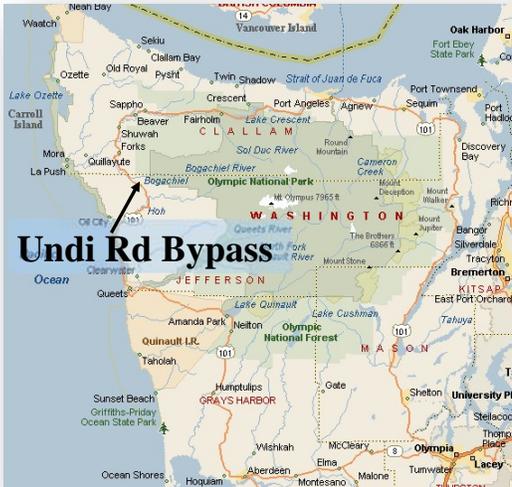


## UNDI ROAD BYPASS PROJECT

The new Undi Road Bypass was opened to traffic in November 2016 after Undie Road was identified as unsafe for motor vehicles. The Bypass ensures continued access to homes, fishing, and a popular trailhead into Olympic National Park.

The old Undie Road, which ran along the Bogachiel River, was damaged by a series of flood events in November, 2015. Damage to the road continued as a large, deep-seated landslide was mobilized by the flooding. Based on geotechnical inspection of the landslide area, the flooding river and potential risk, Public Works staff determined that full closure of the road would be necessary. Unusually wet weather in 2016 and 2017 contributed to the road deterioration and continuing landslide. The old road became completely impassable in February 2017 and was permanently closed.



The project is located in west Jefferson County, and provides access to homes, fishing and a popular trailhead into Olympic National Park.

The route included upgrading 1.5 miles of DNR road and constructing 0.9 miles of new road on steep and challenging terrain. At the time the construction contract was awarded, the County had no assurance that any federal assistance would be provided and had to make the difficult financial choice to commit over \$1 million dollars to this project. It was not until after the project was completed on November 30, 2016 that the County was awarded Federal Emergency Management Agency (FEMA) funds to offset approximately 85% of the costs, thanks to the efforts of staff at the State Emergency Management Department and support from State and Federal legislators.

The new road varies in width from 17 feet to 24 feet and is gravel surfaced. The project was designed and managed by Public Works. It was constructed under 2 contracts by Interwest Construction Inc. (Burlington, WA with offices in Sequim) for a combined cost of approximately \$990,000. Construction was complicated by record-setting rain in October, 2016.

(continued on next page)

Jefferson County made repeated repairs to Undie Rd following the 2015 storms in order to keep it passable for residents and visitors. Meanwhile, feasibility of constructing an alternate route was explored using a network of State Department of Natural Resources (DNR) roads and new construction.

The bypass route climbs over a 300-foot high ridge and then reconnects to the old road beyond the landslide. Jefferson County secured right-of-way from the DNR and private landowners and began construction on August 1, 2016. Multiple permits from State and Federal agencies had to be secured through a difficult but ultimately successful process that normally could have taken several years.



The original Undie Road is barely recognizable as it continues to slide into the Bogachiel River. Notice the two culvert pipes protruding from what remains of the road surface.

## UNDI ROAD BYPASS PROJECT (CONTINUED)

Right-of-way costs totaled nearly \$300,000. Engineering, surveying/staking, special studies for permits, and inspection added another \$150,000 bringing the total cost to \$1.4 million. Cost to keep the old road open while the new route was built was roughly \$250,000. Several local companies played key roles in the project including Pacific Forest Management (Forks, WA) for permitting and Clark Land Office (Port Angeles, WA) for surveying and staking.

Subsequent to project completion, Jefferson County was awarded an additional \$2 million through the Federal Lands Access Program (FLAP) for future improvements to the new route. Success through this competitive grant program was largely due to support from the US Forest Service, National Park Service, and State and Federal legislators. The FLAP project will be managed by the Federal Highways Western Federal Lands office.



This 35-foot high, cut slope required moving 20,000 cubic yards of earth.



Nothing but clay and mud on the last 200 feet of the project!



Spreading gravel base over geotextile for subgrade stabilization of the new road.



Winter 2017 on the new Undi Road Bypass.