

**TESTIMONY OF TREY ACTESON,  
CHIEF EXECUTIVE OFFICER OF THE  
SOUTHEAST ALASKA POWER AGENCY**

**BEFORE THE SUBCOMMITTEE ON FEDERAL LANDS  
OF THE U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON NATURAL RESOURCES**

**LEGISLATIVE HEARING ON H.R. 219: SWAN LAKE HYDROELECTRIC  
PROJECT BOUNDARY CORRECTION ACT**

**October 11, 2017**

Good morning Chairman McClintock, Ranking Member Hanabusa, and Members of the Subcommittee on Federal Lands. Thank you for the opportunity to appear before you today as the Subcommittee considers H.R. 219, the Swan Lake Hydroelectric Project Boundary Correction Act. I also want to thank Congressman Don Young, Chairman Emeritus of the Natural Resources Committee and sponsor of H.R. 219, as well as the entire Alaska delegation, for their efforts on behalf of rural communities in Southeast Alaska.

My name is Trey Acteson, and I am here in my capacity as Chief Executive Officer of the Southeast Alaska Power Agency (SEAPA). SEAPA is a governmental not-for-profit regional Joint Action Agency of the State of Alaska that supplies wholesale power to the municipal utilities of Petersburg, Wrangell, and Ketchikan over its interconnected transmission system. Formerly known as the Four Dam Power Pool Agency, SEAPA was established in 2001 to take over ownership from the State (the Alaska Energy Authority) of the Swan Lake Hydroelectric Project (Swan Lake Project), licensed by the Federal Energy Regulatory Commission (FERC) as Project No. 2911, located on the northeast side of Carroll Inlet in Southeast Alaska. SEAPA also owns and operates the Tye Lake Hydroelectric Project, as well as 175 miles of transmission lines in the region. SEAPA supplies approximately 62% of the total power consumed by its three member-utility communities under the terms of a long-term power sales agreement originally executed in 1985 and updated in 2009. SEAPA's service territory, which consists of less than 12,000 metered customers, is an islanded community that is not interconnected to the interstate electric grid—or even to the more populated areas of Anchorage and Fairbanks. Rather, our electric grid is separate and isolated, which means that we must independently handle load, balancing, reliability, and other challenges of electric service all on our own—through our hydropower resources and backed up by diesel power.

It is an honor to provide testimony to this Subcommittee regarding the importance of H.R. 219 and the reasons why approval of this bill is necessary for the long-term management of the Swan Lake Project.

## **Description of the Swan Lake Project**

The Swan Lake Project is a remote facility located approximately 22 air miles northeast of Ketchikan, and is accessible only by air or water. It serves as an energy storage and peaking facility, and is one of only a few projects in the region with significant storage capacity. It serves a critical role in offsetting the use of diesel generation in the region, reducing the cost of electricity to ratepayers. Diesel generation in the Southeast region is used primarily during times of transmission line or generator outages, and to a secondary degree during intermittent times of low hydropower production. It accounts for up to five percent of total annual generation in the region. The Swan Lake Project helps reduce regional dependence on diesel generation, particularly during the winter months, to the benefit of both ratepayers and environmental resources. A map and photos of the Swan Lake Project appear in Attachment 1.

The storage capacity at the Swan Lake Project also adds operational flexibility that benefits the entire region. Existing hydropower projects in the region are underutilized during spring runoff and the fall wet season, because existing reservoirs do not have the capacity to capture basin inflows. As a result, the reservoirs spill during these periods. The Swan Lake Project is able to capture these inflows and store them for essential winter generation. This, in turn, allows SEAPA to reduce generation during the summer to allow the reservoir to refill, and allows new projects, such as the recently constructed Whitman Lake Hydroelectric Project (Project No. 11841), to generate during these months. The Swan Lake Project then utilizes the reservoir capacity to increase winter generation and off-set the use of diesel. The storage capacity provided by the Swan Lake Project benefits the entire SEAPA region by improving dispatch flexibility, increasing overall energy availability, and providing storage for new run-of-river projects.

## **Background**

Except for the approximately 26 acres of National Forest lands that are the subject of H.R. 219, the Swan Lake Project is located on State of Alaska lands that were conveyed to the State pursuant to the Alaska Statehood Act of July 7, 1958. U.S. Survey (USS) 11630 was filed on May 9, 1997, and identifies the corners of two (2) lots which were conveyed. These lands were subsequently transferred to the State via Patent 50-97-0286. Lot 1 starts at the Swan Lake Dam and encompasses Project lands downstream of the Dam. Lot 2 surrounds the Swan Lake itself. Because the State selected these lands (which are located within the external boundaries of Tongass National Forest) for the express purpose of developing, operating, and maintaining the Swan Lake Project, Lot 2 was originally intended to encompass all lands surrounding Swan Lake, up to the 350-foot contour elevation. Obtaining ownership of all lands up to the 350-foot contour would provide the State authority over all lands necessary to operate and maintain the Swan Lake Project, including an appropriate buffer zone around the shoreline.

Recently, SEAPA learned that these original surveys unfortunately did not capture all lands up to the 350-foot contour elevation and that, as a result, a small area of about 26 acres of National Forest lands within Tongass National Forest were not conveyed to the State as intended.

SEAPA discovered this error during a recent effort to improve system capability and decrease reliance on diesel generation by increasing the Swan Lake Project's active reservoir storage capacity by 25% through a 15 foot increase in the dam height. By modestly increasing the height of the dam, SEAPA sought to more efficiently use existing generation infrastructure at Swan Lake to increase storage capacity, and therefore reduce reliance on fossil fuels while reducing the cost of electricity to ratepayers.

In the early stages of exploring this pool raise at the Swan Lake Project, SEAPA sought to confirm the accuracy of the existing surveys establishing the State's ownership of lands for the Project. Of particular concern were four tributary mouths where a small increase in surface elevation that would result from the Dam raise could potentially result in a relatively larger horizontal area of inundation of the raised pool. In 2012, SEAPA conducted a survey to locate the key corners described in USS 11630, and to identify elevation 350 feet around the four tributaries. The purpose of this survey was to confirm whether the proposed Dam raise (which would elevate the pool of Swan Lake up to elevation 345 feet) would not inundate areas beyond lands owned by the State. Although the survey confirmed that, at three of the four feeder tributaries, the 350 foot elevation contour lies within State-owned lands, unfortunately the mouth of one tributary—Lost Creek—was not included in the conveyance to the State in 1997. Although the mouth of Lost Creek is below the 350-foot contour elevation and should have been included in the 1997 conveyance, an apparent survey error resulted in approximately 26 acres of Tongass National Forest mistakenly being excluded from the conveyance to the State. Although the State always intended to obtain ownership of all lands within the 350-foot contour elevation for purposes of operating and maintaining the Swan Lake Project, SEAPA believes that a lack of refined contours on the then-available topographic maps in this remote location may have led to a misplacement of the 350-foot contour in this low gradient tributary. A map depicting the survey error appears in Attachment 2.

### **Purpose and Need for H.R. 219**

FERC approved SEAPA's proposed license amendment to raise the Swan Lake Dam by order dated August 18, 2015, and SEAPA completed the Swan Lake Dam raise in December 2016. Photographs of the completed dam raise appear in Attachment 3.

Although construction of the Swan Lake Dam raise is now complete, the survey error at Lost Creek discovered by SEAPA at the beginning of this undertaking remains. Completing the transfer of the approximately 26 acres of federal lands to the State—as intended when the State originally selected these lands under the Statehood Act—is a priority for the long-term management of the Swan Lake Project. Consolidating ownership with the State would not only achieve the State's original intent, it would

ensure consistent management decisions related to the Project and would ease administrative burdens of FERC, the U.S. Forest Service (USFS), and SEAPA.

In addition, the transfer of these lands to the State would eliminate the duplicative and overlapping regulatory oversight currently required due to the presence of USFS lands in the Project boundary. Upon the transfer of these lands, SEAPA would no longer be subject to both a FERC license and a USFS special use permit, and the accompanying parallel environmental studies and mitigation and enhancement obligations. This will significantly reduce administrative costs that are currently being passed to SEAPA's ratepayers. In Alaska, we already face extraordinary challenges—our cost of living is high; heating costs are excessive, due primarily to diesel; we have high unemployment; and our State is going through a difficult economic period. While the cost savings for reducing duplicative federal oversight of 26 acres may not appear significant to others outside our community, given our small customer base of less than 12,000 metered customers, the savings that will be achieved through H.R. 219 are significant to those we serve.

In addition, the conveyance provided under H.R. 219 would not eliminate federal oversight of these 26 acres. Although the conveyance would remove these lands from Tongass National Forest, these lands will continue to be administered by FERC, in accordance with the public interest requirements of the Federal Power Act and SEAPA's license for the Project. Although the Swan Lake Project is in a remote area accessible only by boat or floatplane, these acres would continue to be accessible to the public, in accordance with SEAPA's license.

Finally, since discovering this Project boundary error in 2012, SEAPA has engaged in discussions with the Alaska Department of Natural Resources, the Bureau of Land Management, and USFS regarding the proposed conveyance under H.R. 219, and view the bill as the most efficient means of achieving the State's original intent to obtain ownership of all lands needed for the Swan Lake Project. SEAPA is unaware of any opposition of these agencies to H.R. 219 and believes that the bill implements a targeted, common-sense solution by directing the Secretary of the Interior, after consultation with the Secretary of Agriculture, to survey the Lost Creek tract of federal lands within the Swan Lake project boundary, and convey these lands to the State of Alaska, in accordance with the Alaska Statehood Act of July 7, 1958. A map depicting the 26 acres to be conveyed under H.R. 219 appears in Attachment 4 (Swan Lake Project Boundary—Lot 2).

## **Conclusion**

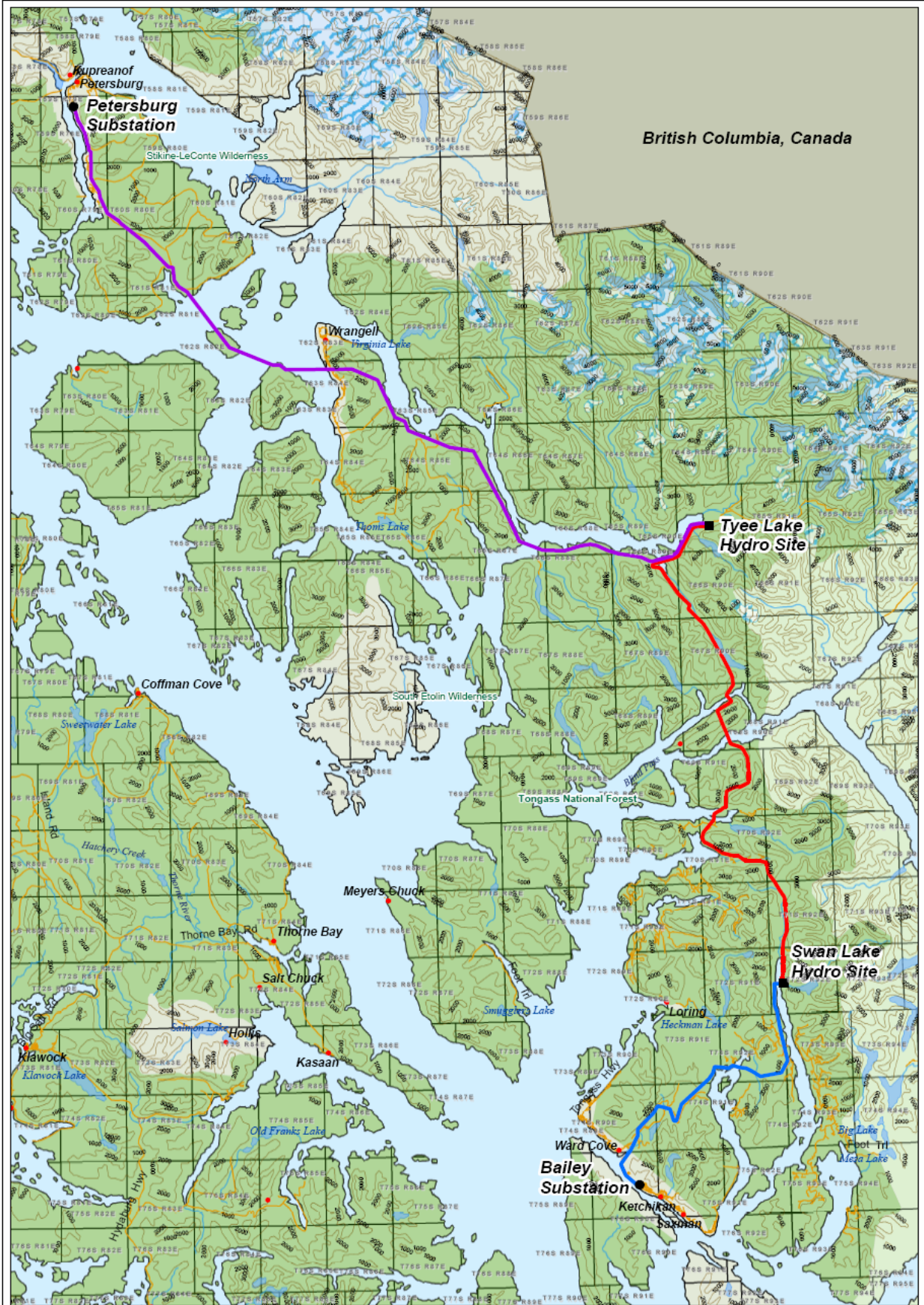
Thank you, Chairman McClintock, Ranking Member Hanabusa, and Members of the Subcommittee for this opportunity to comment on H.R. 219. On behalf of SEAPA and our electric customers throughout rural Southeast Alaska, I appreciate your leadership in Congress to complete the transfer of all federal lands within the Swan Lake Project boundary to the State of Alaska.

**ATTACHMENTS TO**

**Written Testimony of  
Trey Acteson, Chief Executive Officer  
Southeast Alaska Power Agency,  
In Support of H.R. 219**

**ATTACHMENT 1**

**Map and Photos of the Swan Lake Project**



**Ketchikan - Swan Lake - Tye - Petersburg 115/138 kV Transmission Line**  
 Four Dam Pool Power Agency  
 February 13, 2006

**Scale:** 1" = 8 miles (1:506,880)

**Horizontal Datum:** North American Datum of 1983 (NAD83)  
**Geographic Coordinate System (GCS):** Alaska State Plane, State Plane Zone 1  
**Federal Information Processing Standard (FIPS) Zone:** 5001  
**Projection:** Hotine Oblique Mercator Alutian Natural Origin  
**Spheroid:** Geoidetic Reference System of 1980 (GRS 1980)  
**Linear Unit:** US Feet

**Basemap Source:** Alaska State Geospatial Clearinghouse and ESRI.

**Project Area**







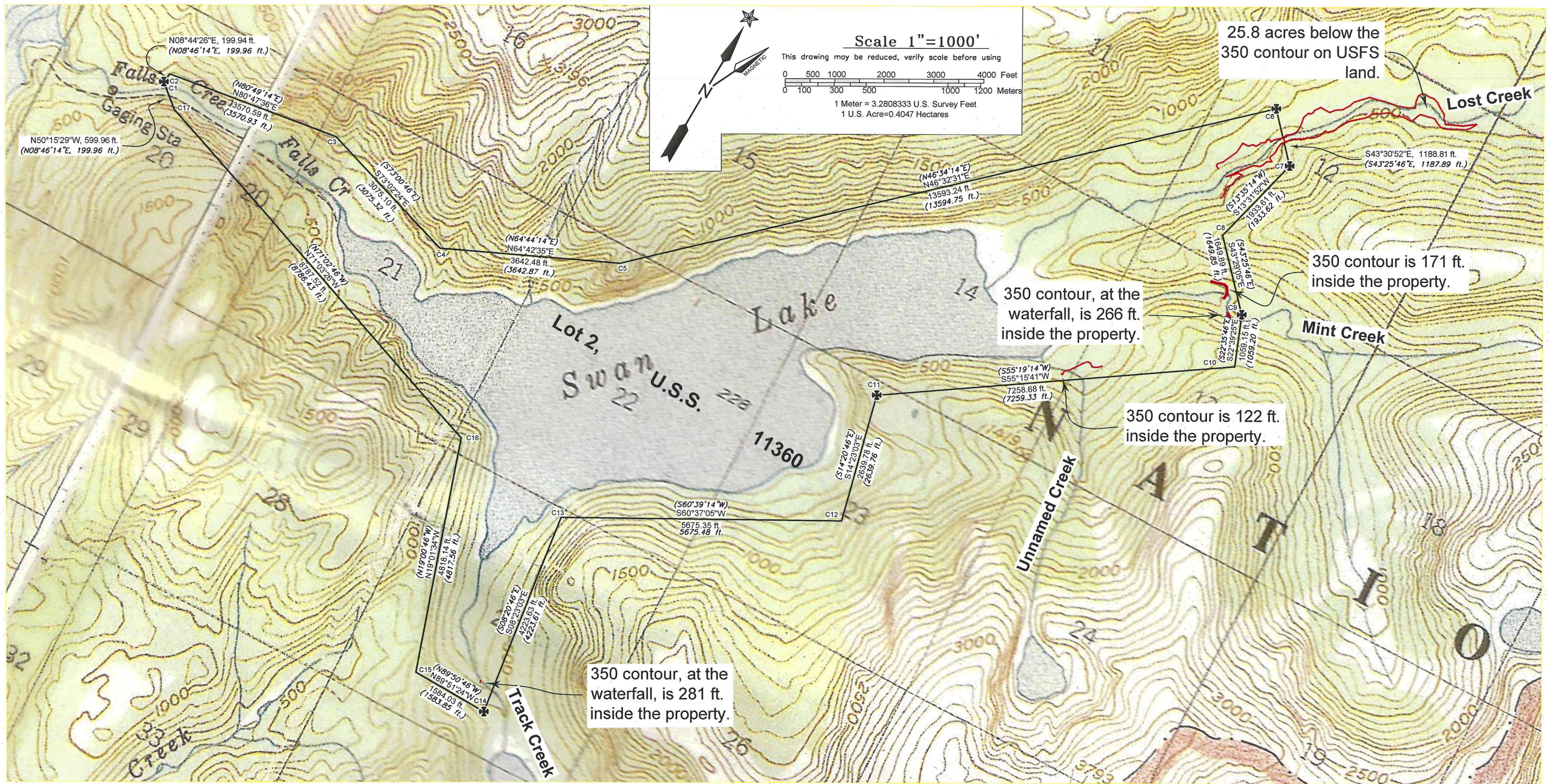
## Ketchikan Photos



**ATTACHMENT 2**

**Map Depicting Survey Error**





**Scale 1"=1000'**  
 This drawing may be reduced, verify scale before using  
 0 500 1000 2000 3000 4000 Feet  
 0 100 300 500 1000 1200 Meters  
 1 Meter = 3.2808333 U.S. Survey Feet  
 1 U.S. Acre = 0.4047 Hectares

25.8 acres below the 350 contour on USFS land.

350 contour is 171 ft. inside the property.

350 contour, at the waterfall, is 266 ft. inside the property.

350 contour is 122 ft. inside the property.

350 contour, at the waterfall, is 281 ft. inside the property.

**LEGEND**

- ⊕ Bureau of Land Management monument recovered and tied this survey.
- ( ) Indicates data from the record of U.S. Survey 11630, see note 2.
- 350 foot contour surveyed and marked.

**NOTES**

1. The horizontal coordinate system employed is the Alaska State Plane Coordinate System, Zone 1, North American Datum of 1927. The elevations are relative to Local Mean Lower Low Water. This is the same coordinate system used in the original construction drawings for the Swan Lake Power Project prepared by R.W. Beck and Associates and the Exhibits in the documents submitted to the Federal Energy Regulatory Commission. The coordinates for the Theodolite Pier at the Swan Lake Dam (also identified as Corner 1, Lot 2, U.S. Survey 11630) were held and used to generate the coordinates in this survey. The linear units are U.S. Survey Feet.
2. The record data from U.S. Survey 11630 was brought into the project coordinate system by applying the state plane corrections for convergence angle and scale factor at the Theodolite Pier.  
 Latitude = 55°36'55.9467" N  
 Longitude = 131°20'39.9000" W (NAD 27)  
 Convergence angle = 1°55'46"  
 Scale Factor = 0.999908376



July 30, 2012

Do not scale, use dimensions whenever possible

Map of Survey of  
**Swan Lake Pool Raise**  
 near Ketchikan, Alaska

Client: Southeast Alaska Power Authority  
 1900 First Ave., Suite 318  
 Ketchikan, AK 99001

**R&M**  
 R&M ENGINEERING-KETCHIKAN, INC.  
 355 Carlama Lake Road  
 Ketchikan, AK 99901  
 Phone: (907) 225-7917  
 Fax: (907) 225-3441

Date: July 30, 2012  
 Drawn by: JPP  
 Job No. 122737

Scale: 1 in. = 1000 ft.  
 Apprv'd by: [Signature]  
 Sheet 1 of 1

REVISION	DATE	DESCRIPTION	APPROVED
REVISIONS			

W:\resources\1\common\Projects\2012\122737 - Swan Lake Pool Raise.dwg 7/30/2012 10:07:47 ADT



**ATTACHMENT 3**

**Photos of Completed Swan Lake Dam Raise**



Swan Lake Dam – 174' High x 430' Width at Crest





Before



After



Middle Pier Concrete Placement



Gate Piers Complete – Flashboard Columns Erected





Crane on Barge – Placing Flashboard Panels and Vertical Gate

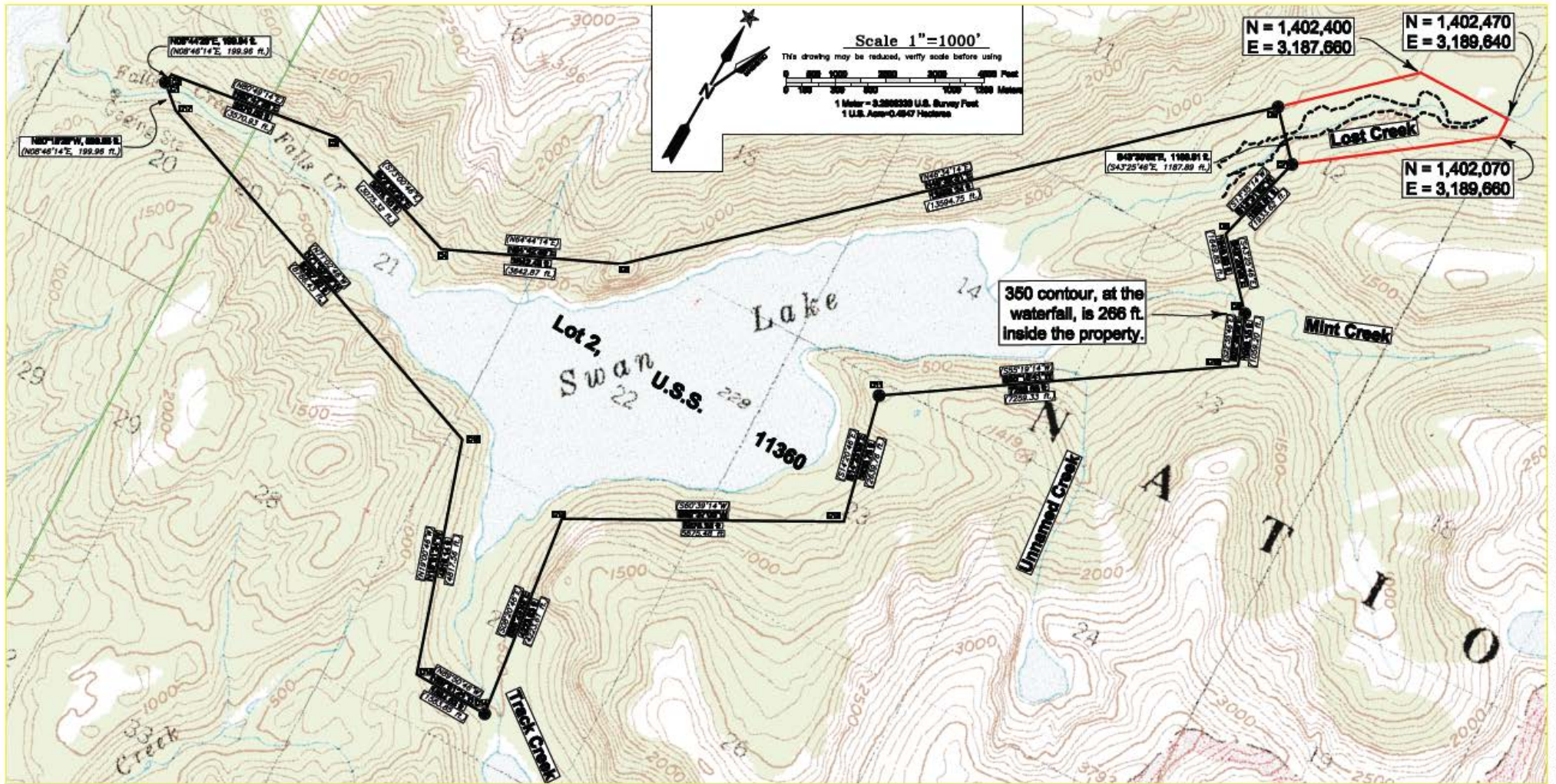


Spillway Construction Complete – 15 Foot Reservoir Elevation Increase

**ATTACHMENT 4**

**Map Depicting 26 Acres to be Conveyed under H.R. 219**





Do not scale, use dimensions whenever possible

**Swan Lake  
Project Boundary - Lot 2**  
near Katchikan, Alaska

Client: Southwest Alaskan Power Authority  
1900 First Ave., Suite 210  
Katchikan, AK 98001

**RISM**  
RISM ENGINEERING & SURVEYING, INC.  
2001 Commercial Lake Road  
Katchikan, AK 98001  
Phone: (907) 225-2727  
Fax: (907) 225-2441

Date: Feb. 01, 2018  
Drawn by: JPP  
Job No.: 182708  
Scale: 1 in. = 1000 ft.  
Approved: \_\_\_\_\_  
Sheet 1 of 1

NO.	DATE	DESCRIPTION	BY	APP'D
1	Aug. 1, 2018	Initial 2018 file, locate, generate from 1 sheet record of conditions	JPP	
		REVISIONS		