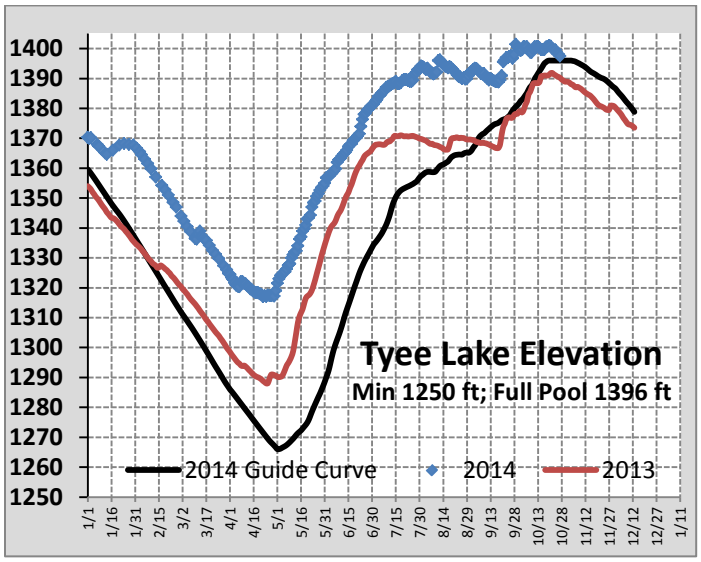
COMMUNITY FLYER

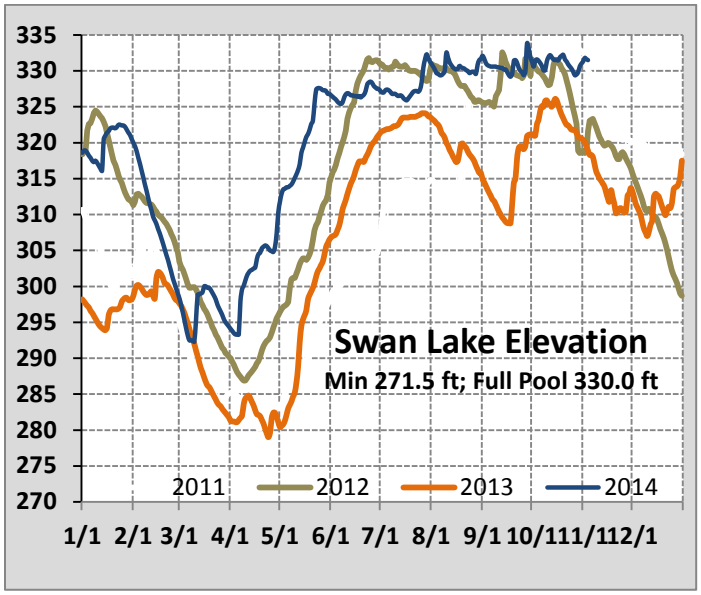
October - 2014

Trey Acteson, CEO

1900 First Avenue, Suite 318
Ketchikan, Alaska 9990-6059
Tel: (907) 228-2281
Fax: (907) 225-2287
www.seapahydro.org

RESERVOIR LEVELS: Swan Lake and Tyee Lake reservoirs have been spilling frequently since August due to early heavy inflows and lower loads. Weather trends going into fall have been warmer and wetter on average. It's anticipated that this trend will continue and reservoirs will be topped off a little later this year prior to being locked up for the winter. The historical plots below show the precipitous decline in the reservoir levels that typically begins in late October. This is due to lack of inflows as precipitation transitions to snow at higher elevations. Ambient temperature generally declines about the same time and system loads increase due to higher electric space heating demand.





SWAN LAKE RESERVIOR EXPANSION: The SEAPA interconnected system of Petersburg, Wrangell, and Ketchikan needs more hydro storage. The picture below of Swan Lake spilling is a good illustration of losing hydro energy because the existing reservoir does not have the capacity to capture all of the inflows that occur in the drainage basin. The Swan Lake Reservoir Expansion Project is focused on capturing this water so it can be converted to clean hydroelectric power.

Swan Lake 10/16/14

Frequently asked questions:

1. Why are you increasing the reservoir storage at Swan Lake instead of building a "new" hydro project or adding a third turbine at Tyee? The Swan Lake Reservoir Expansion is the lowest cost near-term option to enhance energy storage in our region. Unlike a new project, it has a short development timeline and simply enhances an existing facility. The expensive core infrastructure such as powerhouse, penstock, tunnel, turbines, generators, transmission lines, and switchyard are already in place.

2. How much of a storage increase will there be? Active storage in the reservoir will be increased by 25%. This will provide up to 12,000 MWhrs of additional energy annually. In terms of offsetting diesel generation, it will displace up to 800,000 gallons of expensive diesel fuel consumed by our member utilities and elimi-

nate 17,904,000 pounds of CO2 from being emitted into the atmosphere.

3. How much will it cost? The original total project estimate was $13.3 million. However, SEAPA is currently working to simplify the design for filling the existing spillway slot which will help lower construction costs. These proposed enhancements will be modeled and tested as part of the design approval process.

4. How will the project be funded? SEAPA invested $717,500 to advance the project through permitting and preliminary design. We have also received two direct legislative appropriations totaling $3.9 million. SEAPA has requested an additional $2.8 million in grants for the next legislative session and will investigate funding for the remaining balance of the project through a bond offering.

5. Will this project increase my power rates? SEAPA's wholesale power rate has remained stable at 6.8 cents/kWh for 17 years and our goal is to continue that trend. Although some of our member utilities have recently adjusted their retail rates upward to cover the higher cost of delivering power, this is not a result of an increase in SEAPA's wholesale power rate.

6. How will this impact future rebates? Rebates are a mechanism to disburse excess revenues after the business needs of the organization have been met. They are not guaranteed and are influenced by a number of financial drivers including power sales (revenue), operations & maintance expense (O&M), general & administrative costs (G&A), renewal & replacements (R&R), and new project development initiatives. The SEAPA Board of Directors regularly reviews the finances and objectives of the organization, and at their sole discretion, determines annually whether a rebate is prudent for the previous fiscal year.

7. How does the project collectively benefit SEAPA's three member communities (Petersburg, Wrangell, and Ketchikan)? The Long-Term Power Sales Agreement defines Swan Lake as a dedicated Ketchikan resource and Tyee Lake as a Petersburg and Wrangell dedicated resource. Tyee is a bigger resource, with significantly more storage than Swan. Although Ketchikan has first rights to any additional energy at Swan, the reservoir expansion will benefit the entire SEAPA region by improving dispatch flexibility, increasing overall energy availability, and providing storage for new projects such as run-of-the-river hydro or wind. The Swan Lake Reservoir Expansion Project will also enhance future revenues, which will support improvements across the entire system. It is important to recognize that SEAPA is a "regional" organization working for the collective benefit of our interconnected member utilities.

8. What is the status of the project? SEAPA filed a non-capacity license amendment application with FERC in April 2014 after completing two years of required field studies, and is now in the process of refining the dam design in consultation with its FERC approved Board of Consultants (a panel of experts).

9. When will the Swan Lake Reservoir Expansion Project be completed? The scheduled completion date is the end of calendar year 2016.

SWAN LAKE TOUR: SEAPA provided a tour of the Swan Lake Hydroelectric facilities for the Alaska Energy Authority (AEA). The State of Alaska and the AEA are key supporters of the Swan Lake Reservoir Expansion and the visit provided a first-hand look at the planned dam and intake structure modifications.

Alaska Energy Authority visits Swan Lake

TYEE LAKE OPERATIONS: SEAPA assumed daily operations of its Tyee Lake facilities on August 16th. The final hand-off was seamless due to the dedicated upfront efforts of multiple parties. We greatly appreciate the value and commitment of everyone involved, especially the existing employees that transferred over to SEAPA as part of the transition.

Thank you for the opportunity to serve as your regional wholesale power provider.