

# Rural Alaska Sanitation Infrastructure At Risk To A Changing Climate



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# Current Water and Sewer Infrastructure in Rural Alaska

- n 200 communities or 81% of the 247 communities in rural Alaska have water and sewer systems
- n 89% of the homes in rural Alaska are served by these systems
- n 47 communities or 19% of the 247 communities are "unserved", i.e. not served by pipe or closed haul or individual wells/septic. Projects are underway for 18 communities to bring them up to served status. Projects for the other 29 communities have not been funded for various reasons.

# Current Breakdown of Water and Sewer System Types in Rural Alaska

- n Piped – 64%
- n Individual Wells and On Site Septic Systems – 30%
- n Closed Haul – 6%

Several of these systems are in coastal communities that are being impacted by the effects of climate change, i.e. flooding, erosion and thawing permafrost.

# How Vulnerable Is Water and Sewer Infrastructure to Climate Change?

- n Water and sewer infrastructure is perhaps the most vulnerable of all types of infrastructure to climate change because of the importance of water to human health, the economy and the environment.
- n Since sanitation is necessary to prevent the spread of disease, water and sewer infrastructure is one of the most critical types of infrastructure.

# Climate Change Challenge

Protecting the existing and future infrastructure assets or investments from climate change impacts by:

- n Prevention – “prevent” damage to existing infrastructure that are at significant risk and imminent.
- n Adaptation – “adapt” infrastructure from climate change effects by identifying sustainable solutions that reduce or eliminate the risks

# Thank You

