

Susitna-Watana Hydroelectric Project Document ARLIS Uniform Cover Page

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SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Report to the Legislature

2012

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"I am committed to expanding and diversifying Alaska's economy and to unlocking Alaska's energy resources for Alaskans' benefit. One cornerstone of a long-term and comprehensive energy strategy is Susitna-Watana Hydro."

Gov. Sean Parnell

LETTER FROM THE EXECUTIVE DIRECTOR

A year ago, the Alaska Energy Authority filed its Pre-Application Document with the Federal Energy Regulatory Commission, which officially kicked off the licensing process for Susitna-Watana Hydro. I am proud of our entire project team and their many accomplishments this past year. Their work is helping to bring the benefits of Susitna-Watana Hydro closer to reality for Alaska.

For the first time since the 1980s, field studies were conducted to gather additional data. Eighteen studies were conducted with the help of more than 100 fieldworkers in a variety of disciplines. From geology to wildlife, water and ice characteristics to fish and more, this early field season was a success. Detailed results are being compiled, but preliminary analysis supports many of the findings from previous studies in the 1980s.

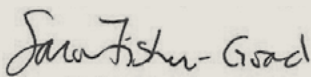
Weather conditions this past year also allowed the project teams to observe a wide variety of naturally occurring river conditions, including extreme snow and ice conditions in the Spring, and high water and flow rates during the September flooding situations along the river system. This variety was helpful as it provided a range of conditions typically not scene over the course of one year.

While the field teams gathered information, the project leads worked tirelessly on developing a Proposed Study Plan that includes 58 studies to be conducted during the next two years. Working with other agencies and stakeholders, the team conducted many technical workgroup meetings to revise the plan in time to submit a final Revised Study Plan to the Federal Energy Regulatory Commission (FERC) in December. That plan is now being reviewed and we anticipate a decision by FERC in the coming weeks.

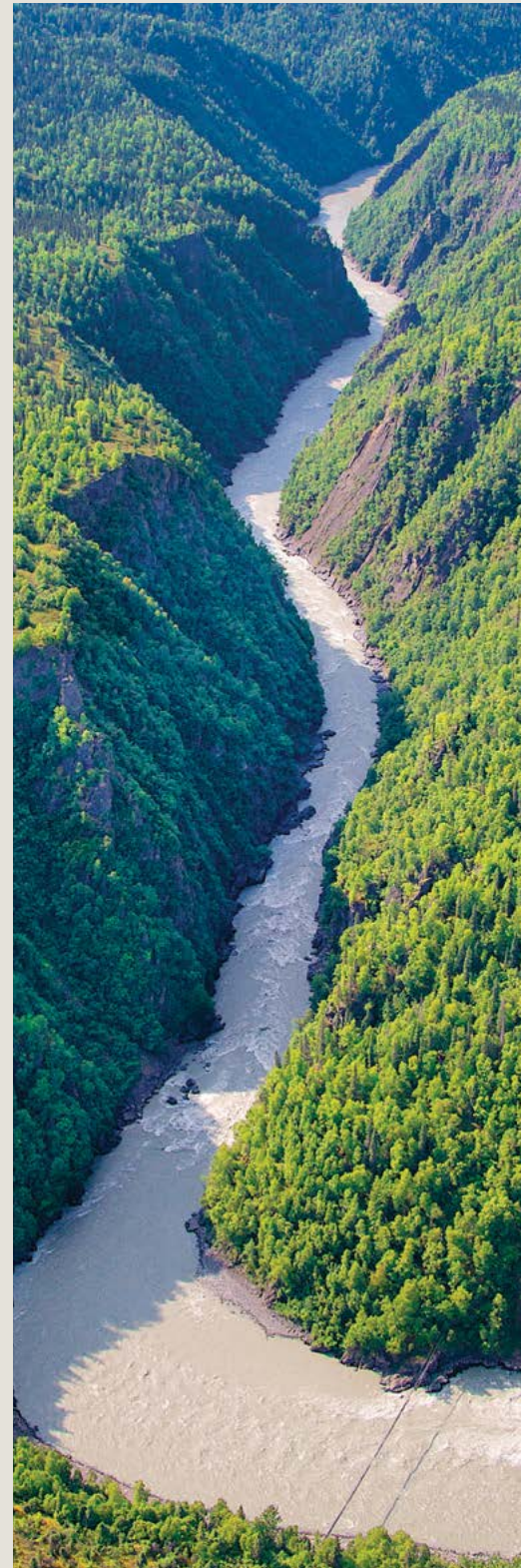
Our goal for 2013 is to implement the study plan and continue moving forward towards a license to build. We also plan to continue educating the public about the project and its benefits to businesses and residents from Fairbanks to Homer.

This report provides an overview of activities during the past year. We welcome any questions and comments, and look forward to working with legislators and the administration as we make progress in providing solutions to Alaska's energy challenges.

Sincerely,



Sara Fisher-Goad
Executive Director
Alaska Energy Authority





WATER

POWER

For more than a century, Alaskans have harnessed power from water. Today, hydropower – from nearly forty separate projects - supplies 21 percent of all the electricity generated in Alaska.

In the context of all renewable energy generated statewide, hydro makes up about 90 percent. Wind, solar, geothermal and other renewable sources combined provide the balance.

Nationally, hydropower accounts for 7 percent of all electricity generated and more than 65 percent of renewable energy sources. Regions with high concentrations of hydropower generation typically enjoy lower - and more stable - power costs compared with traditionally fueled communities.

With more than 3,000 rivers and waterways, Alaska is well-positioned to continue taking advantage of the benefits of hydropower for generations to come.

2012 FOCUS: Public Outreach • Early Field Studies • Study Planning • Stakeholder Collaboration



2012 KEY ACCOMPLISHMENTS



Licensing Progress

Public scoping meetings were held in several communities as part of the FERC licensing process. AEA attended each of these meetings to hear feedback from the public and other stakeholders. Communities visited includes: Anchorage, Wasilla, Glennallen, Talkeetna, Cantwell and Fairbanks.

Study Plan

A significant amount of the 2012 effort was spent developing a study plan for the project. The plan is a key part of the licensing process and outlines the studies that will be conducted to provide a better understanding of the Susitna Basin. The Proposed Study Plan was submitted to FERC in July and includes 58 studies. AEA conducted technical workgroup meetings to collaborate further with stakeholders on the proposed studies. In December, AEA submitted a Revised Study Plan for FERC approval.

Engineering

Engineering work for Susitna-Watana Hydro continues to progress. During 2012, the project team increased the proposed height of the dam to optimize power production and increase valuable winter storage of water. Additional engineering achievements include:

- Progress refining engineering
- Brought on independent board of consultants
- Identified three potential access and transmission routes and worked with Alaska Department of Transportation and Public Facilities on a high-level analysis

Fieldwork

2012 was a milestone year in many ways for Susitna-Watana Hydro. More than 100 field workers were able to conduct 18 initial studies that will provide valuable data to add to additional information gathered in the 1980s and future data obtained via the environmental field program.

Independent Cost Estimate

AEA requested an independent cost estimate for Susitna-Watana Hydro to provide a higher degree of confidence to stakeholders about anticipated costs. Results of this study were within nine percent of the original estimate, which is considered to be positive for a project of this scope.

Buy Alaska

Worked with vendors to establish a mechanism to track Alaska-based employment and spending.

Stakeholder Engagement

AEA is committed to working with stakeholders to address their questions and concerns about the project. The project team has adopted an "open, accurate and collaborative" approach to managing stakeholder expectations and providing information to the public, other agencies and a variety of stakeholders.

An Alaska Native outreach liaison is a key member of the project team and helps to engage Alaska Native communities and corporations about the project. AEA also implemented a public outreach program to help educate Alaskans about the project. Public outreach included:

- More than 20 community visits
- Roughly 50 stakeholder and technical workgroup meetings
- About 75 community presentations
- Initial meetings and conversations with Alaska Native landowners
- A new project website to more effectively communicate with Alaskans and stakeholders

Staffing

AEA has a world-class, experienced team and continues to add resources as needed to make sure the project is managed and developed effectively and efficiently. During 2012, the team added a project economist, environmental technician, and licensing and permitting manager.

Susitna-Watana Hydro PROJECT

AT A GLANCE & MAP

Location:

River mile 184, above
Devils Canyon

Installed Capacity:

600 MW

Size:

735-foot high dam

Annual Energy:

2,800,000 MWh

Reservoir:

About 42-miles long,
average width of 1 mile

Licensing:

Federal Energy Regulatory
Commission (FERC)

Estimated Supply:

About 50 percent of Railbelt
electrical demand

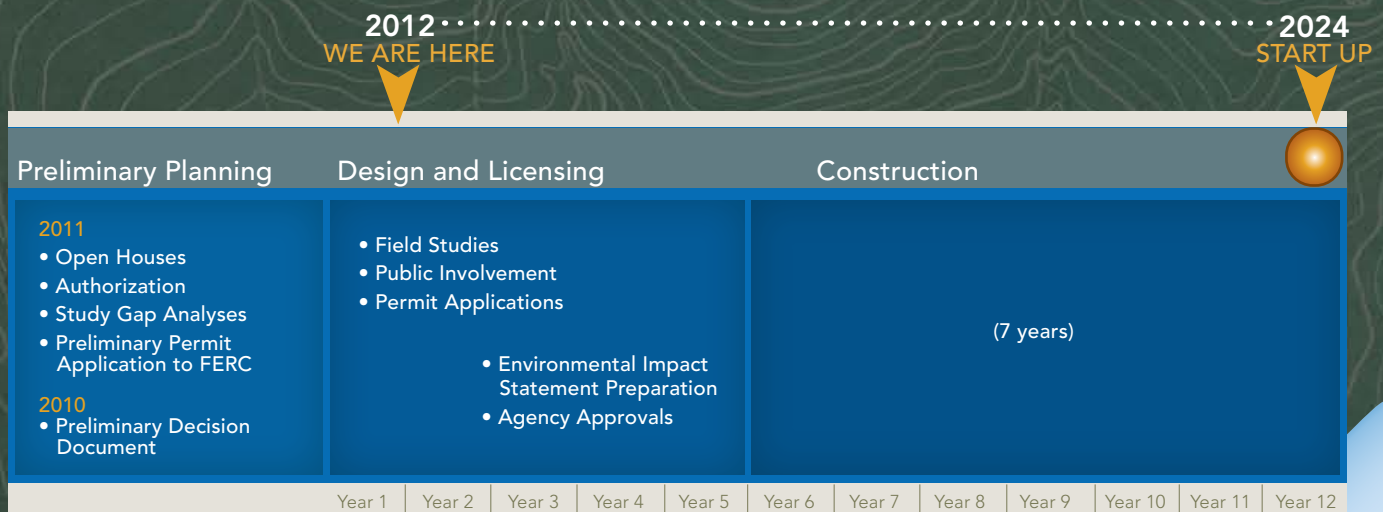
Project Life:

100+ years, providing
long-term, stable rates

Cost:

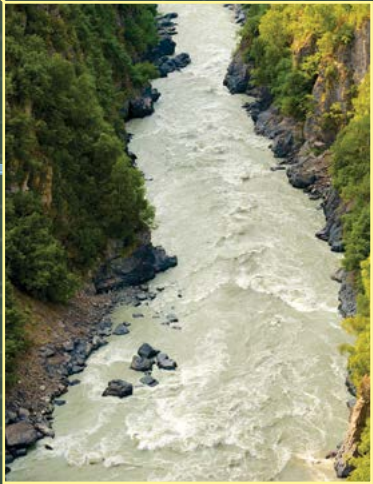
\$5.19 Billion

TIMELINE





DEVILS CANYON
22 to 32 River
Miles Downstream



Devils Canyon, a natural fish barrier



PROPOSED STUDY PLAN



Betsy McGregor Environmental Manager

Betsy McGregor has more than 20 years experience as a fisheries biologist and environmental consultant. She brings an extensive background in hydropower projects across the U.S., including FERC relicensing efforts and compliance with the National Environmental Protection Act, the Endangered Species Act and the Clean Water Act.

Betsy has served on projects as the lead field biologist and task manager for numerous salmonid migration studies; aquatic and terrestrial habitat assessments; species inventories; rare, threatened and engendered species surveys; wetland delineations and hydrogeomorphic functional assessments.

She has a bachelor's in wildlife science from Purdue University.

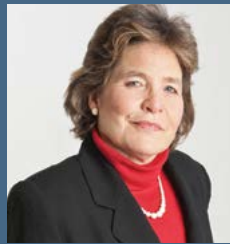
Studying 186,000 Acres

The Federal Energy and Regulatory Commission (FERC) is responsible for issuing the necessary license to build and operate Susitna-Watana Hydro. It is up to the license applicant to demonstrate the feasibility of a project. FERC's regulations include the following provision for conducting studies:

Before the Commission can make an informed decision on a license application, it must obtain adequate information on the resources the project affects, such as soils, water quality, fish and wildlife, cultural, recreation, aesthetics, land use, and tribal resources. To obtain this information, it may be necessary for the applicant to conduct studies to assess these effects so a range of potential protection, mitigation, and enhancement measures can be explored. The Integrated Licensing Process (ILP), developed in consultation with the hydro industry, state and federal agencies, tribes, and non-governmental organizations (NGO), is designed to ensure that the information needs are known before a license application is filed through a Commission-approved study plan.

The state conducted extensive studies during the 1980s under the Alaska Power Authority while the state was previously pursuing a FERC license. These studies have provided the current team with more than 3,000 study documents that form the basis for the new study plan and licensing effort.

The Alaska Energy Authority worked closely with a number of state and federal agencies – and other stateholders – in drafting the proposed study plan submitted to FERC in December. Out of 59 study requests made by various stakeholders, 58 have been incorporated into the plan.



Julia Bosma
Licensing and Permitting Manager

Julia Bosma has more than 20 years of experience in environmental permitting and regulatory compliance in the Western U.S. She has a broad understanding of the permitting and regulatory requirements for developing natural resource projects on state, Federal and private lands.

She has worked to implement the National Environmental Policy Act (NEPA) process for a variety of resource development and infrastructure projects to develop environmental baseline studies and on wetlands permitting under the Corps of Engineers. Her extensive background includes obtaining a variety of required permits and approvals for mining projects and mineral explorations, power plants, permitting timber sales for the U.S. Forest Service, highways, a gas pipeline, transmission, rail and other projects.

Julia has a bachelor's degree in geology from the University of Washington and a master's in geology from the Mackay School of Mines at the University of Nevada, Reno.



The project site is remote and inaccessible by road. Helicopters are the most efficient way to transport fieldworkers and equipment to the project site and surrounding areas. One base camp was established about 20 miles away at Stephan Lake.



During the 2012 field season, core sampling was conducted at the project site. Core samples are meticulously documented, analyzed and stored.



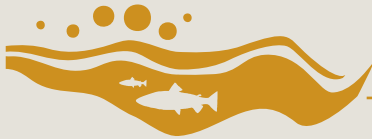
STUDY PLAN AT-A-GLANCE



Geology & Soils

The Alaska Energy Authority plans to conduct a study to define the geologic, geotechnical, seismic and foundation conditions at the sites of project works.

- Geology & Soils Characterization Study



Instream Flow Studies:

Fish Aquatics & Riparian Areas

The Alaska Energy Authority plans to study hydrology characteristics and its relations with fish and aquatic biota and their habitats.

- Fish and Aquatics Instream Flow Study
- Riparian Instream Flow Study

Water Resources

The Alaska Energy Authority plans to have studies conducted to characterize and evaluate any potential effects to the water quality of the Susitna River.

- Baseline Water Quality Study
- Water Quality Modeling Study
- Mercury Assessment and Potential for Bioaccumulation Study
- Groundwater-related Aquatic Habitat Study
- Geomorphology Study
- Fluvial Geomorphology Modeling below Watana Dam Study
- Ice Processes in the Susitna River Dam Study
- Glacial and Runoff Changes Study

Fish & Aquatic Resources

The Alaska Energy Authority plans to conduct dozens of studies to better understand the Susitna River fish populations.

- Fish Distribution and Abundance in the Upper Susitna River
- Fish Distribution and Abundance in the Middle and Lower Susitna River
- Salmon Escapement Study
- River Productivity Study
- Characterization of Aquatic Habitats in the Susitna River with Potential to be Affected by the Susitna-Watana Project
- The Future Watana Reservoir Fish Community and Risk of Entrainment Study
- Study of Fish Passage at Watana Dam
- Study of Fish Passage Barriers in the Middle and Upper Susitna River and Susitna Tributaries
- Aquatic Resources Study within the Access Alignment, Transmission Alignment and Construction Area
- Genetic Baseline Study for Selected Fish Species
- Analysis of Fish Harvest in and Downstream of the Susitna-Watana Hydroelectric Project Area
- Eulachon Distribution and Abundance in the Susitna River
- Cook Inlet Beluga Whale Study



Botanical Resources

The Alaska Energy Authority plans to collect necessary baseline data to evaluate the potential impacts to vegetation, wildlife habitat, wetland and vascular-plant resources in the project area.

- Vegetation & Wildlife Habitat Mapping Study
- Riparian Study
- Wetland Mapping Study
- Rare Plant Study
- Invasive Plant Study





Wildlife Resources

The Alaska Energy Authority plans to study distribution, movements, population size, productivity and habitat of wildlife in the Susitna River and surrounding area.

- Study of Distribution, Abundance, Productivity and Survival of Moose
- Study of Distribution, Abundance, Movements and Productivity of Caribou
- Study of Distribution, Abundance and Habitat Use of Dalls Sheep
- Study of Distribution, Abundance and Habitat Use by Large Carnivores
- Study of Distribution and Abundance of Wolverines
- Study of Terrestrial Furbearer Abundance and Habitat Use
- Study of Aquatic Furbearer Abundance and Habitat Use
- Study of Species Composition and Habitat Use of Small Mammals
- Study of Distribution and Habitat Use of Little Brown Bat
- Survey Study of Eagles and Other Raptors
- Waterbird Migration, Breeding and Habitat Study
- Breeding Survey Study of Landbirds and Shorebirds
- Study of Population Ecology of Willow Ptarmigan in Game Management Unit 13, Southcentral Alaska
- Study of Distribution and Habitat Use of Wood Frogs
- Evaluation of Wildlife Habitat Use Study
- Wildlife Harvest Analysis Study



Recreation & Aesthetic Resources

The Alaska Energy Authority plans to conduct several studies in order to document baseline conditions and help assess potential impacts on recreation and aesthetic resources from construction and operation of the proposed Susitna-Watana Hydro Project.

- Recreation Resources Study
- Aesthetics Resources Study
- Recreation Boating/River Access Study

Cultural & Paleontological Resources

The Alaska Energy Authority plans to conduct studies that will be used to assist in identifying appropriate protection, mitigation and enhancement measures of cultural resources.

- Cultural Resources Study
- Paleontological Resources Study



Subsistence Resources

The Alaska Energy Authority will conduct subsistence studies to document traditional and contemporary subsistence harvest and use and to collect baseline data to facilitate the assessment of potential impacts.

- Subsistence Baseline Documentation Study

Socioeconomic and Transportation Resource

The Alaska Energy Authority will conduct a study that will address evaluation of regional economic effects as well as effects on social conditions and public goods and services.

- Regional Economic Evaluation Study
- Social Conditions and Public Goods and Services Study
- Transportation Resources Study
- Health Impact Assessment Study
- Air Quality Study

Project Safety

The Alaska Energy Authority will conduct studies to assess the stability of project facilities during flood conditions and to estimate earthquake ground motion parameters.

- Probable Maximum Flood Study
- Site -Specific Seismic Hazard Study

An aerial photograph of a river campsite. A gravel bar is situated in the middle of a river, with several tents (white, yellow, and orange) pitched on it. The river flows around the bar, and the surrounding area is densely forested with green trees. The year '2012' is written in white text above the word 'FIELD STUDIES', which is in large, bold, white capital letters.

2012 FIELD STUDIES

The Alaska Energy Authority completed a successful field study season in 2012 with the help of more than 100 field workers. The data gathered from 18 individual studies goes above and beyond the official Revised Study Plan submitted to FERC in December.

The 2012 studies involved the following areas of focus:

AESTHETIC AND RECREATION RESOURCES

The study objectives for the 2012 Recreation and Aesthetics Program focus on the identification, collection, and synthesis of recreation and aesthetic resource information that will inform the formal study planning process. Information will also be used to guide Project design and mitigation of construction, operation and maintenance activities to minimize impacts. Coordination across social resources (e.g., cultural, subsistence, and socioeconomic) from the study's outset is an essential component of the program.

2012 AQUATIC HABITAT AND GEOMORPHIC MAPPING OF THE MIDDLE RIVER USING AERIAL PHOTOGRAPHY

Understanding the extent to which current (2012) aquatic habitat and geomorphic features are similar to or different from 1980s conditions will not only provide information on the long-term equilibrium of the channel, but will also help inform the extent to which other datasets collected in the 1980s can be relied upon to describe and supplement more recent aquatic habitat

and geomorphic data. Quantifying geomorphic features and aquatic habitat types will also provide a basis for selecting study sites, understanding flow versus habitat relationships, and assessing geomorphic conditions.

2012 DOCUMENTATION OF SUSITNA RIVER ICE BREAK-UP AND FORMATION

The purpose of this study is to document the timing and progression of breakup and ice cover formation on the Susitna River between RM 0 and RM 234 (Oshetna River confluence). The study team will:

- Document open leads between RM 0 and RM 234 throughout the winter.
- Document the interaction between river ice processes and channel morphology, vegetation, and aquatic habitats.
- Provide baseline data to help identify the river reaches most likely to experience changes in river ice formation as a result of Project construction and operation.

2012 RECONNAISSANCE-LEVEL GEOMORPHIC AND AQUATIC HABITAT ASSESSMENT OF PROJECT EFFECTS ON LOWER RIVER CHANNEL

The objective of this study is to assess at a reconnaissance level the potential for the project to affect aquatic habitat and channel morphology in the Lower Susitna River.

STUDYING FISH POPULATIONS, SALMON DISTRIBUTION & HABITAT UTILIZATION

During 2012, AEA conducted studies to learn more about fish and adult salmon in the Susitna River system. One of the studies aimed at consolidating and synthesizing contemporary and historical fish-resource data within the study area into a concise, comprehensive reference document and developing a geospatially-referenced relational database.

AEA also began a multi-year effort with the Alaska Department of Fish & Game to study the Susitna River, side channels and sloughs, to better understand the distribution, abundance and spawning habitat of salmon. Key objectives of these studies include:

- Capture, radio-tag and track adults from five species of Pacific salmon in the middle Susitna River in proportion to their abundance.
- Determine the migration behavior and spawning locations of radio-tagged fish in the Lower, Middle and Upper Susitna River.
- Assess the feasibility of using sonar to determine spawning locations in turbid water.
- Locate individual holding and spawning salmon in clear and turbid water and collect habitat data for instream flow modeling.
- Characterize salmon migration behavior and timing above Devils Canyon.



2012 REVIEW OF EXISTING WATER TEMPERATURE MODEL RESULTS AND DATA COLLECTION

The objective of this Study is to provide a foundation for the 2013-2014 water temperature modeling study of reservoir and stream temperatures. The specific objectives are as follows:

- Evaluate the 1980s water temperature model results and determine the applicability of the past results to the currently proposed project.
- Initiate collection of stream temperature and meteorological data that will be needed for the 2013 and 2014 studies.

2012 RIVER FLOW ROUTING MODEL DATA COLLECTION

The study objective for the 2012 field effort is to provide input, calibration, and verification data for a river flow routing model extending from the proposed dam site to RM 75.

2012 CULTURAL RESOURCES STUDY PLAN

The cultural resources study objectives are designed primarily to continue laying the foundation of information to enable the applicant and lead federal agency to meet the requirements of National Historic Preservation Act (NHPA) and its accompanying regulations (36 CFR 800), and other pertinent federal and State laws and regulations. The major objectives for 2012 work are as follows:

- Create GIS database to help enable development of predictive models and management of cultural resources information for 2013-2014 studies.
- Develop predictive model, identifying areas of high, medium and low potential for the occurrence of cultural resources.
- Continue to identify and document cultural resources within the project study area, building upon work done between 1978-1985.
- Prepare plans and procedures addressing unanticipated discoveries of cultural resources, human remains and paleontological resources.

— INVESTING IN RENEWABLE — ENERGY

OUR GOAL

Long-term, stable rates for Alaskans



Nick Szymoniak
Project Economist

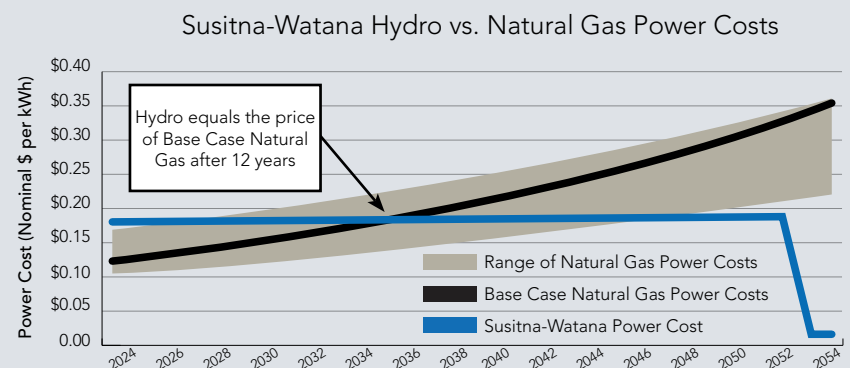
Nick Szymoniak has experience in economics with a strong background in energy. Prior to joining the Alaska Energy Authority, he served as a research analyst for the Institute of Social and Economic Research and gas supply analyst with ENSTAR Natural Gas. He also previously interned with Northern Economics and the Alaska Energy Authority.

Nick has lived in Alaska for 29 years and received a bachelor's in economics from the University of Alaska Anchorage. He is working on his master's in business administration from UAA. He is the president of the Anchorage Association for Energy Economics.

Hydroelectric power is a long-term investment and Susitna-Watana Hydro can be a vital piece of Alaska's energy infrastructure.

Alaska remains dependent on volatile-priced fossil fuels for both electricity and heat, resulting in a large degree of economic uncertainty. In Alaska's interior, utility costs are higher than any major U.S. metropolitan center.¹ Hydroelectric power reduces electric- price uncertainty and provides long-term and stable power for many decades. In fact, Susitna-Watana Hydro's project life can stretch a century or beyond, reducing Alaska's Railbelt's exposure to changing fossil fuel prices.

The cost of power from Susitna-Watana Hydro is anticipated to be competitive with other fuel sources at start-up, even with no direct State investment. The true, long-term benefits of the project become a reality a little after a decade from construction when Susitna-Watana Hydro is anticipated to become one of the most economic fuel sources, even compared to natural gas.



¹ The Council for Community and Economic Research surveyed 314 cities and found Fairbanks paid nearly double the national average.

PROJECT ECONOMICS

The Alaska Energy Authority is committed to providing accurate information, including project cost and economics.

The current cost estimate, based on the 2,800,000 mwh annual energy production is \$5.19 billion. This estimate was produced by MWH, a global leader in developing hydroelectric projects. AEA is confident that this cost estimate, which accounts for project cost risk, is accurate within 25 percent of the final price.

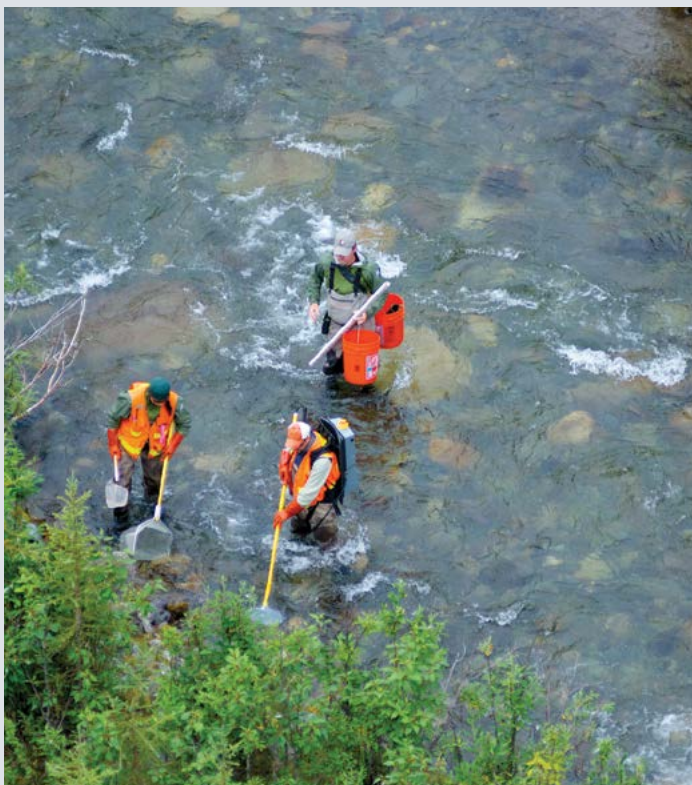
In 2012, AEA initiated an independent cost estimate from AECOM, a firm experienced in the construction of hydroelectric projects in Arctic climates. Their estimate came within nine percent of the original estimate, an impressive statistic for a project of this size. In addition, the independent cost estimate provided valuable recommendations to increase efficiencies and bolstered confidence in the overall project cost estimate.

The finance plan is an important component of developing a project of this scale. There are multiple financing options for the State of Alaska and the Alaska Energy Authority will be working to bring on a financial consulting team in the near future. At this time, AEA is estimating the project's power cost using the most conservative of financial assumptions. AEA is assuming no State direct investment, a five percent interest rate and a 30-year debt term.

The chart below uses these assumptions and describes the cost of power per kilowatt hour (kWh), in wholesale rates:

| POWER COSTS | (\$/kWh) |
|--------------------------------|----------|
| Year 1 Rate (\$2024) | \$0.181 |
| Year 1 Rate (\$2013 Real) | \$0.138 |
| 10-Year Avg Rate (\$2013 Real) | \$0.124 |
| 25-Year Avg Rate (\$2013 Real) | \$0.106 |
| 50-Year Avg Rate (\$2013 Real) | \$0.061 |

Real = Adjusted for Inflation
• Assumes no direct state investment



Bryan Carey Engineering Manager

In addition to heading the engineering for Susitna-Watana Hydro, Bryan Carey is also the project manager for AEA's Bradley Lake Hydroelectric Project, currently the largest hydro project in Alaska, and the Snettisham Hydroelectric Project which is owned by the Alaska Industrial Export Development Authority. He has more than 25 years of engineering experience.

Bryan has been the project manager for various rural-Alaska energy projects that include bulk fuel facilities, power plants and small wind and hydroelectric projects. Prior to AEA, he worked with several engineering consulting companies, performing energy and environmental work throughout the state.

HISTORY

OF

First studies to determine
Susitna River's hydroelectric potential
conducted by U.S. Bureau of Reclamation.

1950s



Oil prices decline in Alaska
causing a financial burden on the
State budget. APA withdraws
the FERC application despite
concluding that project impacts
were manageable.

1980s

1970s

Studies from the 50s reviewed by the U.S. Army Corps of
Engineers. Field work, biological studies, and activities to support
FERC license application happen through the late 70s.

AEA reevaluates Susitna's
hydroelectric potential

2009

2008

AEA Authorized to
reevaluate Susitna
River potential



2011

Alaska Legislature
UNANIMOUSLY
approves funding to
pursue Susitna-Watana
Hydroelectric Project.

50%

2010

Alaska State Energy Policy created
by Alaska State Legislature. This
moves Alaska toward 50% of power
from renewable energy resources
by 2025.

2012

Official Study Plan submitted to the
Federal Energy Regulatory Commission (FERC)

2012

Studies begin on Susitna
River and surrounding areas

2012 - 2015

Field studies, public
involvement and
license application



Environmental Impact
Statement Preparation
and agency approvals

2015

2016

construction of Project begins

2017

2017



Licensing decision expected

2024

Project Completion

SUSITNA-WATANA HYDRO



The Susitna River has long been considered for its hydropower potential. Fed by the Susitna Glacier 2,500 feet up in the Alaska Range, the river is 313 miles long, culminating at Cook Inlet. It is ranked the 15th largest river in America, based on the volume of water discharged at its mouth, by the U.S. Geological Survey.

Dozens of other rivers, creeks and tributaries empty into the Susitna River. Among them are the Deshka, Yentna, Talkeetna and Chulitna rivers. Watana Creek is a stream that runs into the Susitna River near River Mile 190, about six miles upriver from the project site.

Different study efforts over nearly six decades have provided a foundation of data that is helping to guide current plans. During the next few years, the Alaska Energy Authority will gather the necessary data to obtain a FERC license, potentially making Susitna-Watana Hydro a reality.



OUR GOAL

Safe, efficient progress to obtain a license to build



Wayne Dyok
Project Manager

Wayne Dyok has more than 35 years of U.S. and international experience in Federal Energy Regulatory Commission licensing, engineering design, environmental studies and energy planning on hydroelectric projects. He has managed major hydroelectric licensing projects for the California Department of Water Resources, Seattle City Light and Dominion Generation.

Wayne has a master's degree in civil engineering and is a licensed civil engineer in Alaska. He served as chief hydraulic engineer and assistant manager for six years on the Alaska Power Authority's (now AEA) Susitna hydroelectric project in the 1980s.



PUBLIC OUTREACH

OUR GOAL

**Educate public about
Susitna-Watana Hydro**



Emily Ford
Public Outreach Liaison

Emily Ford has more than 12 years of public relations and government affairs experience, with extensive involvement on energy issues. She previously served as a government relations staff member for the state's largest chamber of commerce and in the marketing department of the Anchorage Daily News.

Emily has lived in Alaska for 34 years and holds a bachelor's degree in journalism and public communications from the University of Alaska Anchorage. She has participated in multiple cross-cultural communications training courses and is past president of the Public Relations Society of America, Alaska Chapter.

In March 2012, the Alaska State Legislature commissioned a statewide poll to gauge public sentiment on a number of issues. One question asked survey participants if they supported the Susitna-Watana Hydro project. Overall, 53 percent said yes, 28 percent said no and 19 percent were unsure. Other research indicated that many Alaskans simply did not know enough about the project and, furthermore, that they wanted to learn more about it.

The Alaska Energy Authority implemented the public outreach campaign to help educate Alaskans about Susitna-Watana Hydro. Highlights of the outreach effort for 2012 included a new name, logo, website and collateral materials. Alaska Energy Authority also launched a Facebook page in December 2012 to engage the public through social media.

Informational radio spots were aired in communities throughout the Railbelt. AEA ensured that broadcasted spots were educational and comprised of factual information.

The scope and estimated cost of Susitna-Watana Hydro make it imperative that AEA continue to communicate accurate information so that Alaskans can stay informed as the project progresses.

STAKEHOLDER ENGAGEMENT

Susitna-Watana Hydro is a complex undertaking that will require intense collaboration with dozens of agencies and other stakeholders to succeed. The Alaska Energy Authority has made a commitment to manage the project in a way that engages stakeholders and provides opportunities to participate in the licensing process and other facets of the endeavor.

Throughout the year, the Susitna-Watana Hydro team participated in dozens of public meetings, speaking engagements, technical workgroup sessions and other forums to collaborate with and engage stakeholders.

With a project of this type and scope, criticism and opposition from some groups can be expected. The Alaska Energy Authority is committed to listening to concerns and providing accurate information whenever possible.

In August 2012, the Alaska Energy Authority held its board meeting in Talkeetna, a community that has concerns and some opposition to the Project. The board made this decision to demonstrate its commitment to open dialogue and the sharing of accurate information.

OUR GOAL

Open communication with stakeholders



Deborah Vo Project Manager – Rural Energy

Deborah Vo serves as the project manager for the Alaska Energy Authority's regional planning efforts for rural Alaska. Prior to joining AEA, Deborah was the rural development specialist for Yukon Delta Fisheries Development Association, where she oversaw economic development and training projects for the company's six Lower Yukon communities. Previously, she was the executive director for the Alaska Inter-Tribal Council and a planner for the Alaska Native Health Board.

Deborah's extensive experience with Alaska Native regional and village corporations, as well as tribal governments, is a tremendous asset to the Susitna-Watana Hydro team. She will assist in working with Alaska Native entities and working keep local communities informed.

A lifelong Alaskan, Deborah received a bachelor's degree in Business from Elms College and a master's in business administration from Alaska Pacific University.

EXPENDITURES

Susitna-Watana Hydro Status Report as of Dec. 31, 2012

| Project Costs | FY2009- FY2011 | FY2012 | FY2013 | | Budgeted Amount & Committed Funds | Total |
|--|-------------------|-----------------|-----------------|-----------------|--------------------------------------|-----------------|
| (in thousands of dollars) | Actual | Actual | To Date | Encumbrance | | |
| Site Determination & Pre-Feasibility (Prior to Pre-Application Document) | 2,487.0 | 4,011.3 | - | - | - | 6,498.3 |
| Personnel | - | 625.7 | 321.7 | - | 2,126.5 | 3,073.9 |
| Licensing Costs: | | | | | | - |
| Engineering Feasibility Study | - | 1,244.2 | 3,451.0 | 3,946.4 | 1.0 | 8,642.6 |
| Board of Consultants | - | - | 30.1 | 145.0 | 224.8 | 399.9 |
| Detailed Engineering Design | - | - | - | - | 3,524.0 | 3,524.0 |
| Utility Corridor, Department of Transportation Analysis | - | 450.8 | 88.7 | 53.8 | 125.0 | 718.3 |
| FERC Licensing Support | - | 510.0 | 465.8 | 496.0 | 216.1 | 1,687.9 |
| Office of Project Management & Permitting | - | 165.7 | 265.4 | 2,173.6 | 1,306.0 | 3,910.7 |
| Resource & Feasibility Studies | - | 4,915.7 | 5,593.6 | 9,019.7 | 11,135.3 | 30,664.3 |
| Project Management Consultation | - | 533.3 | 76.6 | 159.1 | 31.0 | 800.0 |
| Technical Assistance | - | 104.0 | - | 42.3 | 653.7 | 800.0 |
| Permitting | - | 2.0 | 3.6 | - | 194.4 | 200.0 |
| Logistical Support | - | 134.3 | 2,085.3 | 100.8 | 563.4 | 2,883.8 |
| GIS | - | 199.2 | 178.2 | 372.8 | 56.7 | 806.9 |
| Website and Public Info Library | - | 40.8 | 9.2 | 7.2 | 1,392.8 | 1,450.0 |
| Communications | - | 9.5 | 64.2 | 87.4 | 546.9 | 708.0 |
| Legal | - | 1,084.5 | 309.1 | 728.4 | 534.6 | 2,656.6 |
| Travel | - | 29.1 | 24.7 | - | 18.9 | 72.7 |
| Project Office | - | 106.4 | 50.0 | - | 311.3 | 467.7 |
| Bureau of Land Management Advances | - | - | 100.0 | - | - | 100.0 |
| Unallocated | - | - | - | - | 5,934.4 | 5,934.4 |
| | | | | | | - |
| Total Project Costs | 2,487.0 | 14,166.5 | 13,117.2 | 17,332.5 | 28,896.8 | 76,000.0 |

| Funding Sources | FY2009 | FY2011 | FY2012 | Total |
|------------------------------|----------------|----------------|-----------------|-----------------|
| Railbelt Energy Fund | 1,528.1 | | 65,700.0 | 67,228.1 |
| General Fund | | 8,771.9 | | 8,771.9 |
| | | | | - |
| Total Funding Sources | 1,528.1 | 8,771.9 | 65,700.0 | 76,000.0 |

PROJECT TEAM

ALASKA ENERGY AUTHORITY BOARD OF DIRECTORS

Hugh Short, chairman
Commissioner Susan Bell, vice chair
Commissioner Bryan Butcher, member
Ron Arvin, public member
Wilson Hughes, public member
Robert Sheldon, public member
Gary Wilken, public member

STAFF

Sara Fisher-Goad
executive director
Alaska Energy Authority

PROJECT TEAM

Wayne Dyok
project manager
wdyok@aidea.org

Bryan Carey
engineering manager
bcarey@aidea.org

Betsy McGregor
environmental manager
bmcgregor@aidea.org

Emily Ford
public outreach liaison
eford@aidea.org

Andy Morton
procurement manager
amorton@aidea.org

Justin Crowther
project technician
jcrowther@aidea.org

Sandie Hayes
administrative assistant
shayes@aidea.org

Nick Syzmoniak
project economist
nsyzmoniak@aidea.org

Julia Bosma
licensing and permitting manager
jbosma@aidea.org

Deborah Vo
project manager – rural energy
dvo@aidea.org

AEA RENEWABLE ENERGY STRATEGY

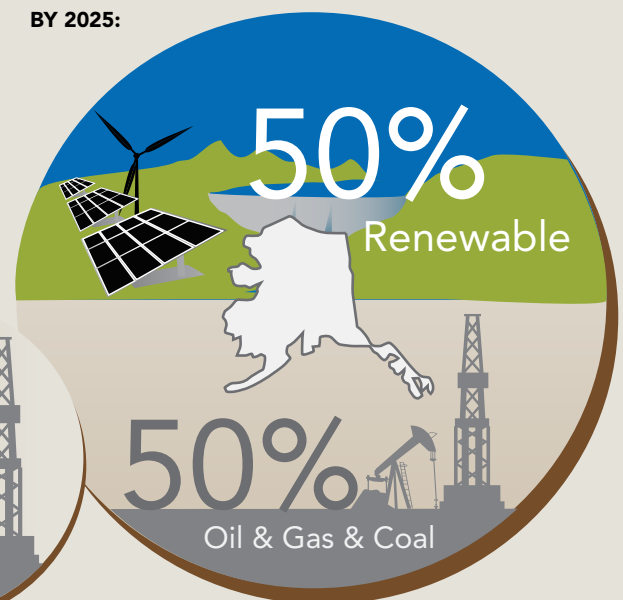
Susitna-Watana Hydro is just one project the Alaska Energy Authority (AEA) is working on to diversify Alaska's energy portfolio. In 2008, the State created the Renewable Energy Fund (REF) with the intent to appropriate \$50 million annually for five years. This legislation placed Alaska in the forefront of most states in the country in funding for renewable energy.

The Legislature authorized AEA to manage the REF project application process, project evaluations, recommendations, completion of grant agreements and disbursement of funds to grantees. In 2012, the Renewable Energy Fund was authorized for another 10 years, providing an additional \$50 million for renewable energy projects statewide. Eligible technologies include wind, geothermal, hydrothermal, certain types of biomass, biogas, wave, tidal, waste heat utilization, river in-stream power, hydropower and solar.

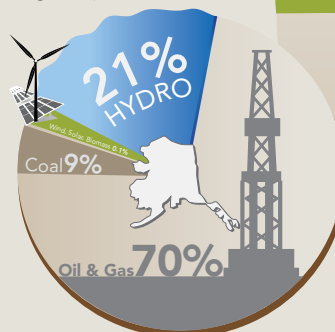
Renewable Energy Fund achievements to date:

- 558 applications received since introduction
- 227 projects funded
- 183 grants in place
- \$202.5 million appropriated since introduction
- \$45 million in annual fuel savings by 2016 from Alaska's renewable energy projects

BY 2025:



TODAY:



In 2010, Alaska adopted one of the most ambitious renewable energy goals in the U.S.: 50% of power from renewable resources by 2025.



EMERGING ENERGY TECHNOLOGY FUND

In an effort to reduce the cost of energy in Alaska, AEA is also encouraging innovation through the Emerging Energy Technology Fund which was created through the Alaska Sustainable Energy Act (Senate Bill 220). Together with a matching grant from the Denali Commission, \$8.9 million was made available for the development of emerging energy technologies in Alaska that can be brought to commercialization within five years.

In November, sixteen projects were selected to receive grants through the fund. Among the projects are initiatives to increase efficiency for diesel generators, develop hydrokinetic resources, enhance wind power and storage capabilities and explore a small community, self-regulating power grid.

Alaska faces some of the highest energy costs in the nation. These initiatives continue to put Alaska at the forefront of finding innovative solutions and new energy technologies, while helping to create a vibrant energy sector.

OUR GOAL

Diversifying Alaska's energy portfolio



Sara Fisher-Goad, Executive Director, Alaska Energy Authority

Sara Fisher-Goad is executive director of the Alaska Energy Authority, a position to which she was appointed in February 2011. She has been with AEA since November 2000, serving as the deputy director-operations.

Prior to joining AEA, Sara worked for a Minnesota financial advisory firm, structuring bond issues for municipal clients. She received a bachelor's degree in mathematics from University of Alaska Fairbanks and a master's in business administration from University of Alaska Anchorage.



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

