



Borough Assembly

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Brent Johnson
President

KENAI PENINSULA BOROUGH'S CAPITAL PROJECTS CONGRESSIONAL PRIORITIES LIST FOR FISCAL YEAR 2024

The approved capital projects list requesting Congressionally Directed Spending for priority infrastructure needs is as follows:

1. Seward Bear Creek Flood Service Area Flood Mitigation Projects:

These flood mitigation projects include five different project needs that, together, would mitigate flooding and reduce potential flood points and create long term solutions for those residents in the Seward, Bear Creek, and Lowell Point communities.

2. South Peninsula Hospital Site and Facility Rehabilitation Project:

The Kenai Peninsula Borough South Peninsula Hospital Service Area South Peninsula Hospital Site and Facility Rehabilitation will Renovate and Rehabilitate the existing hospital facilities, build a new power plant and generator, expand the existing campus, and consolidate all services on campus.

3. Central Peninsula Landfill Gas Collection System Project:

The Kenai Peninsula Borough Central Peninsula Landfill will construct a gas collection system to provide sustainable energy resources for the landfill and the community now and into the future.

Encl.

- Project Information sheets (5 pages)



Kenai Peninsula Borough-Seward Bear Creek Flood Service Area Flood Mitigation Project Federal Share \$7,083,735

Kenai Peninsula Borough
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–Project Information

Project Purpose

There are several flood service area improvements that are identified in the Seward Bear Creek Flood Service area located within the Kenai Peninsula Borough. These improvements include, but are not limited to, Japanese Creek Drainage Improvements, Bruno Road Armoring and Drainage Improvements, Box Canyon Creek Water Diversion Structure Improvements, Tiehacker Bank Stabilization, and Sediment Extraction. Seward Bear Creek Flood Service Area project needs are:

1. The Kenai Peninsula Borough worked with the U.S. Army Corps of Engineers (USACE) to complete a feasibility study of the Japanese Creek Floodplain. The USACE provided cost estimates, and recommendations to correct the issues noted within Japanese Creek. These recommendations and costs include road modifications, a debris basin, and an early warning system to ensure that residents are notified of potential flooding.
2. In the Questawoods subdivision, there is a 2,600-foot-long gravel embankment with an assessed value of over \$36.5 million. Recent storm events have caused floodwaters to rapidly erode existing gravel berms, which undermined the adjacent road and caused damage to the existing infrastructure and private properties. The only egress for the neighborhood, Bruno Road, had to be closed as a result of the flooding.
3. Box Canyon Creek is a deactivated alluvial fan, with a 2,800 foot gravel embankment maintained by the Kenai Peninsula Borough. There is a neighborhood, Old Exit Glacier subdivision, with an assessed value of \$44 million of Borough, State, and Federal infrastructure that is protected by this water diversion structure. In 2012 there was a major flooding event that eroded the embankment that protects the infrastructure within the Old Exit Glacier neighborhood. The USACE, at the request of the Kenai Peninsula Borough, is planning on completing an initial study of the floodplain during the 2023 fiscal year. Following the study the USACE will continue to the feasibility phase of the Continuing Authorities Program, Section 205 of the 1948 Flood Control Act.
4. Tiehacker Road has had streambank erosion during recent storm events that threaten road and utility infrastructure. Erosion has carved out over 1.4 acres of streambanks since a 2006 flood event. The Borough aims to construct an armored revetment along 440 feet of streambank, backfilling the eroded area to protect the road, utilities, and private properties from flood hazard.
5. Sediment Extraction is a major ongoing need for the flood service area. There are several streambed channels that are maintained by the flood service area to allow for the reduction in floodwaters. An effort to engineer controls and advance the flood service areas efforts to remove sediment in high risk areas of sediment build-up would assist in long term and effective solutions for streambed maintenance.

Project Impact to Alaska

The Seward Bear Creek Flood Service Area provides planning, protection, and mitigation of flooding, sedimentation and erosion hazards in the communities of Seward, Bear Creek, and Lowell Point. These communities provide year-round recreation for Alaska, and provide large economic support for the entire State of Alaska through the city of Seward. Through ensuring that flood mitigation is adequately addressed, economic activity and ongoing logistic supports from Seward's port of entry can continue unhindered during flooding season.

Project Description

The Kenai Peninsula Borough Seward Bear Creek Flood Service Area flood mitigation projects would mitigate flooding and reduce potential flood points and create long term solutions for those residents in the Seward, Bear Creek, and Lowell Point communities.

Project Goals and Results

Project Goals:

1. Implement recommendations of the USACE for Japanese Creek Floodplain
2. Armor the eroding berms in the Questawoods subdivision along the embankment
3. Replace the damaged infrastructure along the alluvial fan in Box Canyon Creek
4. Protect the infrastructure along Tiehacker Road
5. Engineer and establish long term solutions for Sediment Extraction in the Seward Bear Creek Flood Service Area

Project Results

1. Prevention of low-level flooding in residential and local areas
2. Prevention of economic and food supply delivery
3. Prevention of delivery of goods and materials from Seward's Port of Entry
4. Protection of infrastructure
5. Stimulation of the local economy through projects



Kenai Peninsula Borough-South Kenai Peninsula Hospital Service Area-South Peninsula Hospital Site and Facility Rehabilitation
\$21,500,000

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– Project Information

Project Purpose

The Kenai Peninsula Borough owns and provides for the operation of South Peninsula Hospital (SPH) through the South Peninsula Hospital Service Area. SPH is a non-profit entity that was founded in 1956 and serves those who live in the southern communities of the Kenai Peninsula from Ninilchik to Nanwalek, Port Graham, and Seldovia. SPH operates the hospital through an operating agreement with the borough. SPH is a 22-bed acute care critical access hospital with an attached 28-bed skilled nursing/long-term care facility. It provides healthcare services, including acute care, cancer care, home health, family birthing, imaging, sleep center, rehabilitation, surgery, trauma level IV emergency care, and other specialties clinical services utilized by the residents of the service area as well as other Alaskans and seasonal visitors who are within the service area and have an emergent need.

The current facility that houses the SPH has exceeded its useful life expectancy and is currently experiencing failures to existing mechanical, plumbing, roofing, and building envelope systems. Average Age of Plant is a common ratio used in the healthcare industry which determines the age of fixed assets used in a business's operations. The median *Average Age of Plant* for U.S. Hospitals was 10.8 years in 2014. Coincidentally, Hospitals within the lowest quartile of *average age of plant* (0 to 8.13 years) are found to have higher overall performance metrics (1). South Peninsula Hospital's Average Age of Plant as of June 30, 2022 is 15.44 years, placing it in the highest quartile for aging hospitals (14.3+ years).

These failures are disruptive to patient care and cause life safety risks and hazards to the communities the hospital serves. In addition to these failures, the current emergency power plant, which was built in the early 1980s, is in need of a total renovation and relocation. The Center for Medicare and Medicaid Services has cited the facility for several code compliance issues related to the age of the facility and its components as a result of these failures and issues.

A master plan has recently provided for a complete renovation of the existing facility which consolidates all services in one single campus, prioritizes patient care, improves efficiencies, ensures code compliance, and provides for a safer facility for all patients within the hospital. The project ensures the hospital can better serve the entirety of the Southern Peninsula.

Project Impact to Alaska

The South Peninsula Hospital service all of the southern Kenai Peninsula. This includes all remote villages, tribal entities, and communities. The service area includes the communities of Anchor Point, Diamond Ridge, Fox River, Fritz Creek, Halibut Cove, Happy Valley, City of Homer, Kachemak City, Nikolaevsk, and Ninilchik with extended services to Nanwalek, Port Graham, Seldovia, and Seldovia Village Tribe. Through the hospital site and facility rehabilitation project, it will reduce an overall cost to the local community, ensure better life safety services to those in need, provide for better code compliance, and extend the aging infrastructure for many years to come.

Project Description

The Kenai Peninsula Borough South Peninsula Hospital Service Area South Peninsula Hospital Site and Facility Rehabilitation will Renovate and Rehabilitate the existing hospital facilities, build a new power plant and generator, expand the existing campus, and consolidate all services on campus.

Project Goals and Results

Project Goals:

1. Rehabilitate the aging infrastructure to extend the useful life of the facility
2. Correct code compliance issues
3. Expand the facility to ensure all services can be consolidated on campus
4. Build a new power plant and generator to meet the future expectancy of the community for the hospital
5. Correct maintenance needs in plumbing, roof, and mechanical issues
6. Renovate the facility to update and extend the useful life of the facility
7. Where renovation is not fiscally responsibly, demolish and rebuild a new facility.

Project Results

1. Life safety of southern Kenai Peninsula Community and Tribal Entities is increased
2. Hospital Services are expanded
3. Infrastructure of the hospital is extended and expanded
4. Cost of providing services to patients are reduced, thus reducing costs to patients
5. Reduction of cost to operate the hospital to the local taxpayer
6. Economic support for the projects in the local community



Kenai Peninsula Borough-Central Peninsula Landfill Gas Collection System \$5,487,451

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– Project Information

Project Purpose

The Kenai Peninsula Borough's Central Peninsula Landfill (CPL) has been filling municipal solid waste into lined landfill cells beginning in 2006. The cells that have solid waste currently have active gas, and the Borough has installed passive horizontal gas vents through the cells that vent any landfill gas to the atmosphere. A new leachate evaporator is being installed in the CPL that will be capable of using landfill gas and supplementing natural gas usage. There is a cooperative partnership between the Kenai Peninsula Borough and local energy providers to explore projects that utilize surplus energy from waste heat and excess gas to provide sustainable energy to the Borough's residents for generator usage in the concentrator.

The solid waste facility services the entire Kenai Peninsula Borough. All waste is transferred from waste transfer sites to the CPL where it is then transferred to landfill cells. The refuse then creates a resource in methane produced from the degradation process. Currently, the methane is released into the atmosphere, and is wasted. This project will collect the methane gas and utilize it to reduce the cost of operation and forward excess usages to provide sustainable energy to the community and project the environment.

Project Impact to Alaska

This project will impact all of the Kenai Peninsula Borough residents, and the entirety of Alaskans as it is a project that works to reduce emissions into the atmosphere and provide a sustainable energy resource. This project will collect methane gas that is currently released into the atmosphere and utilize it to power the CPL and forward the excess to support the cooperative energy partners for sustainable energy community wide.

Project Description

The Kenai Peninsula Borough Central Peninsula Landfill will construct a gas collection system to provide sustainable energy resources for the landfill and the community now and into the future.

Project Goals and Results

Project Coals:

1. Build a gas collection system
2. Implement and utilize the methane gas to power the central peninsula landfill
3. Forward excess gas usage to the energy providers
4. Provide sustainable energy resources to the community
5. Reduce costs of operation to the taxpayers

Project Results

1. Reduced atmospheric pollution
2. Reduced operational costs to the taxpayer
3. Partnerships between the Borough and cooperative energy providers for sustainable energy
4. Economic stimulation through sustainable energy projects