ENVIRONMENTAL ASSESSMENT For and By

The Pyramid Lake Paiute Tribe

Pyramid Lake Paiute Project: Natukwena Nagwesenoo

Broadband Technology Opportunities Program (BTOP)

And

National Telecommunications & Information Administration (NTIA)

September 15, 2011

Prepared by:

Pyramid Lake Paiute Tribe Environmental Department 208 Capitol Hill P.O. BOX 256 Nixon, NV 89424





Table of Contents





EXECUTIVE SUMMARY

This environmental assessment (EA) contains the site-specific analysis of potential impacts that could result with the implementation of the proposed action or alternatives to the proposed action. The EA ensures compliance with the National Environmental Policy Act (NEPA) set forth by guidelines from the Council on Environmental Quality (CEQ). Based on the following analysis of potential environmental consequences, a determination can be made whether to prepare an Environmental Impact Statement (EIS) or issue a "Finding of No Significant Impact" (FONSI). A FONSI documents why implementation of the selected alternative would not result in environmental impacts that significantly affect the quality of the human environment.

The Pyramid Lake Paiute Tribe proposes a public-private partnership project to deploy a fiber-optic middle mile network across a 477,000 acre reservation to address low Internet speeds and a general lack of access to online tools like distance learning, telemedicine, and enhanced public safety services on its reservation. The proposed project, <u>Natukwena Nagwesenoo</u>—a Paiute phrase which means "to weave information"—proposes the construction of 44 new miles of fiber in partnership with Praxis Associates that would provide direct connections to local community anchor institutions at a minimum speed of 100 megabytes per second (Mbps) with expansion capabilities of 2.5 gbps. The connected organizations are expected to include the regional health service center, the Wadsworth grade school, the regional youth treatment center, and the only adult higher education center on reservation lands.

This proposed project is needed on the Pyramid Lake Reservation because fiber optic facilities are not available to the proposed anchor institutions. The no-action alternative does not meet the needs for the people. This proposed project construction may have potential impacts to environmental, historical, and cultural resources of the tribe. The Pyramid Lake Paiute Tribe has worked with NTIA's staff for guidance and has consulted with the US Fish & Wildlife Service, Bureau of Indian Affairs — Western Nevada Agency, Nevada Department of Transportation, and the Nevada State Historic Preservation office. These agencies have worked with the tribe and submitted responses or correspondence with Pyramid Lake on the potential affects to the environment or cultural resources.

The Pyramid Lake Paiute Tribe will address all of the statutory purposes of the Broadband Technologies Opportunity Program and provide infrastructure to underserved communities on the reservation, access to those without service available, and access to schools, libraries, community centers, public safety offices, and medical facilities offering telemedicine that are vital to the community's economy, safety and health.

Nevada is the 15th least populated state in the nation, with population densities that are among the lowest, in its rural areas. Pyramid Lake is located in the rural territories of Nevada and has long faced poverty and increasing challenges to economic development. Potential infrastructure would give access to 500 unserved homes and 50 public safety offices, and 10 community service centers. Additionally, the proposed project would develop or enhance long-distance education through the





Tribal Higher Education Program and increase the tribe's capacity for a satellite higher education program.

Chapter 1 – Purpose and Need

The Pyramid Lake Paiute Tribe reservation is located thirty-five miles northeast of Reno, Nevada in a remote desert area located in the counties of Washoe, Lyon, and Storey. The reservation is approximately 477,000 acres in size with Pyramid Lake encompassing 112,000 acres. The lake is home to two fish species of concern, the endangered Cui-ui and the threatened Lahontan Cutthroat Trout. The Pyramid Lake Indian Reservation (PLIR) has three communities located within its boundaries (Nixon, Wadsworth, and Sutcliffe). The current population is approximately 1,580 tribal members living on the reservation, all of which are in underserved communities.

Due to the rural location and lack of major infrastructure routes, commercial broadband internet service providers have not found the reservation to be economically feasible for service extension to this remote land. Current broadband options are only available to the Tribal government and are very limited. Access can be unreliable with transfer speeds equivalent to a T1, which is a major constraint to tribal programs that depend on data transfer, storage, and communication. The proposed project would provide direct connections to local community anchor institutions at a minimum speed of 100 megabytes per second (Mbps) with expansion capabilities of 2.5 gbps from a connection to a major fiber network in existence along Interstate 80, near the reservation to the northernmost and underserved areas of the PLIR.

Chapter 2 – The Proposed Action and Alternatives

2.1 The Proposed Action

The proposed action is to provide high-speed broadband internet access to the Pyramid Lake Paiute Indian Reservation in Nevada. The proposed fiber would bring broadband speeds of up to 100Mbs, a substantial increase for the tribe, which only has had access through T1 speeds, at best. The Pyramid Lake Paiute Tribe would select a contractor with a strong background and experience in the installation of the fiber cables and anchor points for a successful project. The estimated completion date of the project would be within no more than three (3) years of the grant award date. The Pyramid Lake Paiute Tribe would be the lead agency in contacting and completing federal, state, and local government consultation, and also advise in the installation of 'Best Management Practices' to minimize pollution according to the guidelines of the proper National Pollutant Discharge Elimination System permit. The Tribe will acquire all necessary approvals and permits to proceed with the project by the timelines that are required.

The proposed action would utilize a cable plow which would excavate and bury the cable simultaneously with an approximate depth of 36 inches and width of 15 inches. Any paved crossings would be cut with a concrete saw to remove a 24 inch wide section to allow for excavation and then packed with road base and repaired with concrete asphalt. All wastes will be disposed according to



