



## WASHINGTON RURAL ACCESS PROJECT Environmental Assessment EXECUTIVE SUMMARY

The Environmental Assessment put forth herein provides the requisite evaluation of environmental, cultural and socio-economic resources for compliance with the National Environmental Policy Act (NEPA) as specifically outlined in the "Environmental Assessment Guidance for BTOP Award Recipients Version 1.1," dated May 27, 2010, and put forth by the National Telecommunication and Information Administration (NTIA) for the Broadband Technology Opportunities Program (BTOP). It has been authorized and developed by BTOP Grant recipient Northwest Open Access Network (NoaNet) by a team of consultants that include PACE Engineers, Inc., CHR Solutions, Inc., and Tierra Right of Way Services, Ltd.

Northwest Open Access Network (NoaNet) is a not for profit wholesale telecommunications company formed by several Public Utility Districts (PUDs) in Washington to bring high-speed telecommunication services into underserved communities for utility uses and use by their constituents. NoaNet operates a fiber optic network throughout Washington, connecting the local PUD communications networks to each other and to the major carrier connection points in Seattle, Spokane and Portland.

The Washington Rural Access Project (WRAP) addressed herein includes an estimated 921 miles of new fiber optic cable installations across the State of Washington. In accordance with the stated objectives associated with the American Recovery and Reinvestment Act and specifically the BTOP grant program, the project will:

*"Help bridge the digital divide, improve access to education and healthcare services, and boost economic development for communities held back by limited or no access to broadband – communities that would otherwise be left behind. For example, the investments made in broadband infrastructure, public computer centers, and sustainable adoption will:*

- *provide job training to the unemployed or under-employed,*
- *help school children access the materials they need to learn,*
- *allow rural doctors to connect to more specialized medical centers, and*
- *allow small businesses to offer their services to national and international markets.*"<sup>1</sup>

Because of the length of the project and the extremely diverse environmental characteristics of the 19 separate routes, or project segments, included in the project, Volume 1 of this Environmental Assessment (EA) provides an overview of the Individual Route Assessments (IA's) that are presented in Volume 2. The EA details the overall project development, alternatives and implementation and mitigation strategies anticipated to avoid impacts associated with construction of the WRAP. It also provides a summary of the

<sup>1</sup> Source: Broadband USA Website; <http://www2.ntia.doc.gov/about>; July 18, 2010.

detailed environmental analyses performed. A summary of these analyses is shown on the Environmental Impacts Matrix included at the back of Section 3 – Existing Environment. Accompanying the overall EA are the required exhibits, attachments and documentation of environmental consultations. The overall project, including project regions and route descriptions, is shown on the Project Map on Page iii. Larger scale versions of the same map are included in Section 2 of the EA and in the map pocket at the back of Volume 1.

Volume 2 provides the Individual Assessments (IAs) for each of the 19 routes. The IAs follow the general format of the EA, address elements required for evaluation under NEPA requirements and NTIA Guidance, include detailed route descriptions, and present analyses and mitigation strategies associated with each route. At the back of each IA in Volume 2, a set of maps is provided on a more granular level for each individual route alignment and indicate pertinent information on the environmental resources researched and evaluated during the environmental assessment process. This information includes critical habitat areas, surface water features, wetlands and delineation of park boundaries as well as protected wildlife areas. This information was gathered primarily from published, web based, Geographical Information Services (GIS) from a wide range of national, state, county and city sources. Section 7 of this EA puts forth a detailed listing of data sources used. In addition, field reconnaissance and windshield surveys were conducted to verify published data and help delineate alignment of the 19 routes. Together, this information, verification and map products are intended to provide a comprehensive data set for NTIA evaluation.

Because it is federally funded, this project is considered an undertaking under Section 106 of the National Historic Preservation Act (NHPA) as defined in 36 CFR Part 800. Compliance with the Section 106 process was an important element of the environmental assessment process to ensure that no cultural resources are adversely impacted during the course of this project. In accordance with direction from NTIA (as the lead agency) and as part of the overall EA process, a comprehensive records check of known archaeological and historic cultural properties within the project area has been accomplished. Individual archaeological reports have been submitted under separate cover to NTIA, and subsequently to the Washington State Historic Preservation Officer, for review and the opportunity to comment on the project as it relates to these resources. An overview of the potential archaeological, cultural and historic resources associated with each route is presented in Section 3. A summary of the procedures to be followed in the event that such resources are confirmed and/or encountered in the field is provided for in Section 4 of this Environmental Assessment. Documentation of the SHPO concurrence with the Finding of No Adverse Effect is provided in Appendix A - Communication Plan, which also provides a complete summary of all environmental consultations for the project.

Placeholder for 8.5" X 11" Project Map

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## Project Overview

The project has been divided into 19 separate routes spanning six separate regions based on geographic characteristics. The 19 routes, or project segments, were identified based on a variety of factors including: governance, ownership by sub-participants and location. A summary of each region is presented below to provide the reader with a general understanding of the unique characteristics of each region.

### East Central Region

The East Central Region of the project is within the semi-arid Columbia Plateau ecoregion that is bordered by the Cascade Mountains to the west, the Okanogan Highlands to the north, the Rockies to the east and the Blue Mountains to the southeast. This region is home to an inland sea of sagebrush and the state's fertile agriculture heartland.

The East Central Region generally extends from Spokane to Clarkston; and from the Grant County line to the Washington border with Idaho. The semi-arid area is characterized by hot and dry summers with the majority of precipitation between late fall and early spring. The area is predominantly farmland with bedroom communities surrounding the Spokane urban area and rural communities elsewhere. Aside from the agriculture industry, Washington State University in Pullman is the key employer in the region. Rolling farmlands and the Snake River are key geologic features of the area. The area is culturally rich with a long history of farming and Native American history, particularly along the Snake River. There are six separate routes in the East Central Region: Routes EC-1 through EC-6. All are underground and together they include approximately 260 miles of fiber optic installation. The only exception is a short stretch of less than one-half mile of aerial cable within the town of Warden in Route EC-5.



**Photo 1**  
Route EC-4  
Typical Road Cross Section



**Photo 2**  
Route EC-1 Scribner Rd  
Typical unpaved road

## Southeast Region

The Southeast Region of the project is located in the southeastern most corner of the state, near the borders with both Oregon and Washington. Similar in characteristics to the East Central Region, the Southeast Region also has dry summers with temperatures in the 90s. Winters are cold with temperatures reaching below freezing at night and average temperatures of about 50 degrees ±.

The three routes in Southeast Region are located in the Asotin, Columbia, Walla Walla, Franklin, and Garfield Counties. The cities of Pasco, Othello, Walla Walla, and Asotin, as well as numerous small towns and communities will benefit from the installation of Routes SE-1 through SE-3.

The majority of the Southeast Region is used for agricultural activities and the area is the heartland of Washington State's world renowned cherry growing and wine-making activities. Agricultural interests combine with tourism to support these endeavors in the Yakima area, Yakima River Valley and in the area surrounding the community of Walla Walla. Several small colleges are in the area, along with the Washington State Penitentiary at Walla Walla. An emerging and rapidly growing wind farming industry is evident along bluffs across the Southeast Region. The Umatilla National Forest and McNary National Wildlife Refuge along U.S. Highway 12 are within the Southeast Region.



**Photo 3**  
Route SE-2 Typical Terrain  
South of Waitsburg



**Photo 5**  
Looking east along SR-260,  
west of Kahlotus.

An estimated 219 miles of cable are planned for installation within the Southeast Region with approximately 80 of those miles being aerial installations on existing poles. The longest is underground Route SE-2 that extends an estimated 147 miles from Clarkston, through Walla Walla and ultimately to Pasco.

## South Central Region

The South Central Region is one of the most scenic and spectacular areas of Washington State and includes the transition area from the semi-arid environment of Eastern Washington to the wet and heavily vegetated areas of Western Washington. The region is bordered on the south by the Columbia River and the Washington- Oregon state border. Route SC-1 is an aerial route within urban Vancouver, Washington.



**Photo 6**

Columbia River Gorge looking West

Route SC-4 is primarily aerial and in the vicinity of Yakima, along the Yakima River where rural community and agricultural land uses are predominant. Routes SC-2 and SC-3 occur in the narrow corridor along the Columbia River Gorge, a National Scenic Area with a federally protected status. Federal lands within the Scenic Area are managed by the US Forest Service. The Columbia River Gorge Commission or CRGC sets policy for protecting the non-federal Lands in the Gorge, develops and adopts land use and resource protection policy through the Scenic Area Management Plan.



**Photo 7**

Route SC-3 - Existing microwave site north of Mary Hill

Routes SC-2 and SC-3 traverse through narrow areas of the Columbia Gorge, and in the vicinity of many streams and two designated Wild and Scenic Rivers in the vicinity. The area is rich in archaeological, historical and cultural resources and was a primary migration route for explorers Lewis and Clark and the many pioneers that followed. Numerous potential sites of Native American significance have also been identified in the South Central Region. A combination of aerial and buried and microwave installations has been identified as the most cost effective, practical and environmentally responsible solution to the installations in these areas.

The four routes in the South Central Region total approximately 142 miles, 60 of which are aerial and 82 that are buried. Routes range from less than five miles in Route SC-1 to nearly 64 miles in Route SC-3. In addition, there is one new microwave tower, and two new microwave antennas associated with Routes SC-2 and SC-3.

## Southwest Region

The Southwest Region of the project is also diverse and includes four separate alignments which range in length from 23 miles to approximately 75 miles and total in length to approximately 230 miles. The Southwest Region is bounded on the south by the Columbia River and the Washington Oregon state line and on the west by the Pacific Ocean. The area is characterized by a marine climate and experiences long, wet winters followed by relatively dry and warmer summer temperatures.



**Photo 8**  
Route SW-1  
SR-4, west of the town of Naselle.



**Photo 9**  
Route SW-1  
US 401 Along Columbia River

Routes SW-1 and SW-2 are within the Coastal Management Zone (CMZ) for the State of Washington and occurs along the north side of the Columbia River, crossing estuaries and onto the shores of the Pacific Ocean. The project area(s) are remote and very rural area with logging, agriculture, commercial fishing and tourism supporting the local economy. It is also an economically distressed area and suffers from amongst the highest unemployment rates and lowest median income rates in Washington State.

Routes SW-1 and SW-2 require a mixture of aerial and buried installation techniques. In addition, there is a wireless link between Raymond and Tokeland to deliver service to the remote community of Tokeland. The wireless installation includes two microwave antennas on existing telecommunication towers in Raymond and Holy Cross with an existing end point radio in Tokeland. The use of best management practices in the design, permitting and construction processes will result in no long term adverse anticipated impacts to the environmental and historic and cultural resources. This is documented in Section 4 of this EA and in the correspondence submitted with Appendix A.



**Photo 10**  
Route SW-2  
Typical SR 4 Cross Section

Routes SW-3 and SW-4 are in the vicinity of the Interstate Highway 5 corridor and serve rural communities outside of the cities of Longview, Centralia, Castle Rock and Kalama. Most of these routes are aerial and in the case of Route SW-4, the alignment follows a narrow corridor along SR122, past the Mossyrock Dam and to the town of Randle.



## Northwest Region

The Northwest Region is located on the Olympic Peninsula in the northwestern most corner of Washington and is a west coast marine forest area. The Region is bounded on the west by the Pacific Ocean and the north by the Strait of Juan de Fuca. The area receives over 55 inches of rain per year and is home to North America's only temperate rain forest. The project itself runs parallel the north boundaries of the Olympic National Forest and further south, the Olympic National Park. The area is characterized by rugged and remote terrain and is one of the most remote and sparsely populated of rural Washington. Economic activity is very limited and includes seasonal tourism, logging, commercial fishing and some agriculture. Towns, communities, medical facilities and other public services are sparse throughout the Region and along the project route. The project in the Northwest Region includes nearly 63 miles of aerial installation on existing poles. In addition, installation of new microwave antennas to three existing telecommunication towers in Port Angeles, Clallam Bay, and Neah Bay will be implemented. Although the Northwest Region includes some of the most scenic and natural areas of the Pacific Northwest, because the installations are on existing poles and microwave facilities, impacts to the environment are minimal.

## North Central Region

The North Central Region of the project is along the US border with Canada and in the vicinity of the town of Bellingham, an urban area along the Interstate Highway 5 corridor. Only one route is located in this area of the project, Route NC-1. The approximately 5 mile long route is an extension from an existing network and runs west from Bellingham to the community of Deming. The entire installation will be aerial on existing poles and no adverse impacts are associated with this route. Positive impacts, as with other areas of the project and as noted earlier in this Executive Summary, include bringing enhanced broadband service to rural areas of Washington, improving medical and emergency response capabilities for the communities served and providing increased educational opportunities to residents of these areas.



**Photo 12**

Route NC-1 Typical right of way installation at SR 542 & E. Smith Road

## **Environmental Assessment**

This Environmental Assessment provides a summary of the existing environment, anticipated potential impacts, avoidance and mitigation measures to be employed during project design and construction. In summary, very few adverse impacts are possible with this project yet mitigation strategies for all identified and potential impacts have been addressed. The Grantee has completed a thorough and detailed process of route identification, analysis and modification to ensure that the project avoids contact with environmentally sensitive areas or other features of the environment that are of concern or are threatened or endangered. Nevertheless, over such a wide project area and varying

landscapes, certain protections will be required and are planned for. These are summarized in Section 4 – Environmental Consequences.

Development of this Environmental Assessment required coordination and/or consultation with over 20 separate agencies to ensure that all aspects of regulatory compliance and best managements practices have been identified and addressed. A summary of the communications plan, including requisite consultations with various federal, state and local agencies, together with all relevant communication records, is provided in Appendix A to the Environmental Assessment. Section 5 provides an overview and listing of permits required for the project and Section 7 contains a list of referenced data and materials used.

While completion of this Environmental Assessment has assisted in development of the recommendations, procedures and practices to be followed in design and construction of the project, NoaNet recognizes that additional best management practices and requirements may be identified in the permitting process. This Environmental Assessment, however, confirms that the Washington Rural Access Project, as put forth in the BTOP Grant for the project and described herein, can be completed in accordance with all regulatory requirements associated with the installation using minimally invasive construction techniques. This project as planned will not result in any long term adverse impacts to the environment and is expected that NoaNet will satisfy appropriate mitigation measures by following the usual permitting and regulatory requirements to minimize the impact to the environment. It is in compliance with the National Environmental Protection Act and the National Historic and Preservation Act. This is confirmed by SHPO documentation of concurrence provided in Appendix A and detailed in Section 4. Similarly, the project will result in no additional Section 7 Consultations associated with federally listed species and no effect is associated with any of the other elements analyzed in this EA. .

In completing the project, NoaNet will meet the overall objective of the BTOP program administered by the NTIA. The American Recovery and Reinvestment Act (ARRA) provided the NTIA and the U.S. Department of Agriculture’s Rural Utilities Service (RUS) with funding to expand access to broadband services in the United States. Those funds were allocated to support the deployment of broadband infrastructure, enhance and expand public computer centers, encourage sustainable adoption of broadband service, and develop and maintain a nationwide public map of broadband service capability and availability. As a grant recipient, and through implementation of the project outlined herein, NoaNet meets the stated objectives of the ARRA and the BTOP grant program for rural Washington State.



**WASHINGTON RURAL ACCESS PROJECT  
Environmental Assessment  
TABLE OF CONTENTS**

**VOLUME 1: OVERALL ENVIRONMENTAL ASSESSMENT**

**Section 1: Purpose and Need**..... 1-1

**Section 2: Proposed Action** **Page**

2.1 Project Description..... 2-1

2.2 Construction Techniques..... 2-7

    2.2.1 Plowing and Directional Boring Methods of Construction..... 2-8

    2.2.2 Aerial Installation..... 2-10

    2.2.3 Microwave Installation..... 2-11

2.3 Project Alternatives..... 2-12

    2.3.1 Preferred Alternative ..... 2-12

    2.3.2 No Action Alternative..... 2-13

    2.3.3 Alternatives Considered but Eliminated from Further Discussion..... 2-13

**Section 3: Existing Environment** **Page**

3.1 Noise ..... 3-1

3.2 Air Quality ..... 3-1

3.3 Geology and Soils ..... 3-2

3.4 Water Resources ..... 3-4

    3.4.1 Surface Water ..... 3-4

    3.4.2 Groundwater ..... 3-7

    3.4.3 Coastal Zone ..... 3-7

    3.4.4 Floodplains..... 3-7

    3.4.5 Wild and Scenic Rivers..... 3-8

3.5 Biological Resources..... 3-8

    3.5.1 Wildlife and Vegetation ..... 3-8

    3.5.2 Threatened and Endangered Species ..... 3-8

    3.5.3 Ecoregions ..... 3-11

3.6 Historic and Cultural Resources ..... 3-12

3.7 Aesthetic and Visual Resources..... 3-19

3.8 Land Use ..... 3-21

3.9 Infrastructure..... 3-21

3.10 Socioeconomic Resources ..... 3-21

3.11 Human Health and Safety ..... 3-24

**Section 4: Environment Consequences** **Page**

4.1 Noise ..... 4-1

4.2 Air Quality .....	4-1
4.3 Geology and Soils .....	4-2
4.4 Water Resources .....	4-2
4.4.1 Surface Water .....	4-2
4.4.2 Groundwater .....	4-4
4.4.3 Coastal Zone .....	4-7
4.4.4 Floodplains .....	4-7
4.4.5 Wild and Scenic Rivers.....	4-7
4.5 Biological Resources.....	4-8
4.5.1 Wildlife and Vegetation .....	4-8
4.5.2 Threatened and Endangered Species .....	4-9
4.5.3 EcoRegions .....	4-10
4.6 Historic and Cultural Resources .....	4-10
4.7 Socioeconomic Resources .....	4-12
4.8 Human Health and Safety .....	4-13
4.9 Cumulative Summary of Impacts .....	4-14

<b>Section 5: Permits and Regulatory Requirements .....</b>	<b>5-1</b>
---	------------

<b>Section 6: List of Preparers .....</b>	<b>6-1</b>
---	------------

<b>Section 7: References .....</b>	<b>7-1</b>
------------------------------------	------------

<b>List of Tables</b>	<b>Page</b>
Table 2-1: Route Summary .....	2-2
Table 3-1: Key Water Body Crossings .....	3-4
Table 3-2: Routes Affected by the 100-year Floodplain .....	3-8
Table 3-3: Threatened and Endangered Species by Route .....	3-9
Table 3-4: Summary of Potential Historical/Cultural Impacts .....	3-13
Table 3-6: Socioeconomic Characteristics.....	3-22
Table 3-7: Hazardous Waste Sites by Route .....	3-24
Table 3-8: Highway Fatality Statistics per County.....	3-28
Table 3-9: Summary of Environmental Impacts .....	3-30
Table 4-1: Best Management Practices.....	4-4
Table 4-2: Summary of Effects on Federally Endangered and Threatened Species .....	4-17
Table 5-1: Summary of Federal, State, and Local Known Permits .....	5-1
Table 7-1: Summary of References .....	7-2

<b>List of Figures</b>	<b>Page</b>
Figure 1: Project Map .....	2-5

<b>List of Photos</b>	<b>Page</b>
Photo 2-1: Plowing Installation Method along RR easement .....	2-7
Photo 2-2: Plowing Method of Cable Installation .....	2-8
Photo 2-3: Pull Cat and Static Mount Plow within Interstate Right-of-Way .....	2-8
Photo 2-4: Directional Bore Machine Working in Town Utility Easement.....	2-9
Photo 2-5: Example of Aerial Installation.....	2-10
Photo 2-6: Example of Telecommunication Tower Installation .....	2-11

## VOLUME 2: INDIVIDUAL ROUTE ASSESSMENTS

---

<b>East Central Region</b>	<b>Tab ID</b>
EC-1: Marshall to Oakesdale to Clarkston; Oakesdale to Tekoa .....	EC 1
EC-2: Wilbur to Davenport to Reardan; Davenport to Harrington.....	EC 2
EC-3: Odessa West to Grant County Line .....	EC 3
EC-4: Ritzville West to Grant County Line.....	EC 4
EC-5: Othello to Warden .....	EC 5
EC-6: Pullman to Colfax .....	EC 6
<b>Southeast Region</b>	<b>Tab ID</b>
SE-1: Pasco to Kahlotus.....	SE 1
SE-2: Pasco to Clarkston.....	SE 2
SE-3: Clarkston to Asotin .....	SE 3
<b>South Central Region</b>	<b>Tab ID</b>
SC-1: Vancouver.....	SC 1
SC-2: Washougal to Wind River; Cook to Willard.....	SC 2
SC-3: White Salmon to Goldendale; Ponderosa Park to MaryHill.....	SC 3
SC-4: Yakima to Grandview.....	SC 4
<b>Southwest Region</b>	<b>Tab ID</b>
SW-1: South Bend to Tokeland; South Bend to Ilwaco.....	SW 1
SW-2: Longview to Naselle.....	SW 2
SW-3: Castle Rock to Kalama .....	SW 3
SW-4: Centralia to Randle; Napavine to Winlock .....	SW 4
<b>Northwest Region</b>	<b>Tab ID</b>
NW-1: Port Angeles to Forks; Sequim to Blyn .....	NW 1
<b>North Central Region</b>	<b>Tab ID</b>
NC-1: Bellingham to Deming .....	NC 1