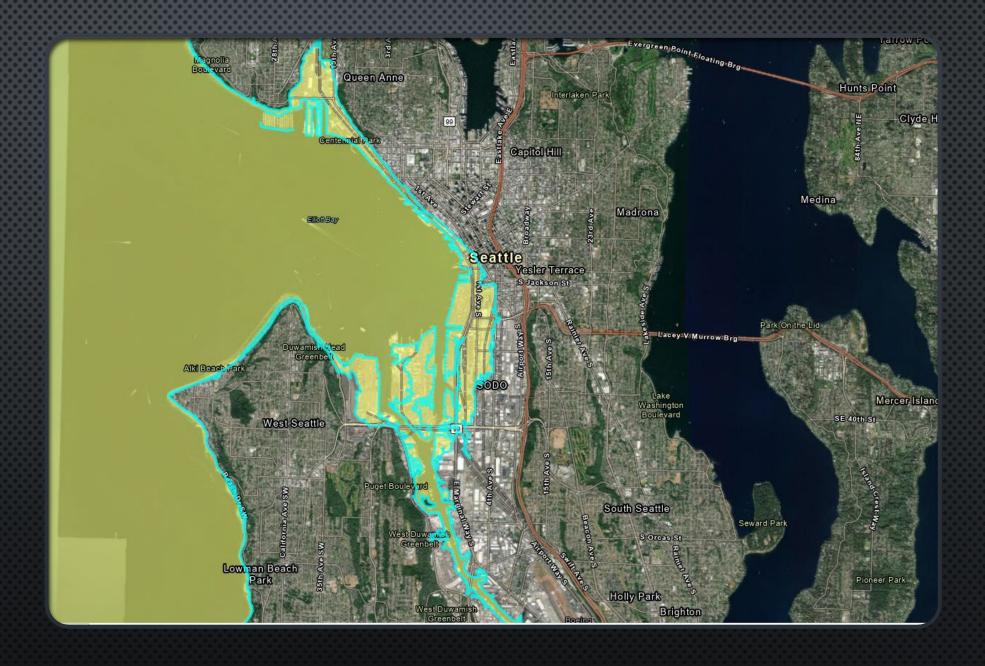
CLALLAM BAY **TSUNAMI FLOOD** ZONE **2023 DNR** STUDY



PORT
ANGELES
TSUNAMI
FLOOD
ZONE

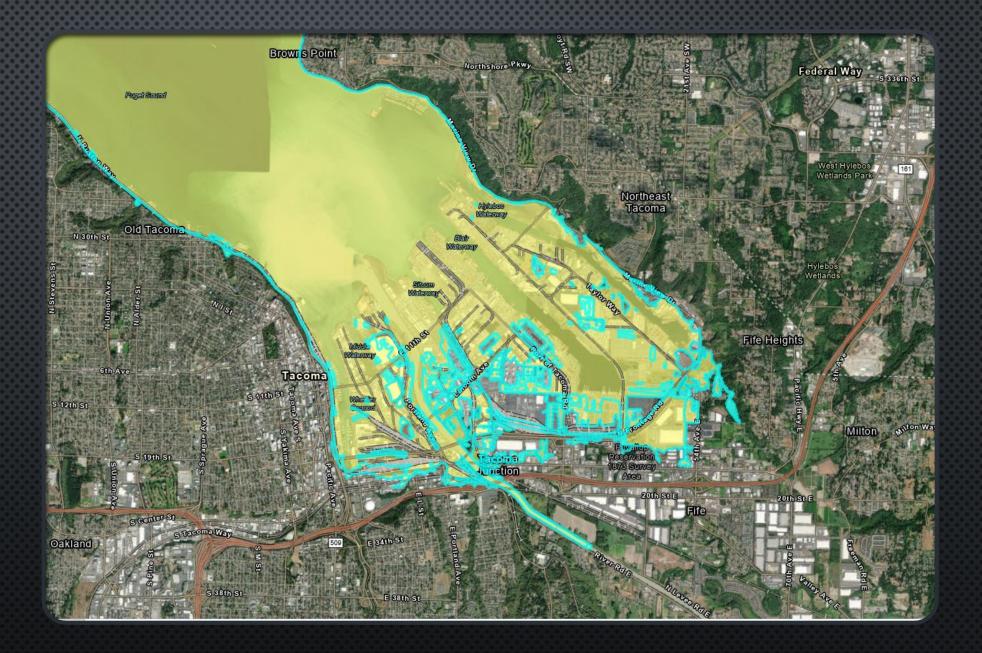


SEATTLE
TSUNAMI
FLOOD
ZONE



CASCADIA

TACOMA
TSUNAMI
FLOOD
ZONE



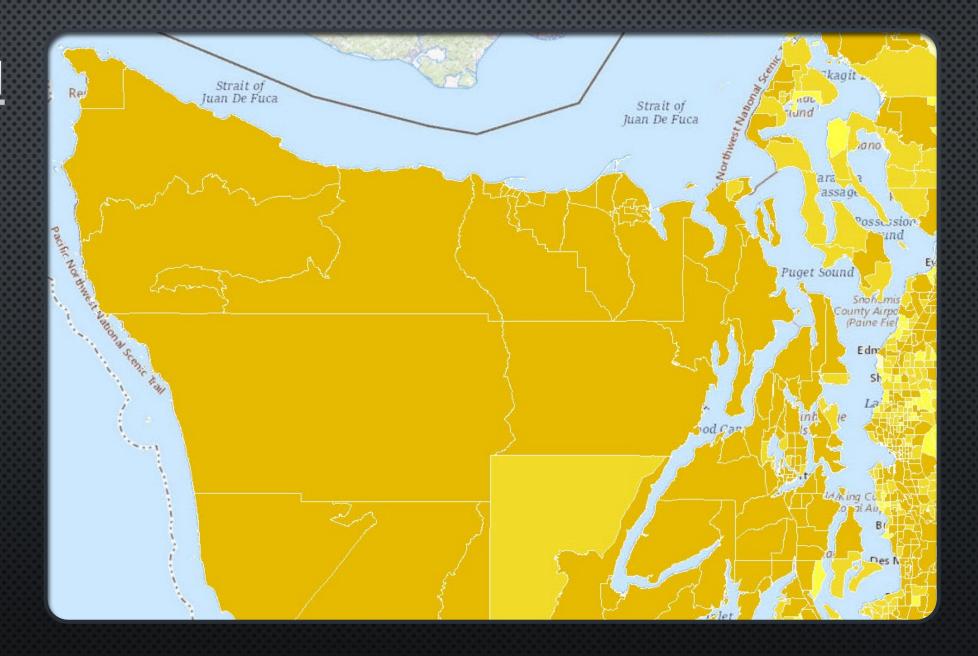
CASCADIA

GRAYS
HARBOR
TSUNAMI
FLOOD
ZONE

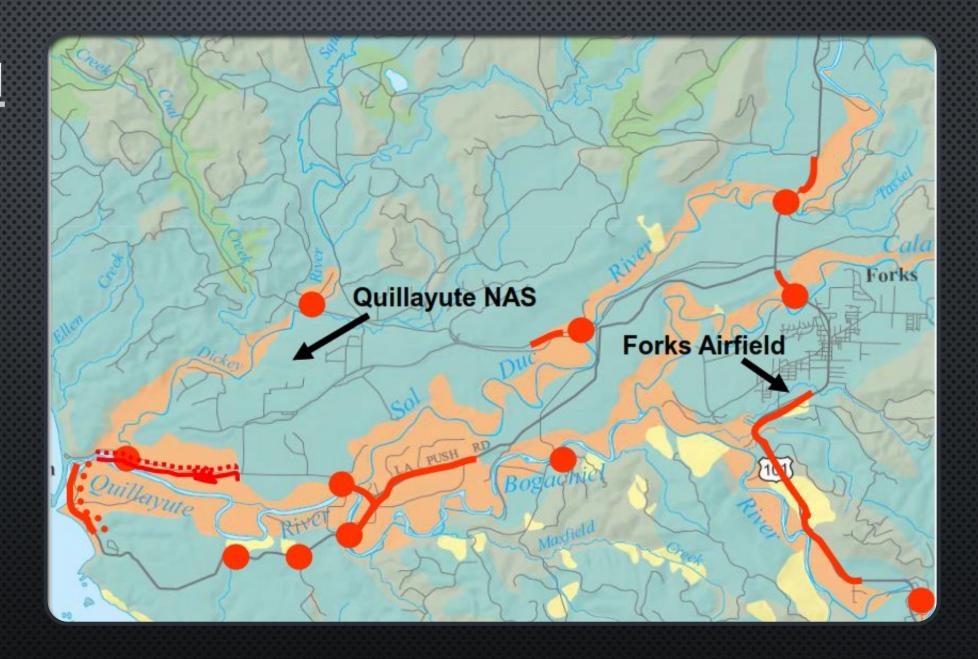


Total Debris in Thousands of Tons

- 0 0.125
- 0.126 0.395
- 0.396 1.00
- 1.01 2.291
- 2.292 200



DESTROYED
OR
DAMAGED
BRIDGES



CELL PHONES

AM/FM

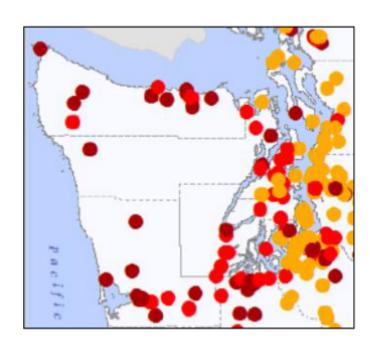
TV

RADIO

OUT

100%

COMMUNICATIONS



After the CSZE, the county will experience phone, cell phone, internet, radio and TV outages lasting for months.

It may take days or weeks to restore 33% of coastal communications facilities.

POWER AND
WATER

100%
OUTAGES

UTILITIES



ELECTRICAL GRID

100% will be severely damaged or destroyed.

It may take up to 1 year to restore service to 90 % of the current demand.

WATER

100% of water systems will be severely damaged or destroyed. 67% of water may be restored as power is repaired. 33% must be rebuilt.

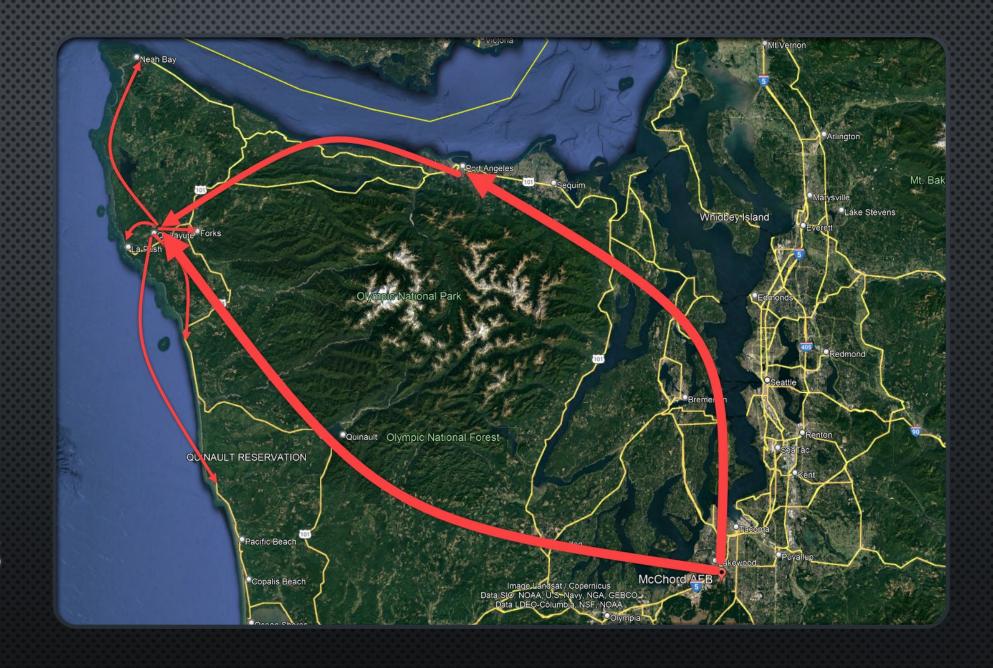
QUILEUTE DAYS
SCENARIO:

MORE THAN
4,000
VISITORS AND
1,100
RESIDENTS
STRANDED

	ntial Evacuees by District	Residents	Visitors	Source/Description
Nietolet (5 West (west of Solduc, north of Quillayute)	Residents	Visitors	Source/Description
DISTRICT	QRR		24	direct knowledge
	Manitou Lodge		58	website
	Cycle Camp		300	Bob Wishon: 35 average, 300 max
			300	DOD WISHON: 35 average, 300 max
	Hipcamp Dilly Farm		4	AirBnB website
	Olson's Vacation Cabins		11	website
	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			1.7.7.7.7.7.7
	ONP Vacation Home		10	website
	Rialto Beach Bungalow		6	website
	Blue Spruce Meadows		8	AirBnB website
	sites on Prairies End Road		90	Maria Sohas
	Mountain View Cabins		30	Facebook page - this is a guess
	Mora Campground		329	94 campsites @ 3.5 per site
				54 parking spaces @ 3 per space = 162
	Bialto Beach		468	Quileute overflow: 170 paces @ 0.6 paces per space =
	nialto Deacri		400	102 parking spaces
				156 spaces @ 3 per vehicle = 468
	Subtotals	488	1338	2.7
District 6	East (east of Solduc, north of Bogachiel)			
	Three Rivers Resort		120	Jason
	Riverview RV Park		90	Leith Grahn: 30 RV sites @ 2; 3 cabins @ 2; 12 tent sites @ 2
	The Orchard at 3 Rivers		10	https://threeriversorchard.com/
	Ultimate camping trip (site #1)		8	AirBnB website
	Ultimate camping trip (site #2)		5	AirBnB website
	Ultimate camping trip (site 5)		4	AirBnB website
	Riverside Cabin		4	AirBnB website
	Jacob Black's Vacation Rental		10	RentByOwner website
	Wolf Den Cabin		12	AirBnB website
	various Old La Push Road sites		30	educated guess
	Subtotals	244	293	1.2
			200	
LaPush (s	south of Bogachiel & Quillayute)			
	Byron Brassfield (Spaulding place)		99	Vrbo website
	Quileute Oceanside Resort		574	Christina at Oceanside: 70 units @ max capacity = 346; 69 RV sites @ 3 = 207; 7 tent sites @ 3 = 21
	First Beach		540	300 paces @ 0.6 paces per space = 180 parking space @ 3 per vehicle = 540
	Second Beach		846	lower area: 100 paces = 60 spaces @ 3 = 180 upper area: 370 paces = 222 spaces @ 3 = 666 Total = 846
	Third Beach		324	nose-in parking: 120 paces = 72 spaces @ 3 = 216 other parking: 60 paces = 36 spaces @ 3 = 108 Total = 324
	Subtotals	406	2383	5.9
	Totals	1.138	4014	3.5

RECOVERY

POTENTIAL FEMA / NATIONAL GUARD AIR SUPPORT **SCENARIOS**



NEXT STEPS SOLAR PLUS STORAGE FOR **RESILIENT** COMMUNITIES GRANT \$87,270 TRACK 1 **FEASIBILITY** STUDY

Quillayute Airport Microgrid Feasibility Report

Prepared for: Clallam County Fire District 6

March 8th, 2024



SOLAR PLUS
STORAGE FOR
RESILIENT
COMMUNITIES
GRANT
\$87,270

TRACK 1
FEASIBILITY
STUDY

Executive Summary

Geological studies estimate the likelihood of a Cascadia megaquake occurring within the next 50 years at something between 17% and 37%. It will cause widespread power outages, water failures, communication disruptions, and transportation blockages. The Quillayute Airport, in Clallam County, WA is ideally positioned, both physically and developmentally as an ideal opportunity to take the lead as an emergency response base of operations and all-hazard shelter facility for Clallam County Emergency Operational Area 2. As the only Tier 2 airbase on the outer coast of Washington and already designated as the assembly point for tsunami evacuation, ensuring reliable power for the emergency staging area is a critical next step in the airport's master planning and redevelopment process.

This study highlights the capabilities of the Airport to drastically increase emergency preparedness in the region and provides a comprehensive plan and design for a resilient, grid-tied, microgrid power system.

The design provided as part of this study includes a $60kW_{dc}$ solar PV array coupled with a $61.4kWh_{dc}$ battery energy storage system and a $60kW_{ac}$ traditional generator for increased redundancy and resiliency. The PV system will produce 62.2MWh of energy annually and the microgrid will be capable of maintaining the designed load indefinitely.

As part of this project, basis of design drawings have been developed including site plans, equipment layouts, electrical single lines, additional communication infrastructure, structural foundational details and equipment specifications. With limited additional effort the drawing package could be taken to 100% construction documentation for permit and installation.

NEXT STEPS FEMA HAZARD MITIGATION GRANT **PROPOSAL** SUBMITTED TO WASHINGTON NATIONAL GUARD **AUGUST 2024**

SOLAR DESIGN SERVICES FOR QUILLAYUTE AIRPORT MICROGRID PROJECT



GRANT PROPOSAL ELIMINATED FROM FURTHER CONSIDERATION DUE TO LACK OF STANDING IN THE COUNTY HAZARD PLAN

From: Vulcano, Audrey (MIL) < Audrey. Vulcano@mil.wa.gov>

Sent: Wednesday, September 25, 2024 1:34 PM
To: 'ckeen@3riversfire.org' <ckeen@3riversfire.org>

Cc: HMA (MIL) < hma@mil.wa.gov>

Subject: Combined DR-4759-4775 | Declination | Clallam County and Promoting Emergency Response and Community Resilience at the

Quillayute Airport

Hello Robert,

Thank you for submitting a pre-application for the DR-4759-4775 combined round. The review process has been completed and, unfortunately, your proposal for Promoting Emergency Response and Community Resilience at the Quillayute Airport will not receive an invitation to develop and submit a full grant application at this time. Please see the considerations below.

The purpose of our pre-application screening process is to prevent jurisdictions from unnecessarily expending their valuable time and resources on preparation of a lengthy sub-application that's not suitable for the grant round. For that reason, we have only extended invitations and full sub-application documents to proposals that: are deemed conceptually eligible, fall within FEMA's funding limits, are likely to achieve a favorable Benefit-Cost Analysis (BCA), and are likely to be competitive for funding in the given round, with emphasis on prioritized jurisdictions.

Despite this result, we encourage Clallam County to keep submitting pre-applications for future mitigation grant opportunities—especially for grant-eligible projects specifically identified in your local Hazard Mitigation Plan. EMD's Mitigation staff is ready and willing to help you identify suitable mitigation grant proposals upon request.

Considerations specific to your proposal:

- Clallam County Fire Protection District 6 is not covered by the Clallam County HMP. The county is currently updating their plan.
- Once annexed under the county's plan please reapply to an open HMGP round.

CITY OF FORKS

ANNEX TO NEW
HAZARD
MITIGATION PLAN
ADDS FOUR NEW
QUILLAYUTE
AIRPORT ACTIONS

- New Water Main
- ELECTRICAL UPGRADE
- COMMERCIAL SEPTIC
- MICROGRID

Table 5-2 City of Forks Mitigation Actions

Action ID#	Mitigation Action Description	New or Previous Mitigation Action	Jurisdiction/ Lead Department	Timeline	
FR01	City of Forks Culvert Assessment Study/Report	2019 Mitigation Action	Internal: City of Forks Public Works and Planning Departments	Short-term	
FR02	Storm-related Roof Damage Mitigation Assessment	2019 Mitigation Action	Internal: City of Forks Planning Department	Medium-term	
FR03	Palmer Road Stormwater Detention Pond and Conveyance System	2019 Mitigation Action	Internal: City of Forks Utilities Department	Medium-term	
FR04	Participate in the County-wide Community Wildfire Protection Plan as a stakeholder. Utilize technical findings to understand areas of local vulnerability and relevant risk reduction strategies.	New Mitigation Action	Internal: Community Development Department	Short-Term	
FR05	Identify and prioritize critical facilities within Forks in need of back-up generators. Establish a procurement plan and seek grant funding.	New Mitigation Action	Internal: Public Works Department	Long-Term	
FR06	As part of the ongoing Forks Comprehensive Plan update and related climate resilience planning, evaluate policies related to climate change and related hazards. Evaluate housing and other land uses, and consider additional land use/zoning regulations in hazard areas and environmentally sensitive areas. Consider the findings of this MUHMP and the Comprehensive Plan climate resilience planning to develop ongoing policies to mitigate climate impacts.	New Mitigation Action	Internal: Community Development Department	Medium-Term	
FR07	Continue to promote a culture of emergency preparedness and hazard mitigation by distributing and promoting outreach materials/programs produced by Clallam County Emergency Management Department.	New Mitigation Action	Internal: Community Development Department	Ongoing	
FR08	Initiate discussion and collaboration with Washington Department of Natural Resources (DNR) regarding wildfire and burn risk associated with permitted timber harvest and debris storage on both DNR and private forest land. Identify opportunities to reduce wildfire risk and vulnerability this practice poses to the City of Forks and Forks UGA.	New Mitigation Action	Internal: Community Development Department	Ongoing	
FR09	Conduct periodic assessments and maintenance of drainages, ditches and outfalls to ensure adequate drainage capacity for both current and future use.	New Mitigation Action	Internal: Public Works	Ongoing	
FR10	Work with local community groups and NGOs to determine adequate locations throughout the City to serve as both warming and cooling centers. Establish a plan to coordinate services, volunteers and other resources required to facilitate warming and cooling centers.	New Mitigation Action	Internal: Community Development Department	Short-Term	
FR11	Evaluate back-up power capacity for the local potable water system; identify any gaps and establish a method to prioritize existing needs. Establish a procurement plan and seek grant funding.	New Mitigation Action	Internal: Public Works	Long-Term	
FR12	Evaluate microgrid concepts such as solar arrays and battery energy storage systems (BESS) to offer alternative power sources at the Quillayute Airport.	New Mitigation Action	Internal: City of Forks Utilities Department	Long-Term	
FR 13	Quillayute Airport Utility System Upgrade to include new water main from well house, electrical system upgrade, installation of on-site commercial septic system, and development of a site specific energy generating and storage microgrid system.	New Mitigation Action	Internal: City of Forks Planning Department External: Coordination with CC Fire District 6	Medium-Term	
Adopt the 2024 MJHMP	Adopt the MJHMP after approval.	New Mitigation Action	All Participating Jurisdictions	Short-term	

CITY OF FORKS

UPDATE TO THE 20-YEAR FAA AIRPORT MASTER PLAN

"PROVIDES
FRAMEWORK
AND VISION TO
GUIDE FUTURE
DEVELOPMENT"



Quillayute Airport

AIRPORT MASTER PLAN



Forks, WA January 2024

CITY OF FORKS THE "AMP" ENVISIONS:

- Runway Lighting
- INSTRUMENT APPROACH
- RENTABLE HANGER STORAGE
- UTILITY
 IMPROVEMENTS
 (WATER, ELECTRIC,
 SEPTIC)



Quillayute AirportAIRPORT MASTER PLAN



Forks, WA January 2024

CITY OF FORKS

"AMP" VISIONS:

- RESTORATION OF THE WWII QUONSET HANGER
- INDOOR RESTROOM
- PILOT LOUNGE
- AVIATION-RELATED TENANTS
- MIXED-USE
 BUILDINGS



Quillayute AirportAIRPORT MASTER PLAN



Forks, WA January 2024

QUILLAYUTE AIRPORT CAPITAL IMPROVEMENTS PLAN 2025-2030

\$1,342,000:

\$452,000 FOR SOUTH FACE HANGAR RENOVATION

- \$526,000 FOR
 RUNWAY LIGHTING
- \$364,000 FOR
 OTHER ACTIONS

	Fund Source					
		2025	2026	2027	2028	2029
UIL Main Hangar South Face Renovation	4, 6	300,000	152,000			
2. UIL - Runway 4/22 Markings & Runway Repair	4, 6		74,000	200,000		
3. UIL – Airport Runway Edge Lighting	4, 6				100,000	426,000
4. Joint Airports Hangar Design	4, 6, 8		15,000	+		
5. FMA - Runway Repair	4, 6, 8	15,000		15,000		15,000
6. FMA - Additional Parking	4, 6, 8		15,000	15,000		
Sub-Totals		315,000	256,000	230,000	100,000	441,000

1. UIL Main Hangar South Face Renovation. UIL has been designated in the federal Bipartisan Infrastructure Legislation to receive funding that may be utilized for improvements to the WWII era hanger's south side. City would solicit for an architect/engineer to develop project scope, estimates, and bid documents to remove all asbestos siding on the south side, repair and renivate the southern exterior walls and associated portion of the southern two storey wing of the building. On site septic system would also be pursued and installed in the area associoated with the former parade ground to serve the entire hangar facility. In addition, electrical service would be restored to the southern two storey wing of the building. Such undertaking would make the hangar fully usable and thereby rentable, creating an additional revenue source for UIL. Work to be done in 2025 and 2026.

QUILLAYUTE AIRPORT CAPITAL **IMPROVEMENTS** PLAN 2025-2030 \$1,342,000:

\$452,000 FOR SOUTH FACE HANGAR RENOVATION

- \$526,000 FOR **RUNWAY LIGHTING**
- \$364,000 FOR OTHER ACTIONS

	Fund Source	2025	2026	2027	2028	2029
UIL Main Hangar South Face Renovation	4, 6	300,000	152,000			
2. UIL - Runway 4/22 Markings & Runway Repair	4, 6		74,000	200,000		
3. UIL - Airport Runway Edge Lighting	4, 6				100,000	426,000
4. Joint Airports Hangar Design	4, 6, 8		15,000			
5. FMA – Runway Repair	4, 6, 8	15,000		15,000		15,000
6. FMA - Additional Parking	4, 6, 8		15,000	15,000		
Sub-Totals		315,000	256,000	230,000	100,000	441,000

The following numerical codes used within the following tables explain the funding mechanisms to be utilized in completing these projects. **Funding Sources:**

1 General Fund

• 5 Improvement District

2 Street funds

6 Grants

• 3 Lodging Tax

7 Bonds

• 4 Enterprise Funds (Water, Sewer, FEDSC) • 8 Loans

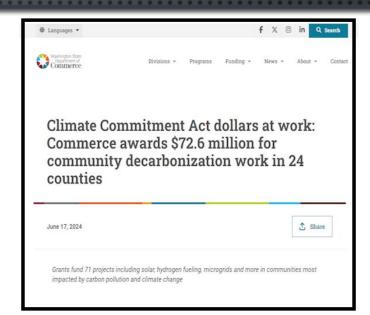
• 9 Other (inc. Capital Improvement Fund(Real Estate Excise Tax REIT))

WAIT TO SEE
HOW GRANT
OPPORTUNITIES
WORK OUT

WAIT TO SEE
HOW FORKS CITY
COUNCIL
DECIDES ON
PRIORITIES

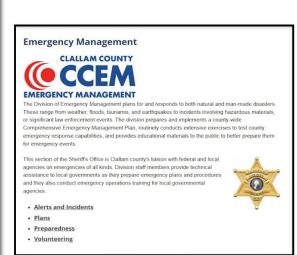




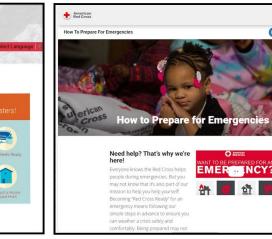




WE DON'T
HAVE TO
WAIT TO
PREPARE FOR
EMERGENCIES













WHAT CAN OUR COMMUNITY DO TO MAKE THE AIRPORT MORE THAN AN **EMERGENCY** ASSET?

Light Manufacturing

O April 27, 2024 & Sally French 9 0 = Flight Diaries,

On the heels of news that some U.S. lawmakers want to ban DJI drones, there.



XPONENTIAL 2024: THE TOP PRODUCTS AND NEWS FROM **AUVSI'S DRONE CONFERENCE**

O April 23, 2024 & Sally French 9 0 > Events, News,

XPONENTIAL 2024, the massive drone conference for uncrewed systems and robotics, wraps up today in...



SAFETY ACT: WHICH DRONE COMPANIES HAVE DESIGNATION STATUS

O April 19, 2024 & Sally French 9 0 S News,

In the slew of government programs designed to award

⊙ April 25, 2024 & Caroline Dobrez 9 0 > Deals, Events,

The team at DARTdrones is hosting a raffle for their online Part 107 test prep.



DJI AVATA 2 VS. AIR 3: WHICH DRONE IS BETTER?

O April 28, 2024 & Sally French • 0 > Reviews.

DJI makes two excellent drones for different purposes: the adrenaline-pumping Avata 2, an FPV (First-Person.



FAR'S BUY AMERICAN ACT: WHAT DRONES MEET THE REQUIREMENTS?

O April 25, 2024 & Sally French D 0 S American drone

These days, all sorts of U.S. drone pilots are seeking







Best 5 Top Drones

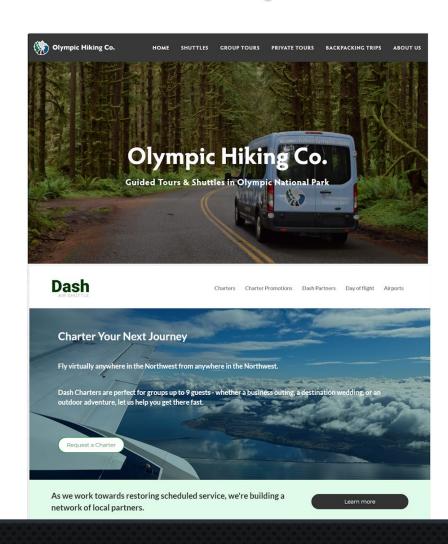
Read Our Top Reviews Before Making Any Drone Purchases. Honest Reviews, By Real Experts

topconsumerguide.com

Open >

WHAT CAN OUR COMMUNITY DO TO MAKE THE AIRPORT MORE THAN AN **EMERGENCY** ASSET?

Tourism Options



WHAT CAN OUR COMMUNITY DO TO MAKE THE AIRPORT MORE THAN AN **EMERGENCY** ASSET?

Educational Site



HISTORIC AIRCRAFT

PRESERVATION SOCIETY, INC.

Home

Galle

ang

About

ft :

Contact U



THANK YOU FOR BEING HERE TONIGHT!

The Slide Deck for This Presentation is Available on the Quillayute Airport for Community Resilience Website:

QA4CR.ORG