Lagoon Point Improvement Club Project Proposal

September 18, 2001

The Board of Directors of the Lagoon Point Improvement Club consist of community minded residents willing to volunteer their time for the betterment of the community. The community at the annual meeting held around the first of September each year elects the members. One of several board duties and responsibilities includes the maintenance of community assets.

With that in mind, the Board of Directors for the Lagoon Point Improvement Club asked the Waterway Committee some months ago to undertake a comprehensive study of Lagoon Point community assets with emphasis on Lagoon Point waterway properties. Several meetings with the Board and discussions with many community members were held to gather input and suggestions on what people felt were the most pressing issues or areas in need of attention.

Several meeting have been held with Island County Planning, The Department of Fish and Wildlife, and various Contractor personnel including the original Engineering Co. responsible for the existing design. This was done in an attempt to gain an understanding of that which was feasible and possible. We initially contracted with an individual to guide us through the initial phases. We have talked with local communities that have similar facilities experiencing similar problems. It's good to know we are not unique.

Please understand that it is not possible to communicate all we have learned, nor should it be necessary. Our goal is to present what we have determined to be the most pressing community needs. Then present the needs and what we feel is the most cost effective workable solution in an orderly manner that should be understandable to all. It is up to you to make the decision. A yes decision will enhance all property values, a no decision will, in time, do the opposite.

The Waterway Committee is not responsible for Project funding. Your board has said that no project will be committed to unless it has been fully funded in advance. The eligible members of LPIC must vote to approve all projects that exceed five thousand dollars.

The following list of proposed projects reflect the most pressing needs of the community at this time.

A. Jetty Repair

B. Replace log bulkhead along Seaview Avenue

C. Dredge Lot C tidal basin, including eel grass mitigation

D. Replace and extend fishing and short-term moorage dock

A. Jetty Repair

The existing North Jetty has sustained substantial damage to the point where the seaward end is barely recognizable. Much of the rock is simply gone; several rocks are in the channel and must be retrieved. Several loads of very large rock will be required to rebuild the North Jetty. The South Jetty is still in fair condition and can be repaired by retrieving the existing rock that have come loose and fallen into the channel and on the seaward side. The south Jetty is some two feet lower than the North Jetty. It is not known if settling has caused this but some back fill is necessary to stabilize the Jetty. If the Jetty is not repaired soon, we are in danger of losing it. If this occurs, there is a good chance we will not be able to rebuild or repair them given today's ESA

environment. This simply means we will eventually lose the entrance channel. We may be able to obtain the necessary permits on an emergency basis to repair the Jetty structure to its original "As built" condition on an expedited basis. This could allow repair to begin as soon as next spring.

B. Replace log bulkhead along Seaview Avenue

Much of the existing log bulkhead along Seaview Avenue has deteriorated to the point that it is no longer recognizable in places. The original bulkhead consisted of non-treated logs placed on end in a row. Silt buildup along the north side of the Lot C turnaround basin has further aggravated this. The condition of the bulkhead in the area of the wooden bridge requires rebuilding soon. The remaining bulkhead replacement is necessary to obtain the necessary depth in the area to be used for the eelgrass mitigation relocation project (See Item C below). This project is also necessary to create the depth required to replace the fishing and short-term moorage dock (See Item D below). This project would be considered a replacement of an existing bulkhead and as such should be exempt from SEPA requirements.

C. Dredge Lot C tidal basin, including eelgrass mitigation

The Lot C tidal basin was partially dredged in 1994. At that time approximately 18 percent of the basin was dredged to an average of minus five feet. Our proposal is to dredge the entire basin to minus ten feet or to the hardpan whichever occurs first with the exception of the eelgrass mitigation area. The mitigation area would be dredged to minus five feet or less. We were initially under the impression that the entire Lot C basin was originally dredged to minus twenty feet. The "As built" drawings show this not to be true. A channel or partial channel was dredged to minus twenty feet. The area contains a clay hard pan that would make it impossible to dredge to a level minus twenty feet. We would like to dredge to the original "As built" conditions with allowance for the mitigation. The original dredging lasted from 1975 until 1994. We think that is far better than the experience of most other communities with private moorage. No dredging in the entrance channel would occur with the possible exception of removing or leveling a buildup on the south side inside of the breakwater. No dredging would occur in the East canal. Some dredging (depending upon the outcome of the negotiations for eelgrass mitigation) would occur to remove a silt buildup within the first two hundred (estimate) feet. Funds for this portion of the dredging project would be paid using the Special Water Fund, which Division 2,3, & 4 owners contribute annually. The tidal basin now has an Island at low tide, which has caused the current flow from the east canal to change. It's now running under the docks in front of Division 3 lot 36 and Division 4 Lot 1 (The two houses on the end of Steelhead Dr). The Island (We call Heron Island) is now about eight to twelve inches above water at low tide. The eelgrass that was present last year on the island is not there now. We expect this project will require at least two years to complete the permit process. This is necessary before any actual dredging work can begin.

D. Replace and extend fishing and short-term moorage dock

Mr. Frank Roberts donated the original fishing dock (12' x 50') to the community and a smaller dock was used to provide access from the beach. Both docks were cut up and hauled to the dump or burned in 1999. They were deemed unsafe when a child playing on them broke through the decking. The Styrofoam on one of the docks was unstable creating an unsatisfactory environmental condition. In addition, the area under the docks had silted in so that the bottoms of the docks were now on the beach at low tide, again an environmental condition considered unsatisfactory. We do not see a permit problem in replacing these, however the scope of this project has been enhanced as the new dock will be larger (10' x 90'). Two new pilings were recently installed to support the larger dock. See the attached drawing of the proposed dock. The dock will float at all times with sufficient depth to allow boats to moor on both sides. Access to the dock will be via a gate requiring the community issued security key for entry.

Several other **projects** were considered but **determined not** to be **feasible or necessary** at this time.

These are:

E. **Straighten and widen the Jetty entrance to provide a direct approach with out the necessity of turning after entry.**

It was believed that a wider entrance would slow the water flow in the entrance channel and in the turnaround basin. This would lessen the amount of silt deposited in the turnaround basin as the silt would settle out in the entrance channel and then be flushed out on the ebb tide. While the idea has merit, the cost would probably be prohibitive. By providing a straight in approach as opposed to the existing dogleg approach, the argument was that entrance and egress would be safer and that elimination of the back eddy at the entrance would minimize silting. This may not be a correct assumption. The currents at the entrance are mitigated by the existing eddy making entrance easier especially in a west or north west wind. The existing jetty was constructed with a south facing entrance for reasons that were elaborated on in meetings with the original design engineers Kegel and Associates, and as described in "A Study of the Revised Entrance of the Lagoon Point Small Boat Harbor", by Richard Alan Murray, a Master of Science in Civil Engineering thesis completed at the University of Washington in 1981. It did not escape our notice that many small boat harbors are constructed in this manor. It is our belief that given today's permit requirements, to do anything other than repair and restore the existing Jetty to its' "As built" condition, would result in a permitting nightmare. The significant additional cost would provide little added benefit.

F. **Increase the depth of the entrance to minus five feet to provide entrance and egress at all times.**

The "As built" drawings show that the entrance was originally dredged to minus five plus feet. This soon filled back in as the entrance will seek its' own level which is normally about the zero tide level at Lagoon Point. To attempt to change this would involve continuous maintenance dredging of the channel every year. Lagoon Point normally experiences low tides in the minus three plus area several times per year. If the water level in the basin and the two canals were allowed to drop that low, many docks would be on the beach. This is not desired for environmental reasons. It would also place damaging stress on many of the docks.

G. Increase the diameter of the Lagoon Lake tidal flow pipe.

This was deemed a solution to providing improved flushing action of the tidal lake. An increase in pipe diameter from two feet to three feet would substantially increase the in and out flow from the lake which occurs twice daily depending upon the tides. It is our understanding that the level of the lake should not exceed the current high so existing septic systems and rain fall runoff do not saturate the ground around the Lagoon. We are not sure that increased water volume will solve the problem. If we were to lower the lake more than we currently do when we close the tide gate in the winter, we might impact the eel grass/fish population in the lake. Island County has agreed to work with us in identifying those septic systems that are not working properly should the odor problem become worse. At this time the pipe and gate system are in working condition. We would hesitate to say they are in good condition. Allowance should be made for regular maintenance and funds set aside for eventual replacement when needed. Island County does not maintain this system. It is the responsibility of LPIC.

H. **The Wooden Bridge.**

LPIC replaced the bridge located in the Northeast section of Lot C in 1994 using proceeds from a special assessment for that purpose. The bridge is necessary to provide multiple entrances and exit routes from the lower LPIC area for safety/emergency reasons. The bridge appears to be in good condition with the exception of the log bulkhead supporting both ends of the bridge. The bulkhead is in need of replacement. See section "B" in the recommended projects section. The private road section was re-paved by LPIC in 1998. The bridge and the road are not maintained by Island County. They are the responsibility of LPIC. An important note: This is a wooden bridge and as such it was not designed for high speed or heavy vehicle traffic. Vehicles should cross this bridge at speeds of less than five miles per hour. To do otherwise will shorten the useful life of the bridge.

I. **Storm water drains on Shorewood and Salmon streets.**

There are several road drains that empty into the East canal. Their purpose is to evacuate storm water runoff along the properties adjacent to Shorewood Avenue and Salmon Street. They are all equipped with tide gates that must be periodically checked and lubricated. The tide gates are underwater at high tide. The actual drainpipes run from the street on the property lines of the division four owners on the canal side of Shorewood and Salmon Streets. All appear to be in good condition at this time. This storm water system is not maintained by Island County. It is the responsibility of LPIC to maintain this system.

J. **The Stibre Dock.**

Condition of this dock is questionable, however the latest modifications seem to have it functioning satisfactorily for another year. This dock is used by many and we recommend continued maintenance until the new fishing / short-term moorage dock can replace it.
(See item D above)

K. The Boat Launch.

The boat launch (Concrete and Dock) is in good condition. The floatation, and much of the underwater wood structure of the dock was rebuilt in 1999. The dock was also brought into regulatory compliance at that time. This past spring, several fenders were replaced and the ones that were not replaced were refastened. In addition, some decking and toe rails that might have caused a trip hazard have been replaced. The dock has an estimated ten to fifteen years of life remaining before it would need replacing. In the past, the Volunteer Fire Department would hose down the ramp each spring to remove the accumulated silt and seaweed growth. They no longer assist in this task. A group of volunteers removed several inches of silt buildup and pressure washed the ramp to make it ready for opening day of fishing season.