



2020 CARES Act - NTUA Projects

Progress Report Update #7 for Navajo Nation Leadership

The Navajo Nation and the Navajo Tribal Utility Authority (NTUA) are committed to extending utilities to the homes of Navajo Nation families to prevent the further spread of COVID-19. On August 16, the Navajo Nation (NN) announced the funding it would provide to NTUA to construct utility projects eligible under the United States CARES Act by December 30, 2020 as the construction deadline. NTUA has mobilized, to build, extend, and provide essential utility services to families throughout the Navajo region.

NTUA Progress Report Update #7 CARES Act Projects completed as of October 15, 2020

NTUA's Off-Grid Residential Solar Program

NTUA has received applications from 1,091 people for the Off-Grid residential solar program. It is an increase of 99 people. To date, NTUA teams conducted 875 Feasibility Study/Site Assessments. Of those, 192 were found to be feasible, and 291 non-feasible.

Electric Connections and Rights of Way Acquisition

District and ECD electric line crews continue to work 10 hour days.

Photo to the right: One electric line crew working well into sunset. Crews also are building powerlines on weekends and holidays. As a result of their efforts:

- 279 families are now connected to the electric grid
- 19 homes more than last week

Rights of Way - families submitting applications:

- 164 homes require Right of Way (ROW) acquisition
- 50 projects have been released by NN Land Department (NLD) clearing the way for electric line crews to proceed with construction.
- 37 SLA (Service Line Agreements) and 1 ROW project is pending with General Land Development Department.



Electric Capacity Projects

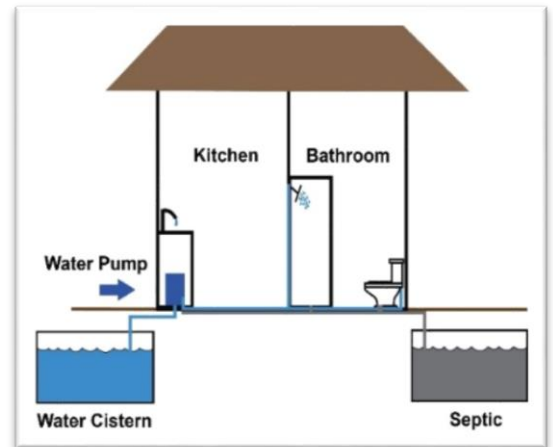
The electric division has completed 19 out of the 59 planned projects. There are 7 projects in construction, including Kayenta (AZ), Shiprock (NM), Oljato (AZ), and Aneth (UT). 7 projects await contractor assignment. These projects include:

- Powerline Conversion
- Substation - Switch/Motor replacement
- Substation - Recloser/Switch Installations
- Transformer/Bushing & Pole replacements

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 combined 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 115 homes

- 85 families have qualified
 - Will all receive Cistern systems
 - 81 will receive house-wiring
 - 78 homes will receive bathroom additions
 - Construction is underway in 22 homes
 - 4 homes do not need house-wiring
 - 3 homes do not need bathroom additions
- 30 homes determined not qualified - did not meet requirements. Homes were either:
 - abandoned
 - not structurally adequate
 - or non-existent (burned down)
- 44 homes do not need a solar unit. These homes are connected to the electric grid.



Water Loading Stations

Renovations and upgrades have been completed to 5 regional watering loading stations, three in Arizona (Bodaway Gap, Leupp, Lupton) and two New Mexico communities (Torreon & Lake Valley). These watering loading stations are now open for public use. A sixth water loading station at the Wide Ruins (AZ) chapter house is complete and is open for public use.

Renovations and upgrades are planned for 6 other locations - four in Arizona (Chilchinbeto, Inscription House, Whitecone, Kinlichee) and two in NM (Pueblo Pintado, Lake Valley). Construction is scheduled to begin October 19 and continue through November 06, 2020. Water Machine installs set to begin Nov. 9th.

Construction is nearly complete for the new watering loading station in Crownpoint, NM. Three additional new watering stations, in Arizona -- Ft. Defiance, Cameron, Lower Greasewood are on schedule to be completed by late October. Fort Defiance

Watering Point is completed with the concrete loading installed Friday, October 9, 2020.

Lower Greasewood (AZ) is set to be installed on October 8, 2020. Machine to be installed by Aqua Flow (water machine contractor), water line ready with stub out, electric to be ready for connection. Once all is connected, Aqua Flow will flush to calibrate system and installment will be complete. The Cameron Chapter water loading station is underway with machine set to be installed mid-October.



Water Wells & Upgrades

Pump/motor replacements for 37 of the 50 wells have been completed to date. The contracts for heavy renovations for two major water tanks in Window Rock have been executed as were contracts for engineering services for three new water wells to allow residential and commercial growth in Houck (AZ), Ganado (AZ), and Thoreau (NM).

Photo to the right: The water well crew dismantled the roof steel sheets to a storage tank near Ft Defiance (AZ). The NTUA team proceeded to put down the I-beam rafters, center support pipe, and continue to grind and clean the interior of the water tank which will be back in service by November 20, 2020.



Cont'd Water Wells & Upgrades

Meanwhile, construction is set to begin October 19th through November 06th for off-line-wells to be converted to watering loading stations for livestock.

There are two in Arizona (Hunter's Point, Chinle) and two in NM (Newcomb, Sheepsprings). Aqua Flow will begin installing machines starting November 09, 2020 thru December 25, 2020. These livestock watering stations were planned so that residents will not haul water for livestock from potable water sources.

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.

Improvements are also planned for 4,800' of the Window Rock (AZ) wastewater trunk line to extend its useful life. Construction will start in November and run through mid-December. The construction of the Pinon (AZ) wastewater lagoon is on schedule to be completed by Thanksgiving.

Free Student WI-FI Hotspots:

34 free Student WI-FI hotspots have been connected in various communities throughout the region. The goal was to place the hotspots so that no one would have more than a thirty-minute drive to access the Internet.

This completes the initial target; however, due to increased demand, NTUA and NTUA Wireless were looking into the possibility of installing additional WIFI hotspots at these locations. Two are the latest to go-live.

- Leupp Chapter (AZ)
- Kaibeto (AZ)
- Red Valley Chapter (AZ) (**now on-line**)
- Sheepsprings (NM) (**now on-line**)
- Oak Springs (AZ)

NTUA Wireless has already ordered over \$12.9 million of the long lead time materials for the 102 new broadband broadcast stations which will deliver high speed internet to homes.

Telecommunications:

The upgrade of NTUA fiber optic backbone from 10 Gbps to 100 Gbps remains on schedule. This increase in capacity is necessary to handle the increased internet traffic due to the COVID-19 pandemic.

Without this uplift installation of the 102 Cares Act broadcast stations would not have provided the increase in internet speeds that the Navajo people deserve, especially the students attending school on-line and patients and doctors engaging in telehealth. One site has been installed and activated with the completion of the Pinedale (NM) tower. Ten more sites are set for construction on week of October 26, 2020.

Pinedale, Beclabito, Summit East, & Woodsprings Towers:

Electric line crews are preparing to build a powerline that will extend to the hill of the proposed tower site in Beclabito (NM). Meanwhile, tower construction crews are awaiting the arrival of ordered equipment and materials to begin building the three towers.

The target completion date remains November 30th. The installation of backhaul, broadcast stations and testing is scheduled to be completed by Dec. 23rd.

The Pinedale (NM) tower is the first tower project that has been completed with CARES Act funding. The project also includes the installation of high speed internet.

Photo to the right: Navajo Nation President Jonathan Nez and NN Council Delegate Edmund Yazzie cut the ribbon to officially dedicate the Pinedale (NM) tower, which 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.



Kaibeto to Page Fiber line:

The fiber line from Tonalea to Kaibeto and the fiber line from Kaibeto to Navajo Generating Station (outside Page, AZ) have been installed. The fiber to Kaibeto tower is installed, which will enhance fiber and microwave network, including improving services for mobile phones or enable broadband towers to provide the data needed for distance learning.

Also the proposed shelter construction near NGS is underway. The entire project completion is targeted November 23, 2020.

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