Summary

The California Broadband Cooperative, Inc. (CBC) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to install approximately 593 miles of fiber optic cable to create a new middle mile network. The new network will include both aerial and buried fiber, with the majority of the route installed underground in existing infrastructure rights-of-way (ROW). A small portion of the fiber will be placed in conduit attached to bridges, as required, to cross water bodies and other sensitive features. CBC will also install 626 underground vaults and 17 prefabricated buildings (nodes) along the route. The new fiber network will provide broadband service to various CAIs, such as county offices, community colleges, California State Universities, libraries, hospitals, and public safety institutions. The network will connect four counties within California and three counties in Nevada, and the project is referred to as the Digital 395 Middle Mile Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded this grant through BTOP, as part of the American Recovery and Reinvestment Act (ARRA). The funding must be obligated and the Project completed within three years. This timeline will comply with the laws and regulations governing the use of this ARRA grant funding.

BTOP supports the deployment of broadband infrastructure in unserved and underserved areas of the United States and its Territories. As a condition of receiving BTOP grant funding, recipients must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA). Specifically, NEPA limits the types of actions that the grantee can initiate prior to completing required environmental reviews. Some actions may be categorically excluded from further NEPA analyses based on the specific types and scope of work to be conducted. For projects that are not categorically excluded from further environmental review, the grant recipient must prepare an Environmental Assessment (EA) that meets the requirements of NEPA. After a sufficiency review, NTIA may adopt the EA, use it as the basis for finding that the Project will not have a significant impact on the environment, and issue a finding of no significant impact (FONSI). Following such a finding, the BTOP grant recipient may then begin construction or other activities identified in the EA, in accordance with any special protocols or identified environmental protection measures.

CBC completed an EA for this Project in May 2012. NTIA reviewed the EA, determined it is sufficient, and adopted it as part of the development of this FONSI.

The Project includes:

• Installing a hybrid broadband network of aerial and buried fiber in existing utility and infrastructure ROWs through San Bernardino, Kern, Inyo, and Mono Counties in California and Carson City, Douglas, and Washoe Counties in Nevada;

- Installing approximately 3 miles of fiber aerially;
- Installing approximately 590 miles of fiber in underground conduit via plowing, horizontal directional drilling (HDD), and trenching; approximately 495 miles of new backbone fiber, 61 miles of new distribution lines, and 34 miles of this buried fiber will be installed in existing conduit;
- Installing approximately 626 underground vaults along the route at intervals of approximately 4,500 feet;
- Constructing 17 nodes or prefabricated buildings to support wireless systems.

Based on a review of the analysis in the EA, NTIA has determined that the Project, implemented in accordance with the preferred alternative and programmatic agreement (PA), and incorporating best management practices (BMPs) and protective measures identified in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an EIS is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the EA and FONSI are available to all interested persons and the public through the BTOP website (www2.ntia.doc.gov) and the following contact:

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Purpose and Need

The purpose of this Project is to provide broadband internet access in rural areas of northeastern California and northwestern Nevada. These areas currently lack adequate access to the bandwidth required to support e-heathcare, advanced learning opportunities, economic development opportunities, and communication needs. CBC's project will provide more affordable and accessible broadband service to CAIs within the Project area, including K-12 schools, colleges, and libraries within 36 communities; 7 Native American tribal reservations; and 2 military bases.

Project Description

CBC will install 593 miles of middle mile fiber in San Bernardino, Kern, Inyo, and Mono Counties in California, and Carson City, Douglas, and Washoe Counties in Nevada. The Project traverses many public and private lands, including several Bureau of Land Management (BLM) jurisdictions, U.S. Department of Agriculture - Forest Service (USDA-FS) jurisdictions, and Native American reservations and lands. The Project will include two BLM Resource Management Plan (RMP) areas in California: the West Mojave Plan and the Bishop RMP. In Nevada, the Project is located within the BLM Carson City Consolidated RMP area. The Project backbone will also cross a portion of the Humboldt National Forest, Toiyabe National Forest, Inyo National Forest, and the Mono Basin National Forest Scenic Area. In addition, CBC will install fiber on two Department of Defense (DoD) installations, Naval Air Weapons Station China Lake (NAWSCL) and the United States Marine Corps Mountain Warfare Training Center. CBC will continue working with BLM, USDA-FS, and DoD on obtaining the necessary ROW authorizations. CBC will obtain any required permits and complete any coordination associated with these ROWs, and meet any federal requirements of the land management agencies in constructing and maintaining the Project.

CBC will install approximately 590 miles underground and 3 miles of cable aerially on existing pole infrastructure. Specifically, CBC will install approximately 495 miles of new fiber optic cable (FOC) backbone, approximately 61 miles of new distribution lines, and approximately 34 miles of fiber in existing utility conduit. The FOC backbone will consist of one 1.50-inch duct, where one cable will initially be installed, and two 1.25-inch ducts for future use. The distribution line will consist of one 1.25-inch duct, where between 2 and 7 microducts will be installed.

CBC will use either cable plowing; horizontal directional drilling (HDD); or trenching, with either a trencher or track-hoe, to install all buried fiber in new conduit. CBC will use mostly trenching and plowing construction methods for underground fiber installation; HDD will be used where environmentally sensitive areas must be avoided. CBC will implement an HDD Contingency and Resource Protection Plan to account for potential variation in actual construction methods, based on ground conditions or other restrictions during construction.

Fiber will be installed underground within the California Department of Transportation (Caltrans) ROW/easements, county-maintained dirt roads, Los Angeles Department of Water and Power (LADWP) ROW/easements, Nevada Department of Transportation (NDOT) ROW/easements, and the United States Marine Corps Mountain Warfare Training Center. Installation of both underground and aerial optical fiber cables also will occur on Naval Air Weapons Station China Lake. The cable will be placed as far as possible from the edge of the pavement along State highways to minimize disruption and damage to the cable in the event of future highway maintenance/construction. The location of the fiber within the California State Highway ROW will be determined by Caltrans policy, which requires broadband facilities to be located outside the Clear Recovery Zone (CRZ) and placed as far from the travel-way as

feasible. Physical conditions at specific locations may make it infeasible to place the cable as normally required, so an alternate location may be proposed by submitting an exception request to Caltrans.

Plowing is a trenchless method for installing underground conduit and fiber. The plow uses a vibrating blade to cut a narrow slit in the ground to insert conduit. A typical plowing blade, which is not more than 2 to 3 inches in width, acts like a knife and creates minimal, temporary disruption to the soil. Soil disturbance from the plow blade is anticipated to occur within a 4- to 6-inch width, but may be more, and may need to be routed in a variable fashion along the road corridors. As the ground is cut, the conduit is installed at the desired depth by feeding it down a chute located on the back of the blade. As the plow passes the insertion point, the ground is then packed, restoring it to its original condition. Plowing will occur within existing dirt roads, as well as adjacent to and within Caltrans and NDOT ROWs/easements, but not within the paved portions of the roads. After the conduit is installed, the furrow is compacted back in place by the back end of the plow or a following compaction vehicle. This method is typically used in open areas with suitable terrain. The disturbed soil surface will be returned to the pre-construction conditions.

CBC will use trenching machines, excavators, or backhoes to install conduit and fiber in locations inaccessible to plowing or characterized by excessive rockiness or fracture rock. The trenches are opened and then backfilled after the conduit is installed in the trench. Soil disturbance from trenching will be within a 6-foot wide-area and up to a depth of 42 inches, based on the terrain type and accounting for side-cast. As soon as the conduit is installed, the trench will be refilled and compacted. When necessary, the refilled trench will be landscaped with a local, native seed source. Erosion and dust control measures also will be implemented. CBC may require short sections of a trench to remain open temporarily, such as splice box locations, which will remain open until the next workday. Trenches will not be left open overnight unless appropriately secured for safety using barricades and/or trench covers. In sensitive habitat areas, all trenches will be inspected prior to filling or covering to identify and protect the desert tortoise and other sensitive wildlife.

CBC will use HDD to install conduit and fiber when necessary to avoid sensitive areas. HDD is a steerable, trenchless method of installing underground conduits and cables using a surface drilling rig to bore beneath specific environmental features, making minimal impact only at the entrance and exit pits of the bore. An HDD bore may extend from approximately 50 feet to over 2,500 feet, depending on the need and the substrate. HDD will be used to avoid open trenches and where plowing is not practical. HDD minimizes environmental disruption, and will be used for consolidated substrate and/or solid rock conditions, in locations where roadways or rivers must be crossed, and/or where environmentally sensitive areas must be avoided. At both ends of the bore, boring pits will be created, which are open pit areas approximately 3 feet wide by 10 feet long, and which allow for the entrance and exit of the bore. The bore itself will extend beyond the length of the element being avoided (e.g., stream, railroad). HDD uses a

bentonite/water mixture that is pumped down the drill stem to cool the drill head, lubricate the drill pipe, maintain the borehole opening, and remove bore cuttings.

To install FOC into existing conduit, CBC will use conduit proving, cable pulling, and cable blowing. Conduit proving is to install fiber in existing conduit and to check for blockages and snags that may occur. If there is a blockage, the conduit is exposed, the blockage is cut out, and new conduit is installed. Cable pulling is conducted by accessing the conduit system through existing splice points or access vaults. The cable is then pulled through the conduit system in a "figure-eight" or "bi-directional" method, where a mid-point vault allows the cable to be pulled in both directions. Cable blowing is initiated by accessing the conduit system through existing buried vaults or manholes. A 3x2 foot "blowing machine" channels the cable and compressed air from the compressor along a tube and blows the cable into the conduit. Lubricants are manually placed into the conduit during the threading of the pull ropes and applied to the cable. The lubricants are composed of non-toxic materials and CBC will use proper spill containment materials to isolate potential spills, in accordance with a project-specific Spill Prevention and Pollution Plan (SPPP).

The Project route will cross two major river systems in Nevada, the Truckee River and the Carson River. CBC has also identified eight bridge locations in California along the Project route. Although HDD is proposed for river crossings, bridge attachments may be used if: (1) authorizing agencies prohibit boring alternatives, and (2) boring is not feasible and conduit within the bridge structure is not available. Also, the FOC backbone will cross the Long Valley Dam, which will be surface-mounted or located on the dam face along a maintenance road, subject to approval by the LADWP. Also, at four railroad crossings along the proposed route, fiber installation will be constructed below grade by HDD or jack and bore methods at least 10 feet below grade.

While the majority of the new fiber will be installed underground, approximately 3 miles of fiber will be installed aerially on existing utility poles. The existing poles at this location have adequate clearance for additional attachments. CBC will install the new fiber by having linemen climb the poles and pull the cable through rollers from the uphill end of the route. Once the cable is pulled through the rollers, the linemen will detach the rollers and permanently affix the cable to the poles.

CBC will install 17 new prefabricated buildings (or nodes), measuring approximately 35x45x11 feet, at the end of distribution lines as points of interconnection. The nodes will have a concrete or steel exterior, be equipped with an air conditioning system, and secured to a concrete slab. The nodes will be powered by local existing electrical service, backed up by battery and generator, and may also be supported by solar power. CBC plans to place these buildings within existing industrial parks and commercial areas. Some sites may require grading prior to installation to create a level surface. At the Benton, June Lake, and Crowley Lake locations, a 4x4x7 foot building (or "cabinet") may be placed instead of the above-mentioned node building if it is determined that a cabinet can provide adequate services (a cabinet generally provides

fewer services, is not a central node, and is not a regeneration station). The possible use of a smaller cabinet in these locations will be determined during final engineering.

CBC also will install additional underground components, including buried access or splice vaults. These vaults will be placed along the new construction segments (approximately every 7,500 feet) to enable access to the underground conduits. Approximately 626 vaults are proposed for installation. The buried access vaults measure 48x48 inches. With the exception of the flush metal manhole lids, the remaining body of the round, prefabricated structure will not be visible from the surface.

CBC will use a continuous ribbon of Buried Cable Warning tape placed above, and parallel to, the new conduit within the ground. The tape will be imprinted with a warning message for future ground excavations that fiber-optic cable is buried below. Also, CBC will place above-ground warning marker posts along the entire cable route at intervals of approximately 700 feet. These metal, poly-vinyl, or fiberglass posts are installed to provide visible evidence of the presence of buried cable, identify the owner of the cable, and provide a phone number for emergency notifications. The posts will be installed within the Project ROW, directly above, or offset, as required by the conduit/cable.

CBC will establish several temporary staging/laydown areas (approximately 100x100 feet) outside of the Project footprint, in commercial property areas. These areas will be used for vehicle parking, to store material and large equipment for intermittent periods of time, and to conduct fueling and maintenance work, as necessary.

Alternatives

The EA includes an analysis of the alternatives for implementing the Project to meet the purpose and need. NTIA also requires that an EA include a discussion of the no action alternative. The following summarizes the alternatives analyzed in the EA.

Hybrid (Aerial and Underground) Fiber Network Build (Preferred Alternative). This alternative will install approximately 593 miles of fiber cable along existing Federal, state, county, and city road ROWs and easements. Approximately 590 miles of new fiber will be installed in underground conduit. The remaining 3 miles will be installed aerially on existing overhead electrical poles.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist in the Project area. Under the no action alternative, the new network would not be constructed and the rural areas of San Bernardino, Kern, Inyo, and Mono Counties in CA, and Carson City, Douglas, and Washoe Counties in NV would continue to be unserved or underserved. Without the new fiber, these areas would lack adequate broadband infrastructure to support communications, public safety, emergency response, business, education, telemedicine,

and governmental applications. The EA examined this alternative as a baseline for evaluating impacts relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. CBC considered installing the new infrastructure as an all-aerial network. Although this alternative does have the advantages of lower costs and less ground disturbance, it was not considered a viable alternative due to the fact that significant internet routes in the Project area are deemed national security assets (e.g. NAWSCL); aerial lines are subject to wildfires, vandalism, or accidental shooting by hunters; and severe weather in the Eastern Sierra region could affect this infrastructure. CBC also considered installing the new infrastructure as all wireless technology, but this technology does not have the capacity to provide consistent middle mile services to the area. Wireless technologies are currently being used by several of the communities to facilitate last mile internet access, but would not be applicable for the purpose and need for this middle mile Project.

Findings and Conclusions

The EA analyzed existing conditions and environmental consequences of the preferred alternative and the no action alternative in 11 major resource areas, including Noise, Air Quality, Geology and Soils, Water Resources, Biological Resources, Historic and Cultural Resources, Aesthetic and Visual Resources, Land Use, Infrastructure, Socioeconomic Resources, and Human Health and Safety. Cumulative impacts were also evaluated.

Noise

This Project will have short-term impacts on noise due to the use of heavy machinery, such as plows or excavators. However, this noise will be restricted to the construction phase of the Project and there are few sensitive noise receptors along the proposed route. In urban areas, where installation and construction equipment may be more disruptive, CBC will restrict construction activities to daylight hours (7am to 7pm) and will notify area residents of the planned construction in advance. Moreover, because infrastructure installation will continually move along the planned fiber route, it is unlikely that construction noise will impact any area for more than two days. Equipment installed at the nodes would result in minor increases of noise in the immediate vicinity, due primarily to emergency back-up generator use. However, noise associated with construction equipment and the occasional backup generator use will be localized and limited to brief periods along any particular section of the Project route. Use of the new infrastructure for data transmission will not alter ambient noise in the long-term. The Project will be in conformance with applicable General Plan policies and Noise Ordinances. Based on the assessments, no significant impacts on noise are expected.

Air Quality

Operation of heavy equipment and vehicles for plowing, HDD, and trenching construction will result in emissions of air pollutants and fugitive dust. However, these air pollutant emissions will be limited to the construction period, and are considered negligible in comparison to emissions currently experienced along roadway corridors adjacent to the Project ROWs. The

Project will also result in short-term, minor increases in the use of fossil fuel and associated greenhouse (GHG) emissions during construction. CBC estimates that the Project will result in the release of less than 7,000 metric tons of carbon dioxide equivalent emissions. Thus, GHG emissions are expected to be well under the Council on Environmental Quality's presumptive effects threshold of 25,000 metric tons of carbon dioxide equivalent emissions. Long-term operation and maintenance of the network will result in minimal air emissions. Based on these assessments, no significant impacts on air quality are expected.

Geology and Soils

Conduit and fiber will be installed by cable plowing, trenching, and HDD, depending on the nature of the terrain, geology, and environmental conditions. Ground disturbance will be temporary and confined to a narrow trench via the proposed underground installation methods. Soil disturbance from the plowing blade is expected to occur within a 4-to 6-inch width, but could be up to 12 inches wide. After the conduits are installed, the furrow will be compacted back in place by the back end of the plow and the disturbed soil surface will be restored to its original condition. The area of soil disturbance for trenching will generally be 1 foot wide, but potentially as wide as 4 feet, depending on terrain type. Any soil disturbance by trenching will be restored to its original condition. HDD will result in minimal soil disturbance and will be used for solid rock conditions and for locations where roadways, rivers, and environmentally sensitive areas must be crossed. In addition, grading may be required to prepare pads for the 17 new prefabricated buildings that will be installed along the route. Overall, ground disturbance is expected to be minor and the Project is not expected to result in substantial erosion or loss of topsoil. The potential for erosion during construction would be minimized by adherence to the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). Based on these assessments, no significant impact on geology and soils is expected to occur as a result of this Project.

Water Resources

The Proposed Project route crosses or runs adjacent to numerous streams. To avoid impacts to streams, the conduit will be installed using HDD at stream crossings or by bridge attachments. For ephemeral drainages, the conduit will be installed during the dry season, the trench will be backfilled, and the soil will be restored to its original condition. Wetlands will be avoided or bored under to the extent feasible. Along the proposed route, CBC is not able to avoid or bore under approximately 0.16 acre of wetlands. Therefore, CBC will install conduit in these wetlands during the dry season.

CBC has alerted the Army Corps of Engineers (ACOE), Sacramento, Los Angeles, and Reno Districts, of all planned water crossings and is consulting with these offices to obtain applicable Section 404 permits for river and stream crossings. The USACE Sacramento District has confirmed that Water Quality Certification under Section 401 of the Clean Water Act will also be required from the State of California before the USACE can issue their permit. In a letter dated June 17, 2011, the USACE Sacramento District designated the US Department of Commerce as the Lead Federal Agency under NEPA and authorizes DOC to act in their behalf to

comply with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.

CBC will ensure best practices during Project construction to ensure water quality is not degraded, beneficial uses impaired, and/or water quality standards violated due to erosion, a construction fuel leak, or other pollutant entering a stream or other waterbody. Construction activities will comply with all requirements of the Regional Water Quality Control Board. Lahontan Region, and the Nevada Division of Environmental Protection. Project activities will comply with provisions of the Basin Plan for the Lahontan Region concerning industrial wastes. wetlands, floodplains, construction activities, and land development. Spill plans will be kept upto-date and construction activities will comply with all county ordinances and grading permit requirements that relate to erosion control and water quality. Water used during construction will come from municipal or private land owner resources; no water will be drawn from local sources. All loose piles of soil, silt, clay, sand, debris, or other earthen materials will be protected to prevent discharge to waterbodies and disturbed areas will be stabilized during the wet season to avoid erosion. Stabilization of disturbed areas includes covering the trench when construction is not actively occurring and using appropriate BMPs, such as weed-free mulch, geotextiles and mats, earthdikes, and drainage swales to stabilize sediments and control erosion during construction. CBC will obtain Construction Permits for Project construction from appropriate agencies, such as CalTrans, USDA-FS, BLM, and implement provisions of a Stormwater Pollution Prevention Plan (SWPPP) to minimize the potential for erosion during construction and to address any potential spills of pollutants. The SWPPP will include spill prevention measures, processes for maintenance and inspection of all construction vehicles. specifications of spill containment equipment to be kept onsite, specific response procedures in the event of a spill, and designation of responsibilities and reporting procedures in the event of a spill.

HDD will be used at stream crossings to avoid direct disturbance of waterbodies. When conducting HDD, the accidental release of drilling materials caused by a fracture in the rock (frac-out) may occur. To minimize the potential impacts of frac-out on waterbodies in the Project area, CBC prepared and will implement an HDD Contingency and Resource Protection Plan. Measures included in the HDD Contingency and Resource Protection Plan include:

- During drilling operations, visual inspection along the bore path of the alignment shall take place at all times;
- At stream crossings with flowing water, the stream shall be monitored upstream and downstream of the crossing;
- Specification of onsite equipment required to clean up and contain a drilling fluid release:
- Designation of responsibilities and reporting procedures in the event of a drilling fluid release; and
- Specific personnel responsible and specific response procedures in the event of a drilling fluid release.

The Project will not substantially interfere with groundwater recharge, or alter the course of any stream of river. However, in some Project areas groundwater may be less than 4 feet below the surface. If a leak or spill from fuels and lubricants occur, CBC has prepared and will implement response procedures specified in the SWPPP. The Project will not contribute to runoff because new construction will take place in previously disturbed areas. The Project will pass through FEMA-designated Flood Hazard Areas. Although 10 of the 17 proposed node locations are within such areas, these prefabricated buildings will be located in industrial or commercial locations surrounded by existing buildings and will not change potential flood flows compared to existing conditions.

CBC will implement additional protective measures and BMPs which are identified in Appendix B of the final EA. No further impacts from construction, operation, or maintenance of installation equipment are anticipated. Based on these determinations, the Project will have no significant adverse impacts on water resources.

Biological Resources

CBC collected preliminary background information on threatened and endangered species within the Project area through correspondence with the U.S. Fish and Wildlife Service (USFWS), BLM, USDA-FS, California Department of Fish and Game (CDFG), and Nevada Department of Wildlife (NDOW). They also reviewed the California Natural Diversity Database, the Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California, and the Nevada Natural Heritage Database. Through these efforts, CBC identified state and federally listed threatened and endangered species and BLM and USDA-FS sensitive species. In addition, a reconnaissance field survey was conducted along the Project route, including a 50-foot buffer, to identify the potential occurrence of special-status species, vegetation communities, or habitats that could support these species. Based on this data, 11 federal threatened, endangered, or candidate species were identified as potentially occurring in the Project area. These species are identified in the Biological Assessment CBC Digital 395 Middle Mile Project report (Chambers Group, Inc., January 2012). In addition, the effects analysis for sensitive species on National Forest system lands was documented in a Biological Evaluation (BE) (Biological Evaluation for Inyo National Forest, April 2012; Biological Evaluation for Humboldt-Toiyabe National Forest, April 2012). After further evaluation, CBC determined that suitable habitat for the following species also is present near the Project route and subject to potential disturbance: Mojave desert tortoise (Gopherus agassizii) and Owens tui chub (Siphateles bicolor snyderi).

On October 6, 2011, NTIA entered into formal consultation with the USFWS regarding potential significant adverse impacts from Project activities on the desert tortoise and Owens tui chub. Although the Project is located within 200 feet of Owens tui chub critical habitat, based on the location of the Project activities in relation to the critical habitat, the Project will not affect the critical habitat or species. Therefore, no potential impacts on the Owens tui chub are anticipated.

The Project will cross through desert tortoise critical habitat for most of the route segment from Barstow to Johannesburg, in San Bernardino County, California. In a Biological Opinion (BO)

dated March 23, 2012, the USFWS concluded that, based on the information provided by NTIA and CBC, the Project is not likely to jeopardize the continued existence of the desert tortoise. This determination was based on specific protective measures, as outlined in the BO and summarized below.

- 1. CBC will employ authorized biologists, approved by the USFWS, and desert tortoise monitors to ensure compliance with protective measures for the desert tortoise. No construction activities will begin until authorized biologists are approved.
- 2. The duties of authorized biologists and biological monitors will follow the most up-to-date USFWS guidance and will be required for monitoring of any construction activities that may result in adverse effects to the desert tortoise.
- 3. An authorized biologist will be present with each construction team during construction activities within desert tortoise habitat without existing desert tortoise exclusion fencing. The authorized biologist will have the discretion of determining the appropriate level of protective measures required for the type of construction activity (e.g., plowing, trenching, splicing).
- 4. CBC will designate a lead authorized biologist responsible for ensuring the proper implementation of all desert tortoise protective measures, coordinating the other authorized biologists and biological monitors, and coordinating with the Federal and State agencies. The lead authorized biologist will be on-site during all project activities, and will have a copy of all stipulations when work is being conducted on the site. Prior to initiation of construction, an authorized biologist will conduct an environmental awareness training to all personnel who will be on-site, including CBC staff, contractors, workers/personnel, and engineering inspectors.
- 5. Other Federal agencies, such as the Navy, may require additional training while operating on their lands (i.e., within the boundaries of the Naval Air Weapons Station). Therefore, follow-up tailgate trainings for the desert tortoise will be conducted in the field by an authorized biologist immediately prior to construction activities.
- 6. Within 48 hours prior to starting construction in a given area, authorized biologists will survey the project right-of-way (i.e., the footprint or area of direct placement of the project features [conduit, nodes, towers] and other areas that will be disturbed by construction activities [boring, plowing, drilling, staging areas, pathway of construction related equipment]) and a 50-foot-wide area adjacent to the project right-of-way wherever desert tortoise habitat is present in that area. The authorized biologists will ensure that this entire area is surveyed, using 30-foot-wide linear transects; if dense vegetation impedes visibility, the authorized biologists will decrease the width of the transect to ensure full coverage of the area.
- 7. Surveys will not be conducted in areas where existing exclusion fencing for desert tortoises precludes their entry into the project right-of-way unless the right-of-way fence has gaps that would allow passage by desert tortoises. In this case, the authorized biologists will implement the survey protocol described in the preceding paragraph for 200-feet on both sides of the gap.

- 8. During pre-construction surveys (as described in the previous measure), authorized biologists will also inspect the project right-of-way for desert tortoise burrows. Prior to collapsing burrows, the authorized biologists will inspect each burrow to determine if it is occupied. If an occupied desert tortoise burrow is found within the project right-of-way, and it cannot be avoided, the authorized biologists will follow guidance in the Desert Tortoise Field Manual on extracting, excavating, and relocating desert tortoises. If an occupied desert tortoise burrow is found on the edge of the project right-of-way, and if feasible, the authorized biologists will follow guidance in the Desert Tortoise Field Manual and temporarily pen the animal.
- 9. Encounters with desert tortoises will be immediately reported to the lead authorized biologist. The lead authorized biologist will maintain a record of desert tortoises encountered during construction activities.
- 10. All handling of desert tortoises will be conducted by or under the supervision of an authorized biologist in accordance with recommended protocol in the Desert Tortoise Field Manual.
- 11. The authorized biologists will handle a desert tortoise only when necessary. The authorized biologists will use new latex gloves when handling each desert tortoise to avoid transfers of infectious diseases between animals.
- 12. Desert tortoises will be moved the minimum distance possible within appropriate habitat to ensure their safety. Desert tortoises will not be moved in excess of 1,000 feet for adults or 300 feet for juveniles and hatchlings.
- 13. Any desert tortoise found aboveground that needs to be moved from harm's way will be placed in the shade of a shrub, facing the same direction that it was facing prior to moving it.
- 14. The authorized biologists will have the authority to halt all non-emergency project activities should danger to a desert tortoise arise. Work will proceed only after hazards to the desert tortoise are cleared or removed, the desert tortoise is no longer at risk, or an authorized biologist has moved the desert tortoise from harm's way.
- 15. Any desert tortoises found in areas that would be disturbed by project activities will be moved by an authorized biologist the appropriate distance to ensure that they do not move back into the construction area. Desert tortoises that are found in the 50-foot-wide area adjacent to the project right-of-way will either be moved as described in the previous sentence or confined to their burrows through the use of desert tortoise fencing as described in the Desert Tortoise Field Manual, the authorized biologists will use their judgment to determine the appropriate course of action and may consult with the USFWS or California Department of Fish and Game if necessary. Prior to the onset of work each day, the authorized biologists will survey the area to be disturbed that day to ensure that desert tortoises have not re-entered the site. For these daily surveys, the adjacent 50-foot-wide area and areas enclosed by desert tortoise fencing need not be surveyed. If any desert tortoises are found, the authorized biologists will implement the measures described in the previous measure.
- 16. Trenches or holes left open overnight or over a weekend will be ramped at an angle so that animals can escape or covered to prevent desert tortoises from becoming entrapped.

Prior to backfilling trenches or holes, an authorized biologist will inspect them for desert tortoises.

- 17. Prior to moving project vehicles and equipment, all workers (e.g., contractors, crewmembers, engineering inspectors, and environmental compliance personnel) will inspect for desert tortoises resting in the shade under them. If a desert tortoise is observed underneath a project vehicle or equipment, an authorized biologist will be contacted. If possible, the desert tortoise will be left to move on its own; otherwise, the authorized biologist will capture and relocate the desert tortoise.
- 18. In areas with existing desert tortoise exclusion fence, an authorized biologist will inspect the fence prior to initiation of construction activities to ensure it is intact. The authorized biologist will document any observations of entrapped animals, repairs needed, and recommendations for supplies and equipment needed to complete repairs and maintenance.
- 19. Any damage to existing desert tortoise exclusion fencing will be immediately reported to the lead authorized biologist. Project-related damage to existing desert tortoise fencing will be repaired by the contractor immediately and under the supervision of an authorized biologist.
- 20. Project vehicles, equipment, and activities will be confined to the project right-of-way, approved access roads, and staging and laydown areas. Off-road or cross-country travel will be prohibited except in emergency situations. No additional dirt or paved roads will be created outside of the project right-of-way.
- 21. Where there is not a conflicting speed limit, project vehicles and equipment will not exceed speeds of 20 miles per hour while traveling on unpaved access roads in desert tortoise habitat.
- 22. Firearms and domestic dogs will be prohibited.
- 23. Trash and food items will be disposed of promptly in predator-proof containers with resealable lids. Trash containers will be inspected at the beginning and end of each workday to ensure that they are properly sealed. During non-work hours (i.e., end of the workday or over the weekend), these containers will either be removed from work areas or secured in a fashion that keeps wildlife from opening them.
- 24. Material that leaks, spills, or is otherwise released into habitat of the desert tortoise will be removed immediately. The authorized biologists will ensure the appropriate measures are implemented during the removal of the hazardous materials.
- 25. To the extent possible, surface-disturbing components of the project will be located in previously disturbed areas, immediately adjacent to previously disturbed areas, or where habitat quality is poor; disturbance of vegetation and soils will be minimized to the extent practicable.
- 26. Disturbance of vegetation and soils will be minimized to the extent practicable. Where possible, disturbance will be limited to crushing vegetation to minimize root damage.
- 27. Following construction activities, CBC will conduct surface stabilization and reclamation activities within the project right-of-way. These activities will include the removal of construction debris and returning the soil to its original grade.

- 28. If unforeseen circumstances require disturbing vegetation beyond the project right-of-way, CBC will notify the appropriate agencies immediately.
- 29. To minimize the spread of noxious weeds, a noxious weed plan will be prepared and implemented for each county that the project occurs in.
- 30. If sensitive plant species, such as Joshua trees (*Yucca brevifolia*), cacti, and succulents are within an impact area, a restoration specialist will remove and temporarily relocate these plant species to a "nursery area" until they can be returned to the immediate area where the sensitive plant species was originally found. The "nursery area" will be located outside of desert tortoise critical habitat. If the "nursery area" is located within desert tortoise suitable habitat, the "nursery area" will be located within a previously disturbed area or an area devoid of vegetation (i.e., laydown or staging areas).

The following measures will be implemented during operation and maintenance activities:

- 1. Operation and maintenance activities, vehicles, and equipment will be confined to the project right-of-way. No additional dirt or paved roads will be created off the project right-of-way during operation and maintenance activities. If unforeseen circumstances require disturbance beyond the project right-of-way, the appropriate Federal agency will notify the USFWS immediately.
- 2. An authorized biologist will be present if operation and maintenance activities would disturb desert tortoise habitat.
- 3. For emergency maintenance activities resulting in the disturbance of desert tortoise habitat, the appropriate Federal agency will notify the USFWS immediately. If desert tortoises must be handled, an authorized biologist will conduct these activities.
- 4. If operation and maintenance activities require laydown or staging areas, CBC will verify with the appropriate Federal agency that previously approved laydown or staging areas can be used. Leftover excavated material will not be left in place but will be disposed of in areas approved by the appropriate Federal agency.
- 5. Leaks, spills, or releases of fuel or other hazardous materials along access roads within desert tortoise habitat will be reported immediately to the appropriate Federal agency. Material that leaks, spills, or is otherwise released into desert tortoise habitat will be removed immediately. CBC will ensure the appropriate measures are implemented during the removal of the hazardous materials.
- 6. Where there is not a conflicting speed limit, project vehicles and equipment will not exceed speeds of 20 miles per hour while traveling on unpaved access roads in desert tortoise habitat.
- 7. Firearms and domestic dogs will be prohibited.
- 8. Trash and food items will be disposed of promptly in predator-proof containers with resealable lids. Trash containers will be removed at the end of each workday.

The USFWS also specified that the following reasonable and prudent measures are necessary to minimize take of desert tortoises during Project implementation.

- 1. The NTIA, Bureau, or ACOE, as appropriate, must minimize adverse effects associated with handling and movement of individual desert tortoises.
- 2. The NTIA, Bureau, or ACOE, as appropriate, must ensure CBC implements measures to reduce the take of desert tortoises within the action area.
- 3. The NTIA, Bureau, or ACOE, as appropriate, must ensure that the level of incidental take anticipated in the USFWS is commensurate with the analysis contained in the BO.

These reasonable and prudent measures will be implemented by the following terms and conditions:

- 1. The NTIA, BLM, or USACE, as appropriate, must ensure that only biologists authorized by the USFWS under the auspices of this biological opinion conduct clearance surveys for and handle desert tortoises. NTIA must require CBC to provide USFWS with the credentials of authorized biologists who it wishes to conduct these duties at least 30 days prior to the time they must be in the field. The authorized biologists approved by USFWS, in coordination with the consulting agency, will be responsible for selecting additional biological monitors to ensure that the proposed protective measures and terms and conditions USFWS requires are fully implemented. The authorized biologist will assign appropriate tasks to any additional desert tortoise monitors, based on their experience.
- 2. USFWS has identified appropriate roles and responsibilities for authorized biologists and desert tortoise monitors at the following website: http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/dt/DT%20Auth%20Bio%20qualifications%20statement%2010_20_08.pdf.
- 3. To ensure that the measures proposed by NTIA and CBC are effective and are being properly implemented, the NTIA, BLM, or USACE, as appropriate, must contact the USFWS immediately if it becomes aware that a desert tortoise has been killed or injured by project activities. At that time, the USFWS and the appropriate agency will review the circumstances surrounding the incident to determine whether additional protective measures are required. Project activities may continue pending the outcome of the review, provided that the proposed protective measures and any appropriate terms and conditions of this biological opinion have been and continue to be fully implemented.
- 4. If four desert tortoises are killed or injured by project activities during construction of the proposed action, NTIA must re-initiate formal consultation with the USFWS.
- 5. If two desert tortoises are injured or killed as a result of operation and maintenance of the project in any calendar year, the NTIA, BLM, or USACE, as appropriate, must re-initiate formal consultation with the USFWS.

In addition, the BO specifies that NTIA provide annual reports to the USFWS by January 31 of each year detailing the effects of the Project on the desert tortoise, including information on any instances where tortoises were killed, injured, or handled; the circumstances of such instances; and actions undertaken to prevent similar instances from occurring in the future. Furthermore, within 60 days of the completion of construction, NTIA must submit a final report to USFWS.

Within three days of locating a dead or injured desert tortoise, the NTIA, BLM, or USACE, as appropriate, must notify the Ventura Fish and Wildlife Office by telephone (805-644-1766) and in writing (2493 Portola Road, Suite B, Ventura, California 93003). The report must include the date, time, and location of the carcass, a photograph, cause of death, if known, and any other pertinent information.

Injured desert tortoises must be taken to a qualified veterinarian for treatment. If any injured desert tortoises survive, the USFWS must be contacted regarding their final disposition.

The NTIA, BLM, or USACE, as appropriate, must ensure that CBC takes care in handling dead desert tortoises to preserve biological material in the best possible state for later analysis. If a desert tortoise is killed by Project activities, the USFWS will instruct the NTIA, BLM, or USACE, as appropriate, and CBC regarding the final disposition of the carcass.

Upon reviewing maps of the proposed Project, the Nevada USFWS determined that a portion of the Project ROW was located near occupied and potential habitat of the federally endangered Carson wandering skipper (*Pseudocopaeodes eunus obscurus*). On December 15, 2012, NTIA provided additional correspondence to the USFWS regarding the potential effects of the Project on the Carson wandering skipper and its habitat. The USFWS concurred with NTIA's determination that the Project would not likely adversely affect the Federally endangered Carson wandering skipper. This concurrence was based on the fact that the proposed route was relocated west of occupied and potential habitat, and based on the following measures:

- 1. CBC will ensure construction occurs outside of the adult flight season:
- 2. CBC will ensure construction activities occur within areas devoid of vegetation or, if vegetated, CBC will ensure a Project biologist surveys the area and determines it does not contain suitable habitat for the Carson wandering skipper; and
- 3. In areas that contain suitable habitat for the Carson wandering skipper (i.e., the Carson River Crossing), CBC will minimize disturbance to potential nectar sources and the larval host plant by attaching conduit to the bridge and/or using horizontal directional drilling.

Furthermore, CBC and NTIA are requested to address new non-native invasive plant species in their noxious weed plans, and discuss measures to minimize their introduction, spread, and establishment within the action area.

Re-initiation of consultation with USFWS is required in instances where the amount or extent of incidental takes are exceeded; if new information reveals effects not previously considered; if the Project is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the BO; or if a new species is listed or critical habitat designated that may be affected by the Project.

State or Federal-listed threatened or endangered plants, and plants listed by BLM or USDA-FS as sensitive plant species have a potential to occur onsite. CBC will conduct a pre-construction survey for special-status plant species and document the locations of identified plants. Construction activities will avoid special-status plant species occurrences either by minor rerouting of the cable alignment, or by using HDD methods to prevent surface disturbance. Where avoidance is not possible, minimization practices will be employed.

In addition to considering potential impacts on listed species, CBC evaluated potential impacts on migratory birds and other wildlife. The Project may temporarily affect wildlife, including migratory birds. Should active bird nests be identified along the Project route, a biological monitor will be present during times of construction in areas containing active bird nests, and a protective buffer will be established around the nest. Additional protective measures will also be implemented to avoid potential impacts to USDA-FS and BLM sensitive species.

Construction noise and human presence will cause temporary direct and indirect impacts to the Sierra Nevada bighorn sheep, mule deer, Mohave ground-squirrel, special-status bats, American badger, and pygmy rabbit, and other ground dwelling mammals and reptiles. The short-term presence of construction vehicles, equipment, and crews may also result in temporary noise and visual impacts to amphibian, reptilian, fish, insect, mollusk, and crustacean species. Direct and indirect impacts to these species will be minimized through the implementation of BMPs.

Much of the Project will be constructed along disturbed roadsides, or other unvegetated areas or areas dominated by weedy and non-native plants species. However, for the portions of the Project alignment within native vegetation or habitats, the Project has the potential to temporarily or permanently impact those habitats. Vegetation may be subject to crushing, disturbance of root systems, removal, and introduction of invasive vegetation species. In order to minimize this impact, selected portions of the Project will be constructed using HDD technology; and a monitoring biologist will be present during construction activities within these habitats.

In an effort to avoid and minimize the spread of invasive plants and their parts, contractor vehicles and equipment, and personnel will be cleaned prior to the arrival at constructions sites. Off-road driving will be avoided to the extent possible, and equipment staging areas shall be chosen that are, or at least primarily, unvegetated. Ground disturbance will be minimized to the extent required to safely perform construction activities. In addition, biological monitors will identify areas of native vegetation to be protected. BMPs often require the use of straw and/or hay bales, and those resources shall be purchased from State-cleared sources that are primarily free of primary noxious weeds. If the Contractor suspects invasive plants to have been brought to the construction sites, the biological monitor shall be notified in an effort to minimize the potential impacts. The appropriate Agencies shall be consulted regarding invasive plant species measures.

Based on this analysis and implementation of the recommended protective measures and BMPs, CBC will be able to construct the fiber network with no significant adverse impacts on biological resources.

Historic and Cultural Resources

In letters dated October 22, 2010 and October 25, 2010, NTIA initiated consultation with the California and Nevada State Historic Preservation Offices (SHPO), respectively. These letters included a Project map and Project description, and documented the determination that the CBC Digital 395 Project had the potential to affect historic properties. On October 29, 2010, NTIA provided Project details, through a modified version of the Federal Communication Commission's (FCC) Tower Construction Notification System (TCNS), to 35 tribes interested in the Project's geographical location in California and Nevada. In October 2010, CBC contacted the California Native American Heritage Commission (NAHC) to request a review of their Sacred Lands Inventory to determine if sacred lands or other resources of significance to the Native American community were known to exist in proximity to the proposed Project. NTIA notified the affiliated tribes of the undertaking, provided Project descriptions and maps, and invited the tribes to comment on the undertaking, particularly regarding any questions or concerns about the Project in general and Native American interests specifically. Formal government-to-government consultation was initiated with twenty-eight (28) tribes via letter dated May 10, 2011. CBC and NTIA participated in several meetings with affected tribes during the development and implementation of the PA, including multiple intertribal meetings that occurred between May-October 2011.

During early Project coordination with the parties involved with Section 106 review, it was determined that the effects on historic properties would not be fully determined prior to approval of the undertaking considering the Project timeline and the number of parties involved. Therefore, a phased process for compliance with the National Historic Preservation Act (NHPA) Section 106 is appropriate because the Project is proposed in segments and impacts lands under various jurisdictions in two States. In an effort to meet the ARRA requirement to complete the Project within three years, and in light of on-going Project design and engineering, per 36 CFR 800.14(b), NTIA and CBC decided to pursue a PA to streamline Section 106 compliance. Preparation of a Project-specific PA is consistent with the provisions of the NHPA Section 106 implementing regulations (36 CFR Part 800) which permit Federal agencies to use PAs to establish alternative procedures for Section 106 compliance. The PA further establishes activities exempted from Section 106 review and clearly lays out a process for identification and evaluation of cultural resources, including those on Federal or tribal lands, assessment of effects, and resolution of adverse effects. On June 16, 2011, a draft PA was circulated to proposed signatories with a request to review and participate in the PA. On October 7, 2011, the PA was executed among the following parties:

- NTIA
- California SHPO
- Nevada SHPO
- The Benton Paiute Reservation
- The Big Pine Band of Owens Valley Owens Valley Paiute
- The Bishop Paiute Tribe Paiute, Shoshone

- The Bridgeport Paiute Indian Colony
- The Fort Independence Community of Paiute
- The Lone Pine Paiute -Shoshone Reservation
- The Washoe Tribe of Nevada and California
- The California Public Utilities Commission
- The California Department of Transportation
- The Nevada Department of Transportation
- U.S. Forest Service, Inyo National Forest
- U.S. Forest Service, Humboldt-Toiyabe National Forest
- The Bureau of Land Management
- CBC

CBC must comply with all provisions of the PA, which are hereby incorporated by reference. The provisions include, but are not limited to, the following summary stipulations.

First, the PA stipulates that NTIA must approve that Section 106 review is complete for a specific Project segment before CBC may initiate associated construction. Additionally, CBC is required to notify and seek approval from NTIA and the relevant consulting parties for any proposed changes to the Project.

Second, the PA stipulates that a Master Cultural Resources Report (MCRR) be developed to provide background on previous studies, past surveys, and historic context for the Area of Potential Effects (APE). The draft MCRR was provided to all signatories, invited signatories, and concurring parties on November 2, 2011. This report was intended to provide sufficient information on historic properties within the APE to permit an evaluation of their significance and eligibility for inclusion on the National Register of Historic Places (NRHP). The MCRR also contained a Communication Plan and Communication Plan Chart. CBC divided the Project into approximately 80 geographic segments ("blocks") identified and keyed to an overall Project map and schedule, contained in the Communication Plan Chart. The purpose of the Communication Plan, therefore, was to establish a process through which multiple parties could participate in Section 106 review within the Project schedule, identify appropriate reviewing parties for each block, establish a schedule by which block-specific Segment Survey Reports (SSRs) would be prepared and delivered to reviewing parties, and establish a schedule by which reviewing parties would commit to consider and respond to the delivered SSRs. Per the tenets of the PA, if SSRs are delivered according to the schedule outlined in the Communication Plan Chart, all reviewing parties agree to a 15-day timeline to review and comment on the NRHP eligibility of any historic properties identified. If SSRs are not delivered in accordance with the schedule, the review timeline reverts back to 30 days. A final technical report describing the results of the cultural resources survey for each segment will be prepared within one month (30 calendar days) of completion of the SSRs, per Stipulation IV H of the PA.

Third, the PA stipulates that a Class III Archaeology/Cultural Resources survey be conducted for each Project segment in areas of the APE that have not been surveyed to a standard sufficient to comply with Section 106 of the NHPA within the past five (5) years.

Fourth, the PA stipulates that, for any segments that cross Federal or tribal lands, CBC must obtain all required permits and approvals, and document for NTIA, unless otherwise exempted, the successful conclusion of Section 106 review for each segment conducted in accordance with 36 C.F.R. §§ 800.3 through 800.7 with the respective Federal land managing agencies, SHPO and/or THPO. Along with the required fieldwork authorization applications, the APE will be submitted to Federal and tribal land managers for approval.

The PA was amended on January 31, 2012 to add the Bureau of Indian Affairs (Pacific and Western Offices) as well as the China Lake Naval Air Weapons Station as signatories. A second draft of the MCRR was released to signatories, invited signatories, and concurring parties on February 21, 2012. The second draft MCRR was accompanied by a revised Communication Plan Chart with a revised schedule for SSR release, review, and comment. By adhering to the process for identifying, evaluating, and resolving any effects to historic properties set forth in the PA, this Project will not have any significant adverse effect on historic properties.

Aesthetic and Visual Resources

Temporary impacts to visual and aesthetic resources will occur during the construction phase of the Project due to the presence of the construction equipment, storage of equipment and materials, and removal of vegetation. Because construction vehicle traffic and Project activity will move along the fiber route, the viewshed from the Project site will not be permanently affected. The Project will cause temporary disturbance along California Scenic Highways. Nevada Scenic Highways, and National Scenic Byways. CBC will bury the majority of the cable underground, and hang approximately 3 miles on existing utility lines, resulting in no long-term visible effect. In areas of scenic visibility, such as on BLM or USDA-FS lands, the cable will be installed underground, with temporary construction equipment impacts. New marker posts placed along the Project ROW will be similar to existing marker posts and would not result in a major change in the overall visual quality compared to existing conditions. Lack of vegetation may be evident along the trenching route until the area is successfully reclaimed. The proposed node sites are planned to be placed within industrial and commercial areas, which will not add permanent visual elements to the viewshed, comparable to existing surrounding land uses. These sites will be visually modified to blend in with the surroundings, based on the requirements of the local jurisdictional agency. Based on these assessments, this Project will not significantly affect aesthetic or visual qualities in the region.

Land Use

The route is adjacent to many land use types, including open space, resource conservation, agriculture, forest and range, and rural living. Many of these areas include the expanses between the cities and communities along the Digital 395 Project route. The land uses in the Project vicinity are designated by individual County General Plans, City General Plans, or Master Plans

when located on private land. The land uses in the Project vicinity that are on USDA-FS and BLM lands are guided by the agency's resource management plans. Overall, the Project does not conflict with the current land uses along the proposed route. All cable will be installed either underground or hung on existing poles within existing Federal, State, county, or city ROWs. Fiber will be installed underground within the California Department of Transportation (Caltrans) ROW/easements, county-maintained dirt roads, Los Angeles Department of Water and Power (LADWP) ROW/easements, Nevada Department of Transportation (NDOT) ROW/easements, and the United States Marine Corps Mountain Warfare Training Center. Installation of both underground and aerial optical fiber cables also will occur on Naval Air Weapons Station China Lake.

Minimal ground disturbance is anticipated from fiber installation and construction will be temporary in nature. Seventeen 35x45x11 foot pre-fabricated (node) buildings will be placed on the outskirts of the communities, within existing industrial parks or commercial areas, and will not affect the land use of those areas. Approximately 626 4x4x7 foot vaults will be installed underground within the ROW, which will not affect the land use along the route. Based on these findings, no significant adverse impacts on land use are expected to result from Project implementation.

Infrastructure

The Project will enhance telecommunications infrastructure by adding 593 miles of broadband fiber optic cable. The Project's fiber route will be primarily constructed underground, in existing ROWs. There will be minor, short term construction impacts on roadways and traffic flow during fiber installation. CBC will implement traffic control measures, where necessary, that will follow an approved traffic plan. Overall, this Project is expected to have a positive impact on infrastructure, and is not anticipated to result in significant adverse impacts on infrastructure.

Socioeconomic Resources

The Project will enhance broadband access among underserved users in San Bernardino, Kern, Inyo, and Mono Counties in California, and Carson City, Douglas, and Washoe Counties in Nevada. This improved broadband access will result in socioeconomic benefits such as economic development and improved public safety, tourism, healthcare, education, and employment opportunities. No residents, minority, or low-income populations or businesses will be displaced as a result of Project implementation. Rather, these populations are expected to benefit from enhanced broadband access in the area. Overall, this Project is expected to have a positive impact on socioeconomics in the planned service area, and will not result in significant impacts on socioeconomic resources.

Human Health and Safety

The Project is not expected to have any adverse impacts on human health and safety during normal operation, but may have minimal, short-term impacts during construction. In Bishop, CA, CBC has identified three sites along the Project route with known groundwater contamination. This contamination may pose a potential hazard to the safety of the workers

during construction. Depending on the amount of rainfall, the workers may encounter gasoline-impacted groundwater while trenching. To minimize potential impacts, an environmental health and safety professional, who is Hazardous Waste Operations and Emergency response (HAZWOPER) trained, will be present during the trenching and cable installation in the vicinity of the three active contaminated sites to monitor and minimize risk. The Project will be implemented by experienced contractors and trained personnel. General public and worker safety on the construction sites will require safe vehicle movement, personal protective equipment, and proper operation of safety equipment in strict adherence with company and Federal rules and regulations (including OSHA). CBC will ensure that all construction sites maintain sanitary conditions at all times and waste materials will be properly disposed. Based on these considerations, significant adverse impacts on human health and safety are not expected. Conversely, improved telecommunications infrastructure may actually improve human health through telemedicine, and public safety through better emergency management communications.

Cumulative Impacts

CBC did not identify any significant cumulative impacts that will result from Project implementation. Because Project construction will occur along existing ROWs, there is potential for overlap between the planned installation and future improvements. CBC will work with other utilities, and Federal, State, and local governments, to coordinate scheduling to avoid construction conflicts, including traffic safety and access issues. As such, no cumulative impacts on the environment are anticipated.

Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, identified BMPs, and protective measures, will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the proposed action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:

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