

Alaska Department of Environmental Conservation Village Safe Water Program

The Alaskans We Serve

Rural Alaska is characterized by over 280 isolated villages scattered across an area more than twice the size of Texas. Populations in these communities are predominately Native and range between 25 and 6,000 residents, averaging about 300 residents per village. Nearly all villages are accessible by air and water only. Most residents practice a blended subsistence lifestyle and depend heavily on moose, caribou, walrus, whale, seal and fish for their food supply. Unemployment rates frequently exceed 50%. Many of these communities lack a safe source of drinking water or a safe means of sewage disposal – The Village Safe Water Program (VSW) is working to change this. As one of the three Facility Programs established within the Department of Environmental Conservation, Division of Water, the role of the VSW program is to work with rural communities to develop sustainable sanitation facilities.

How the Program Works

Communities apply each year to VSW for grants for sanitation projects. The applications are scored, based heavily on the proposed project's ability to address assessed critical public health needs, as well as the communities' demonstrated capacity to operate and maintain the facilities. Grants are awarded for the highest ranking projects. Federal and state funding for this program is administered and managed by the State of Alaska's Village Safe Water (VSW) program. VSW provides technical and financial support to Alaska's smallest communities to design and construct water and wastewater systems. VSW works directly with community officials to make sure that planning results in facilities that are appropriate for each community, that facilities are properly and efficiently constructed, and that state and federal grant funds are used effectively and efficiently. In some cases, funding is awarded by VSW through the Alaska Native Tribal Health Consortium, who in turn assist communities in design and construct of sanitation projects.

Focus on Local Capacity

Local capacity is a vital component of developing sustainable sanitation systems throughout rural Alaska. Construction is only approved once

The role of the Village Safe Water Program is to work with rural communities to develop sustainable sanitation facilities.

communities have met agreed upon performance criteria and have demonstrated the capacity to operate and manage sanitation facilities. Although local capacity requirements may occasionally delay construction, they are an essential element of a comprehensive statewide sanitation plan.

Progress to Date

Appropriations through EPA and USDA coupled with state funding have resulted in substantial improvements in the health, safety, and well-being of thousands of Alaskans. In 1994 only 37% of rural Alaska households had adequate sanitation facilities. Today, 77% of rural Alaskan homes have running water and flush toilets.

With federal and state support, the percentage of rural households with basic sanitation services has increased by over 30% over the past decade. Similarly, there has been a significant increase in the number of trained rural utility operators, clerks, and managers.

Types of Systems Used in Alaska

Climate, physical conditions, population density, community capacity, capital costs, operation/maintenance costs, and regulations are among the factors that must be considered in determining the type of system best suited to a particular community.

The types of systems built with assistance through the VSW program include:

- 'washeterias': centrally located community buildings with flush toilets, drinking water to haul home, and laundry and shower facilities
- septic tanks and wells, and
- piped systems (both above ground and underground)
- tank haul systems: separate holding tanks provide potable water and store wastewater for each home. Haul vehicles and equipment operated by the city fill the water tanks and remove the waste from sewage tanks.

Funding the Village Safe Water Program

Efforts to improve sanitation conditions in rural and Native Alaska began with a modest endevor in the 1960's and 1970's by the Indian Health Service. The State of Alaska became involved in 1972 with the passage of the Village Safe Water Act. Between 1972 and 1994, the state contributed \$300 million to sanitation projects. The U.S. Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) started providing funding in 1994 and 1995 respectively. Since 1994 when the federal/state Rural and Native Alaska Sanitation Development program began, the State has contributed an additional \$240 million to improve rural sanitation conditions and EPA/ USDA together have contributed \$537 million. The funding level this year (federal fiscal year 2005) for the Village Safe Water program is \$45 million through EPA, \$26 million through

Post Construction

Once a project is complete, the community's local governing body takes ownership of the system and is responsible for its ongoing operation, maintenance and management. The Department of Environmental Conservation offers technical support and hands-on training in system operation and maintenance, and the Alaska Department of Commerce, Community and Economic Development offers utility management training and assistance. Together, these programs offer an insurance policy that safeguards sanitation systems by training local residents the necessary skills to properly operate, maintain, and manage their sanitation

Remaining Needs

Sanitation conditions in most Alaska villages have vastly improved. Yet one family in three still does not have access to a sanitary means of sewage disposal or an adequate supply of safe drinking water in their homes. For members of these families, buckets or pit privies are the only methods for disposing of human waste, and water must be hauled by individuals from community watering points or untreated sources such as creeks or rivers.

Every year, an assessment of the sanitation needs of Native Americans across the country is completed for the Indian Health Service. According to this assessment, the estimated total sanitation need of Alaska's 220 Native Villages is \$565 million. This assessment does not include the needs of 65 rural Alaska villages that are non-Native.

Contacts

For more information visit our website at: http://www.dec.state.ak.us/water/vsw/index.htm

VSW Progam 555 Cordova Street Anchorage, Alaska 99501 (907) 269-7613