



2020 CARES Act - NTUA Projects

Progress Report Update #10 for Navajo Nation Leadership

The Navajo Nation and the Navajo Tribal Utility Authority (NTUA) are committed to extending utilities to homes and making improvements to utility systems to prevent the further spread of COVID-19. On August 16, the Navajo Nation (NN) announced the award of \$147,116,561 to NTUA to construct utility projects eligible under the United States CARES Act. These projects must be constructed by December 30, 2020.

NEW Partnerships to Combat COVID-19:

NTUA is creating partnerships with the other electric service utilities that serve the Navajo Nation to combat the spread of COVID-19. As part of the Navajo Nation CARES Act legislation, NTUA was authorized to install 1,000 off grid solar units across the Navajo Nation. NTUA initiated a public campaign inviting families without electricity to apply for a solar unit. NTUA received more than 1,000 applications and many are from families living within close proximity to a powerline. In addition, some of the families are living beyond the reach on NTUA's electric distribution system. NTUA reached out to the electric companies that serve applicants living in these areas, including Arizona Public Service (APS), Continental Divide Electric Cooperative (CDEC), Jemez Mountain Electric Cooperative (JMEC), and Socorro Electric Cooperative (SEC) to find ways to partner connect these families to the electric grid. Fortunately, the companies agreed to work with NTUA and as of this report, we have identified 25 families who can be connected to the electric grid before the end of the year. This is the first time NTUA has established such a partnership with these neighboring electric utility companies. The partnership builds a unified bond to help fight the spread of COVID-19.

NTUA Progress Report Update #10 CARES Act Projects completed as of November 5, 2020

NTUA's Off-Grid Residential Solar Program

NTUA has received 1,194 completed applications for the Off-Grid residential solar program. To date, NTUA teams conducted 1,116 Feasibility Study/Site Assessments. Of those, 360 were found to be feasible, 514 non-feasible, and the remaining 242 are under review. Crews are working on preparing 137 homes to be connected to the 3,000 Kw solar units:

- 137 homes will have site work completed
- 99 of the 137 homes will be house-wired
- 38 of the 137 homes house-wiring completed
- 17 of the 137 homes belong to Veterans
- Installation of Solar units are scheduled to begin the week of November 16th

Electric Capacity Projects

The electric division has completed 26 out of the 59 planned projects. There are 14 projects in construction, including Kinlichee (AZ), Kayenta (AZ), Shiprock (NM), and Mexican Water (UT). Thirteen (10) additional projects set to begin construction later this month in Fort Defiance (AZ), Crystal (NM), Navajo Mountain (UT), and Chinle (AZ). The work will include Substation work and pole replacements.



Electric Connections and Land Acquisition for Construction

NTUA Districts and ECD electric line crews continue to work 10 hour days. Various crews are building powerlines on weekends and holidays. As a result of their efforts:

- 342 families are now connected to the electric grid
- An increase of 36 homes from last week
 - NTUA connected 29 homes in 2 days including the completion of two major powerlines

Rights of Way - more families submitting

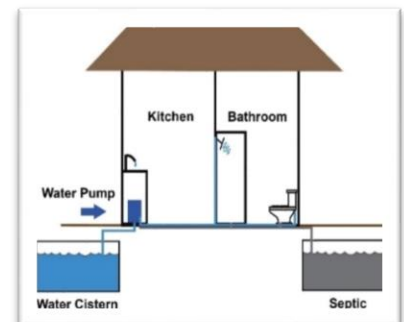
- The NN Land Department (NNLD) has issued NTUA land acquisition for 106 projects, thereby moving these projects closer to construction
- 23 applications for land acquisition are pending with the with General Land Development Department who submits the applications to NNLD for approval
- 124 homes still require land acquisition from the NNLD



Water Cistern Project

The CARES Act is providing funding for 150 water cisterns systems. A cistern water system is used where there is no water available and is used for household for drinking water, kitchens and bathrooms. A cistern water system stores the water needed for a household in a large 1,000 gallon container that can be filled from a watering truck.

NTUA is working with the Navajo Engineering and Construction Authority (NECA) to install the water cisterns and plumbing systems, including building a bathroom addition and plumbing, if necessary. Currently, the NTUA - NECA teams are conducting assessment / feasibility visits to the homes of applicants. Construction has begun on bathroom additions.



Water/Solar Cistern Units

Completed feasibility surveys on 209 homes

- 123 families have qualified
 - 51 bathroom foundations have been completed
 - 22 out of 118 septic systems have been installed
 - 53 out of 123 homes have electricity
 - 31 out of 123 homes need a solar unit
 - 37 out of 123 will be connected to the electric grid
 - 15 homes are still under review
- 86 homes were determined not feasible because these homes were
 - Abandoned; OR
 - not structurally adequate or non-existent (burned down)



Water Loading Stations

Renovations and upgrades to 6 regional watering loading stations have been completed. Four (4) are in Arizona (Bodaway Gap, Leupp, Lupton, Wide Ruins) and two New Mexico communities (Torreon & Lake Valley). These watering loading stations are now open for public use.

The Fort Defiance (AZ) and Crownpoint (NM) water loading stations are completed and open for public use. The Lower Greasewood (AZ) site has been completed and will be open to the public in the week on Nov. 16th. The Cameron (AZ) site is expected to be completed by the end of November

Renovations and upgrades are planned for 5 other water loading stations – four (4) are in Arizona (Chilchinbeto, Inscription House, Whitecone, Kinlichee) and one (1) in NM (Pueblo Pintado). Construction began in mid-October and will continue through mid-December.

Water Machine installs are set to begin November 16th. Materials have been ordered for all sites and the machines for all sites are being built by Aquaflow, which is a water machine contractor.

Construction has begun for one of four (4) off-line wells to become water loading stations for livestock. These livestock water loading stations were planned so that residents will not haul water for livestock from potable water sources.

Currently, construction is underway and is expected to be completed by mid-December for the off-line well in Hunter's Point (AZ). The three (3) other off-line wells are in Chinle (AZ), Newcomb (NM) and Sheepsprings (NM). Work on these livestock water loading stations is scheduled to be completed by December 25th.

Water Wells & Water System Upgrades

Pump and motor replacements for 42 of 53 water wells have been completed. Renovations for two (2) major water tanks in Fort Defiance (AZ) and Sawmill (AZ) are scheduled to be completed by early December.

Engineering services for three (3) new water wells are being finalized. These wells will allow residential and commercial growth in Houck (AZ), Ganado (AZ), and Thoreau (NM).

Park Estates, near Sanders (AZ) is scheduled to have 27,000 feet of waterline replaced. NECA will be providing construction services and has subcontracted Canyon Construction to assist. Digging began on November 2nd.

Wastewater Facilities Improvements

Engineering services have been procured for renovation of wastewater lift stations in Iyanbito (NM) and LeChee (AZ). A lift station moves wastewater in pipes from a lower elevation to a higher elevation in order to allow the wastewater to flow downhill to a lagoon.

4,800 feet of the Window Rock (AZ) wastewater trunk line will be replaced. Construction will start in November and run through mid-December. In addition, the construction of the Pinon (AZ) wastewater lagoon is on schedule to be completed by Thanksgiving.



Groundwork underway for
wastewater lagoon in Pinon (AZ)

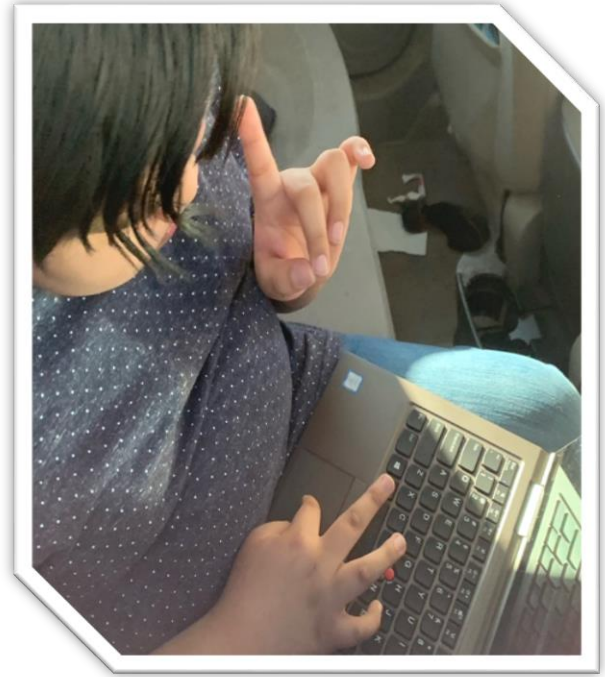
Free Student WI-FI Hotspots

38 out of 40 free Student WI-FI hotspots have been connected in various communities throughout the Navajo Nation. The goal was to place the hotspots so that no one would have more than a 45-minute drive to access the Internet. Recent locations have been turned on at Kaibeto (AZ), Bodaway Gap (AZ) and KinDa'Lichii (AZ).

The CARES Act funded 31 locations; however, due to increased demand, NTUA and NTUA Wireless is planning to install an additional 9 WIFI hotspots, including Leupp (AZ), Oaksprings (AZ).

Telecommunications / Broadband

The upgrade of NTUA fiber optic backbone from 10 Gbps to 100 Gbps has been completed and expect to handle internet traffic the week of November 16th. This increase in capacity is necessary to handle the increased internet traffic due to the COVID-19 pandemic. Without the upgrade to fiber optic backbone, NTUA would not be able to support the new 102 Cares Act broadcast stations.



Of the 102 broadcast stations, 98 are uplifts and four (4) are brand new sites.

- Five (5) of the 102 sites are in-service
- Thirteen (13) more broadcast sites are set to be installed the week of November 9th.

These broadcast stations provide an increase in internet speeds that the Navajo people deserve, especially the students attending school on-line and patients and doctors engaging in telehealth

Pinedale, Beclabito, Summit East, & Woodsprings Towers

The Pinedale (NM) tower is built and is the first tower completed with CARES Act funding and is the first tower to feature the CARES Act broadcast station. The tower is now connected to the internet and providing mobile phone service to the area for the first time. The dedication ceremony was held October 12, 2020.

Tower construction crews are awaiting the arrival of ordered equipment and materials to begin building the three remaining towers. November 30th remains the target completion date. The installation of backhaul, broadcast stations and testing is scheduled to be completed by December 23rd.

Kaibeto to Page Fiber line

The fiber line from Tonalea to Navajo Generating Station (outside Page, AZ) has been completed. Work is concentrating on the final installation of the electronics and shelters. The entire project is targeted for completion by November 23. Once finished, area residents will notice enhanced services for mobile phones or broadband towers to provide the data needed for distance learning.

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