

# STATE OF ALASKA ALASKA CLEAN/DRINKING WATER FUND GREEN PROJECT ASSESSMENT FORM

As applicable under the EPA annual capitalization grants provided to the Alaska Clean Water Fund (ACWF) and Alaska Drinking Water Fund (ADWF) loan programs, a portion of funds appropriated shall be for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities." To meet this condition under the federal grant for administering these funds, 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 provisional compliance. 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 City and Borough of Sitka							
Address 100 Lincoln Street							
Sitka AK 99835							
Senior Contact Name David Longtin Title Engineer Telephone (907) 747-1883							
PROJECT INFORMATION							
Project Name Lake & Monastery sewer Location Sitka							
Project Type: New ConstructionX Upgrades							
Stormwater Infrastructure X Energy Efficiency Project							

Green Project Description: The replacement of aging, leaky sewer mains and services with properly bedded PVC C-900 pipe will reduce the amount of lift-station pumping and treatment at the WWTP. The wastewater from this basin flows to the Lincoln Lift Station, is pumped to the Thomsen Lift Station and then to Japonski Lift Station 7 before it enters the WWTP. The Green Project cost estimate includes only the cost of the sewer mains, services and manholes.

# 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.

ENERG quality p	<b>GY EFFICIENCY</b> – the use of improved technologie projects.	s and practices to reduce the er	nergy consumption of water				
	Wastewater/water utility energy audits	_ Clean power for public owner	ed facilities				
	_ Leak detection equipment	_Retrofits/upgrades to pumps &	& treatment processes (BC)				
_X	Replace/rehabilitation of distribution (BC)	Other:	(BC)				
	R 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/rehabilitati	on of distribution (BC)				
	_ Leak detection equipment	OTHER:	(BC)				
	N INFRASTRUCTURE – Practices that manage and gy by infiltrating, evapotranspiring and capturing and		ntain and restore natural				
	Green Streets Water harvesting	g 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	)					
resource	ONMENTALLY INNOVATIVE PROJECTS – Design a more sustainable way. This may include project costs and projects that foster adaptation of water protects.	ts that achieve pollution preve	ntion or pollutant removal with				
	Wetland restoration Decentralized w	astewater treatment solutions					
	Water reuse Green stormwater	er infrastructure W	Vater balance approaches				
	_ Adaptation to climate change Integra	ted water resource managemer	nt				
	OTHER:(BC	)					

#### PROJECT & GREEN COMPONENT COSTS

	TOTAL PROJECT COSTS		TOTAL "GREEN" COMPONENT COSTS	
Administration	\$_	20,000	\$	11,750
Legal	\$_		\$	
Preliminary Studies/Reports	\$_		\$	
Engineering Design	\$	140,000	\$	58,600
Inspection/Surveying/Construction	\$_	50,000	\$	24,000
Management				
Construction	\$_	945,000	\$	390,000
Equipment	\$_		\$	
Contingencies	\$_	95,000	\$	78,000
Other	\$_		\$	
Total Costs	\$_	1,250,000	\$	562,350

# 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. For assisting MGL in evaluating "Business Case" assessments of water main, meter, and pump facility replacement type projects, the attached form titled "ADWF - Water/Energy Efficiency Determination - Water Main Replacement/Meter/Pump Facility" is required to be completed. Once the form is complete along with any supporting documentation, please submit documentation to the MGL program for review and concurrence. Note, only water/energy efficiencies that achieve a 20% or greater increase in efficiency will categorically qualify as a Green project.

#### **CERTIFICATION STATEMENT:**

I certify the above information is current and accurate.

David Longtin	Senior Engineer	
Name	Title	
My	June 16, 2017	
Signature	Date	

Submit Completed Form to:

Alaska Department of Environmental Conservation Municipal Matching Grants & Loans 555 Cordova Street Anchorage, AK 99501-2617