

Elfin Cove Hydro

Grantees	Community of Elfin Cove Utility Commission (Utility-Government), Community of Elfin Cove Non-Profit (Non Profit Entity)
Technology Type	HYDRO
Region	Southeast
AEDG Project Code	10247

REF Grants Received

Round	App	Grant Title	Grant #	AEA Project #	Phase	Start Date	End Date	Status
0, 2	-17, 231	Elfin Cove Hydro Assessment	2195343	407015	Feasibility	10/29/08	12/31/11	Active
4	692	Elfin Cove Hydroelectric Project	7040043	407015	Final Design	7/1/11	12/31/16	Active

Grant 2195343: Elfin Cove Hydro Assessment

Project Scope: The project is to prepare a feasibility study of the Crooked Creek diversion to Jim's Lake for a run-of-river hydroelectric project. A site visit, evaluation of various sites for hydroelectric potential, power generation cost, detailed plant and site services design, access, transmission infrastructure, costs, critical issues, and conclusions as to the technical and economic feasibility of the project and recommendations for further studies will be completed, as well as stakeholder meetings, pre-application filings, and stream gauging.

Project Status: The feasibility grant is complete. Deliverables under this phase include the reports "Hydroelectric Reconnaissance Study Elfin Cove, Alaska", dated June 2010, prepared by Polarconsult Alaska and "Crooked Creek and Jim's Lake Hydroelectric Feasibility Study", dated June 2011 and prepared by Polarconsult Alaska.

As of Nov. 30, 2013	Budget	Expenditures
Renewable Energy Funding	\$0.00	\$0.00
Other State Funding	\$99,667.80	\$99,667.80
Total State	\$99,667.80	\$99,667.80
Required Local Match	\$25,000.00	\$25,000.00
Federal Grant Funding	\$99,667.80	\$99,667.80
Total Project Costs	\$124,667.80	\$124,667.80

Grant 7040043: Elfin Cove Hydroelectric Project

Project Scope: The project is to complete permitting and final design of a run-of-river hydroelectric project at Crooked Creek and a second storage hydroelectric project at Jim's Lake to serve the community. Before funds can be expended towards permitting and final design an independent, third party review of the hydro projects evaluated during the reconnaissance and feasibility studies, in regard to population, demand, and feasible project layout, must be completed. Upon completion of review and verification that project should proceed, then the project will move into the permitting and final design phases.

Project Status: The project received a FERC preliminary permit. Field work conducted include bald eagle and wildlife surveys, fisheries survey of Crooked Creek, Jim's Lake and Creek, field validation of LIDAR topography, preliminary wetlands and delineation, evaluation of potential routes for access, penstock, and powerline, flow measurements, and bathymetric survey. The consultant began preparation of preliminary design drawings.

The Grant was extended through 2015 and the grantee met ADNR at the project site in April 2015 as part of the land leasing process. The grantee needs to file a hydrology report, updated development plan, and obtain a fish habitat permit in order to obtain a final decision from ADNR on the lease. The grantee expects to complete that work in October 2015.

As of January 2016 the Community is working with the forest service to establish resource study requirements as part of the FERC licensing process. Permitting, continued hydrology data collection, and preliminary design are targeted for the reporting period.