



# Norwegian Commercial Club of Seattle

March 10, 2016

*Topic: Ballard Locks Restoration with panel **Nathan McGowan**, PE from the US Army Corp of Engineers; **Peter Schrappen**, VP NW Marine Trade Association and **Charles Costanzo**, VP The American Waterways Operators.*

The Ballard locks was dedicated on July 4, 1917. Next year will be the 100-year anniversary and special events will be planned on the July 4 anniversary date.

The locks have 1.3 million visitors a year and 1 million commercial tons are moved thru the locks annually by 45,000 vessels. It is the busiest locks by vessel weight in the nation and ranks #3 tourist attraction in the state of Washington. The Panama and Erie canals rank as one and two ahead of Seattle.

Funding is needed to replace, upgrade and repair this 99-year-old structure.

The following (by priority) are project repairs needed:

1. Pumping Plant Replacement – *used to dewater for annual maintenance. Condition is red tagged, out of service. Many valves no longer function & piping is severely corroded. A major pipe rupture would flood the main electrical service, closing the locks for months. Phase 1 and 1.5 are funded just to make it safe.*
2. Large Lock Emergency Closure System rehabilitation (Crane replacement) - *The crane serves to stop uncontrolled release of water & as an auxiliary spillway. Original from 1920; currently working but in poor, un-repairable condition. If failure occurs, may impact lake levels, floating bridges, floating structure, house boats and delay commercial traffic for extended period of time. New crane design is 95% complete. Construction, if funded, set for 2017 at est cost of \$4-6M.*
3. Filling Culvert Valve & Machinery Replacement (Stoney Gate valves) - *valves are original 1916, which are obsolete and unreliable, heavily corroded and worn; more on the salt water than fresh water side. Failure may result in extended large lock closure. New design at 50%, anticipated design completion for this fall with construction (if funded) for 2018/2019 at cost of \$3-11M, depending on # of valves replaced.*
4. Large Lock Miter Gate rehabilitation – *gates are original (1916); rehabbed in 1972. Coating system has failed on most gates with heavy corrosion. Bushings need to be replaced on center lock gates. Complete failure could result in loss of pool and potential loss of life, extended closure, with commercial traffic stopped for months*

5. Seismic retrofit of transformer house
6. Saltwater drain intake system & permanent solution to diffuser well
7. Emergency closure for small lock
8. Electrical system rehabilitation
9. Maintenance building rehabilitation
10. Small lock machinery replacement

The locks are valued by tonnage that passes thru. If the locks show as under one million in tonnage, it's not looked at by the government as a high enough priority to fund for repairs. A study (at \$30-50k cost) could be done to quantify usage of the locks. The Army Corps of Engineers would then go to Congress to get funding needed for these repairs.

Washington state builds more super yachts than any other state. Boats will spend 10% of their value every year here for repairs, so commerce is very important to our area.

Ideas suggested are user fees both for visitors and by the boats to generate money needed for repairs. FEMA was also mentioned as a possible resource.

There was no cash winner in the Big Money Jackpot drawing. Congrats to Magne for winning a free dinner (*also Happy Birthday!*) and the bottle of amber went home with our new member Monica!!! The business card drawing winner for another bottle of amber was won by Julie Svendsen. 3 new members were initiated.

Our next speaker on March 24 will be Nathaniel Howe on the restoration of the halibut schooner Tordenskjold. The dinner menu will be: Karbonada, fried onions, boiled potatoes, green pea stew, apple slaw and dessert.

Reservations are recommended.

Call the office by the Wednesday before the meeting and leave a message to guarantee your spot: (206) 783-1274



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