



Waterfall Creek Hydroelectric Project

March 2015

Waterfall Creek will be the second run-of-the-river hydroelectric facility owned and operated by the City of King Cove. This project will consist of a concrete diversion/intake structure, 4,500' HDPE penstock pipeline, 16"x40" metal powerhouse on a concrete slab, Pelton impulse turbine and induction generator, remote-automatic control system, and 5,000' access road. This facility is expected to produce 1 megawatt (MW) of annual energy.

The project is fully designed, permitted, and construction bid ready. The City anticipates project construction this year (2015) with the facility being fully operation by the end of the year. Waterfall Creek, along with our existing Delta Creek hydro facility (constructed in 1994), will produce more than 75% of the City's annual power demand of 5MW.

King Cove's renewable energy status is indeed unique, almost anywhere throughout Alaska. The City's accomplishments will significantly contribute to the State's overall goal of being 50% renewable energy by 2020.

The total project cost estimate is \$6.6million. This is based on a detailed independent cost estimate using the 100% completed engineering design plans. The City's final funding plan for Waterfall Creek is detailed below. Combined State grant (\$4.3 million) and debt funding (\$1.7 million) of \$6.0 million is anticipated for the project.

State – Grant Funding

AEA – Renewable Energy Fund #5	\$ 200,000
AEA – Renewable Energy Fund #6	\$2,600,000
AEA – Renewable Energy Fund #8 ^a	<u>\$1,500,000</u>
	\$4,300,000

State – Debt Funding

Power Project Fund ^b	\$1,200,000
Alaska Municipal Bond Bank ^c	<u>\$500,000</u>
	\$1,700,000

Local – Cash Funding ^d	<u>\$600,000</u>
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Total Project Funding	\$6,600,000
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^a Anticipated FY16 budget

^b Anticipated approval – summer 2015

^c Approved/disbursed – summer 2014

^d Approved combination of cash from City & Aleutians East Borough