



**STATE OF ALASKA
ALASKA CLEAN/DRINKING WATER FUND
GREEN PROJECT ASSESSMENT FORM
FOR FUNDING UNDER THE
“American Recovery & Reinvestment Act of 2009”**

Under the “American Recovery & Reinvestment Act of 2009” (ARRA) or Economic Stimulus Funding Act, it is stated that “To the extent there are sufficiently eligible project applications, not less than 20 percent of the funds appropriated herein for the Revolving (loan) funds shall be for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities.” To meet this condition under the Act for administering these funds, DEC is offering a 100% subsidy for projects or their components that meet green infrastructure criteria. This assessment form is provided to document this eligibility or what is termed a “Categorical” or “Business Case” justification, which will be reviewed by DEC for ARRA provisional compliance. A “Categorical” justification will only require the first part of this form to be completed. Also, if concurrence is given, a 100% subsidy will be provided to the project or those eligible project components only. For more information on green infrastructure development, please review the following EPA web site: http://cfpub.epa.gov/npdes/home.cfm?program_id=298

For those projects requiring a “Business Case,” Part 2 will require completion to qualify a “traditional project” as green; justification is broken down into two parts, technical and financial. The technical part should use information from a variety of sources such as maintenance or operation records, engineering studies, project plans or other applicable documentation to identify problems (including any data on water and/or energy inefficiencies) in the existing facility, and that clarifies the technical benefits from the project in water and/or energy efficiency terms. Financial justification needs to show estimated savings to a project based on the technical benefits, and demonstrate that the green component of the project provides a substantial savings and environmental benefit.

For more information and assistance in completing this assessment form, please contact the Municipal Matching Grants & Loans program in Anchorage at 907-269-7673, or in Juneau at 907-465-5300.

GENERAL INFORMATION

Name of Community _____

Address _____

Contact Name _____ Title _____ Telephone (907) _____

PROJECT INFORMATION

Project Name _____ Location _____

Project Type: _____ New Construction _____ Upgrades

_____ Stormwater Infrastructure _____ Energy Efficiency Project

_____ Water Efficiency Project _____ Innovative Environmental Project

Green Project Description: _____

PART 1 – GREEN PROJECT CATEGORY & COSTS

Identify the most appropriate “Green” Clean Water or Drinking Water category project type. Note, any selection with (BC) at the end will require a Business Case demonstration.

ENERGY EFFICIENCY – the use of improved technologies and practices to reduce the energy consumption of water quality projects.

_____ Wastewater/water utility energy audits _____ Clean power for public owned facilities
_____ Leak detection equipment _____ Retrofits/upgrades to pumps & treatment processes (BC)
_____ Replace/rehabilitation of distribution (BC) _____ Other: _____ (BC)

WATER EFFICIENCY – the use of improved technologies and practices to deliver equal or better services with less water.

_____ Water meters _____ Fixture Retrofit _____ Landscape/Irrigation
_____ Graywater or other water recycling _____ Replace/rehabilitation of distribution (BC)
_____ Leak detection equipment _____ OTHER: _____ (BC)

GREEN INFRASTRUCTURE – Practices that manage and treat stormwater and that maintain and restore natural hydrology by infiltrating, evapotranspiring and capturing and using stormwater.

_____ Green Streets _____ Water harvesting and reuse
_____ Porous pavement, bioretention, trees, green roofs, water gardens, constructed wetlands
_____ Hydromodification for riparian buffers, floodplains, and wetlands
_____ Downspout disconnection to remove stormwater from combined sewers and storm sewers
_____ OTHER: _____ (BC)

ENVIRONMENTALLY INNOVATIVE PROJECTS – Demonstrate new/innovative approaches to managing water resources in a more sustainable way. This may include projects that achieve pollution prevention or pollutant removal with reduced costs and projects that foster adaptation of water protection programs and practices to climate change.

_____ Wetland restoration _____ Decentralized wastewater treatment solutions
_____ Water reuse _____ Green stormwater infrastructure _____ Water balance approaches
_____ Adaptation to climate change _____ Integrated water resource management
_____ OTHER: _____ (BC)

PROJECT & GREEN COMPONENT COSTS

	<u>TOTAL PROJECT COSTS</u>	<u>TOTAL "GREEN" COMPONENT COSTS</u>
Administration	\$ _____	\$ _____
Legal	\$ _____	\$ _____
Preliminary Studies/Reports	\$ _____	\$ _____
Engineering Design	\$ _____	\$ _____
Inspection/Surveying/Construction Management	\$ _____	\$ _____
Construction	\$ _____	\$ _____
Equipment	\$ _____	\$ _____
Contingencies	\$ _____	\$ _____
Other _____	\$ _____	\$ _____
Total Costs	\$ _____	\$ _____

PART 2 – PROJECT “BUSINESS CASE” TECHNICAL/FINANCIAL ASSESSMENT

TECHNICAL ANALYSIS OF BENEFITS*

In addition to this form, a supporting technical and financial analysis is required to verify energy and water saving efficiencies for any green component of the project. For green infrastructure and innovative environmental type projects, the analysis should include any applicable efficiency and environmental benefits. DEC does not require a specific format for this analysis, but minimal information should include a detailed cost comparison between conventional and green fixture items, and a short written narrative summary of the analysis and benefits. In addition, the inclusion of any manufactures specification that certifies a fixtures high efficiency rating is highly recommended to receive credit for a green component. Please submit this analysis and other supporting documentation with this form to DEC.

ACHICIEVED EFFICIENCY:

ENERGY COST SAVINGS:

<u>Costs – No Green</u>	<u>Costs – With Green</u>	<u>Cost Savings</u>	<u>Percent</u>
(\$ _____)	- (\$ _____)	= \$ _____	_____ %

WATER SAVINGS: (If Applicable)

<u>No Green</u>	<u>With Green</u>	<u>Water Savings</u>	<u>Percent</u>
(_____ gal.)	- (_____ gal.)	= _____ gal.	_____ %

* Pump systems do not require a full analysis for documenting green project eligibility. However, a copy of each specific eligible pump/system must be submitted to verify efficiency, which at minimum must show the pump/system to be 20% more efficient than a standard/system.

I certify the above information is current and accurate.

Name

Title

Signature

Date

Submit Completed Form to:

Alaska Department of Environmental Conservation
Facility Construction and Operation
555 Cordova Street
Anchorage, AK 99501-2617

City and Borough of Sitka

ACWF 783091

Baranof St Sewer Replacement

	Feet	miles	size	GPD	Year Cost
Old	952	0.180303	6	540.9091	\$342.11
New	952	0.180303	8	54.09091	\$34.21

Yearly Cost

\$2,044,716

1,180,000,000 Gallons.

Delta GPY

177688.6

0.00173281 \$/gal

Savings

\$307.90

Reduction

GPD	GPH	GPS	CFS
486.8182	20.28409	0.338068	0.04519

Lake and lincoln Lift Station							Cost per year
Density	Q	Head	efficiency	HP/Day	KW/Day	KW/YR	
62.4	0.04519	30	0.8	0.123049	0.091758	33.49151	\$0.001771
							\$0.05931

elect rate

Katlian Lift Station							Cost per year
Density	Q	Head	efficiency	HP/Day	KW/Day	KW/YR	
62.4	0.04519	100	0.8	0.410163	0.305859	111.6384	\$0.001508
							\$0.16835

elect rate

The water pipe is being upgraded from 6 inch Ductual Iron to 8 inch HDPE.

The C value will be increased from 100 for the aged DI Pipe to 150 for the 8" HDPE.