

# COVID-19 Impacts on Small Community Water Systems

## VILLAGE OF MANOKOTAK CASE STUDY:

### Lockdowns During the Pandemic Challenge Rural Communities' Economies and Delay Essential Infrastructure Upgrades

#### Rural America Needs Significant Infrastructure Upgrades

Rural America needs significant infrastructure upgrades in telecommunications, transportation, water, and energy. The cost of modernizing rural regions is higher and more challenging to fund than dense, urban areas which can rely on more people to support local projects. Native land is predominately rural: national infrastructure projects need to include Native and non-Native needs.

The pandemic has challenged finances of customers and water systems across America, even in places where there are few or no cases of COVID-19. For example, the additional cost of personal protective equipment (PPE) and/or shortages in PPE availability have added an extra burden on small water systems. In addition, the lockdowns across the country have shut down businesses and stressed water systems. Resulting increases in unemployment challenge customers' abilities to pay for their water and delay essential revenue for rural utilities who often do not have reserves.

However, these impacts are disproportionately felt by tribal nations. The federal government has underinvested in Native infrastructure for generations. **About 6% of American Indian and Alaska Native households do not have safe drinking water and/or sanitary sewer facilities, compared to 1% of U.S. homes.**<sup>1</sup> In addition, in 2017, Indian Health Services estimated a backlog of nearly 3,000 sanitation facilities construction projects. The cost to provide safe drinking water and adequate sewage systems to all American Indians and Alaska Native homes was approximately \$2.8 billion.<sup>2</sup> Furthermore, Alaska Native and American Indian nations have seen higher rates of COVID-19 and lower revenue than state and local governments since the pandemic began.<sup>3</sup> These communities need assistance urgently as underinvestment and the economic and social costs of the pandemic continue.

#### Manokotak is a Rural Village Impacted by Underinvestment and the Pandemic

Manokotak is a remote rural village in southern Alaska, located approximately 350 miles southwest of Anchorage. Like many Native Alaskan villages, it is only accessible by air or water. It has a population of about 450 people, 80% of whom are Alaskan Native and 20% are White.<sup>4</sup> Approximately 16% of residents live below the federal poverty level. Many residents work at the school or participate in the fishing and trapping industries. The village,



Source: Scott Garret, Holy Rosary Mission



About 6% of American Indian and Alaska Native households do not have safe drinking water and/or sanitary sewer facilities, compared to 1% of U.S. homes.<sup>1</sup>

1 Indian Health Service, "Safe Water and Waste Disposal Facilities" (2016), <https://www.ihs.gov/newsroom/factsheets/safewater/>.

2 National Congress of American Indians (NCAI). *Tribal Infrastructure: Investing in Indian Country for a Stronger America*. An initial report by NCAI to the Administration and Congress. 2017. <https://www.ncai.org/NCAI-InfrastructureReport-FINAL.pdf>

3 "The Impact of COVID-19 on Native American Communities." 2020. Harvard Gazette (blog). May 8, 2020. <https://news.harvard.edu/gazette/story/2020/05/the-impact-of-covid-19-on-native-american-communities/>.

4 U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates Table B02001 by Zip Code. <https://data.census.gov/cedsci/table?q=zip%20code%20race&g=8600000US99628&tid=ACSDT5Y2019.B02001&hidePreview=true>

incorporated in 1970, maintains two water systems that are 10 miles apart. The Old Town water treatment system was built in 1972, while the Manokotak Heights water treatment plant was constructed in 2015. Drinking water is provided by four wells. The systems have had monitoring violations in the past, but no water quality violations in recent years.<sup>5</sup>

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The pandemic has created economic challenges for residents of Manokotak.

Although there have been no cases of COVID in the village, strict regulations preventing non-essential travel are in place. In addition, the school shut down when cases of COVID appeared in neighboring communities. **Many residents live paycheck-to-paycheck and have missed paychecks because of the shutdown.** “It’s hard for residents to pay for their day-to-day costs without income. It will be hard to buy stove oil during the cold and it will be hard for them to feed themselves. In rural villages like this there is no grocery store or food bank, there’s nothing like that. We only have to rely on one store,” says Nancy George, village administrator for Manokotak.

## Financial Relief is Running Out, Residents Need Assistance

Manokotak was able to access CARES Act funding, allowing the village to provide residents with six to eight months of financial assistance to pay their utility (sewer, water, and electricity) bills. However, these funds are almost gone, and unemployment is high. In Manokotak’s census area, the November 2020 unemployment rate was about 9%, down from 10% in June 2020. **Residents need additional assistance as soon as possible, especially through the winter months, when unemployment is the highest.**<sup>6</sup> The village collaborates with the community to support residents that need assistance paying their utilities through the sharing of water and mutual aid donations.

## The Manokotak Water System Faces Many Challenges Because of the Pandemic

The two water systems have enough revenue to maintain operations, but both need upgrades that have been delayed due to the pandemic. The village has state grant funding to replace underground pipes, fix leaks, and upgrade their wastewater treatment system. “The pipes are older than I am,” says Nancy George. Most workers for these upgrades, however, are from the lower 48 states and are not allowed into Manokotak until the pandemic subsides. This means necessary maintenance will not be performed until at least Summer 2021, threatening water systems’ ability to provide safe water.

In addition, the two water systems are understaffed. The three operators are on-call all winter (November to February), when most repairs are completed. The Manokotak lead operator has also assisted a smaller neighboring village with their winter water system operations. The village investigated updating their rates to add a fourth operator, but the cost and time involved in training an operator were too large for customers and the village finances. Manokotak has some local options for funding operator training, but the funding is limited and often doesn’t cover the entire program. The operators have been able to access PPE, because the Alaska Municipal League Joint Insurance Association provides hand sanitizer, masks, shields, and some full body suits to employees.<sup>7</sup>

Manokotak reflects the challenges of many small rural communities, including those that have managed to avoid COVID infections but continue to suffer dire financial impacts as a result of the loss of employment and revenue. State and federal support is needed to ensure these communities are able to recover.

*This case study was based on an interview with Nancy George, Administrator for the Village of Manokotak, on January 19th, 2021.*

5 U.S. Environmental Protection Agency, 2021 Safe Drinking Water Information System. [https://enviro.epa.gov/enviro/sdw\\_report\\_v3.first\\_table?pws\\_id=AK2262246&state=AK&source=Ground%20water&population=215&sys\\_num=0](https://enviro.epa.gov/enviro/sdw_report_v3.first_table?pws_id=AK2262246&state=AK&source=Ground%20water&population=215&sys_num=0)

6 Alaska Department of Labor and Workforce Development, Research and Analysis Section. n.d. “Annual Unemployment Rates for Dillingham Census Area and Alaska 2010 to 2019.” Data & Tools. Accessed February 1, 2021. <https://live.laborstats.alaska.gov/labforce/labdata.cfm?s=9&a=0>.

7 “Alaska Municipal League Joint Insurance Association.” n.d. Accessed February 1, 2021. <https://www.amljia.org/>.

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