September 20, 2017

Julie Thompson
Planner III
SJC Department of Community Development

Transmitted by email to juliet@sanjuanco.com

Dear MS Thompson:

RE: 9/6/17 MDNS for Orca Dreams, LLC four-slip dock, navigation buoy, and RO system, Permit #PSJ000-003

I am writing, again, to comment on Orca Dreams, LLC request to construct a 260-foot private dock and other infrastructure affecting the False Bay area near my home. I have previously commented extensively to your department and the Army Corps of Engineers in 2014 and 2015 on other Orca Dreams dock proposals. I have attached those letters for reference. As you know, the False Bay neighbors and others have spent considerable personal time and resources responding to repeated applications by Orca Dreams, LLC. The amount of public and government resources required to respond to Orca Dreams development activities is unprecedented in my view.

The current Orca Dreams proposal adds an RO desalination system, the navigation buoy, and increases moored boat size to 35-feet. The MDNS includes 16-Mitigation Measures to support the county's Determination of Non-Significance. After careful review of the MDNS and supporting documents, I continue to believe the dock portion of the project presents a significant environmental risk to False Bay and requires an EIS. I offer my concerns having considerable knowledge of the False Bay ecosystem, my professional experience as a habitat biologist who has reviewed and studied numerous marine construction projects and oil spills, and my multi-decadal experience as a yacht owner/captain in the Pacific Northwest and Alaska. Because this project requires the long-term commitment of public-owned resources and tidelands for exclusive private use, and poses unmitigated risks and identified potential impacts to the False Bay Biological Preserve (FBBP), the dock should be reduced in scope and size, and confined to the Honeywell's private second-class tidelands. Simply said, there is no private need for a dock that outweighs the public need to protect the False Bay Biological Preserve.

In October 2105, after the previous round of review, DCD withdrew its Determination of Non-Significance citing eight specific concerns. Among those concerns was the lack of information about potential pathways of pollution from the dock to the FBBP. DCD recommended the applicant conduct a study of nearshore current dispersal from the dock site before resubmitting their SEPA application. This would have been useful to evaluate both the dock and the RO system. The applicant chose not to conduct that study and instead offered unsupported opinions about the site being 'well flushed' and pollution impacts 'not significant'. Moreover, the applicant continues to misrepresent the dock and RO is sited ¼ mile south of the FBBP. I've checked with several sources including the Assessor's Office. My sources indicate UW-owned tidelands lay within 25-feet of the proposed dock. The lateral lines of the 2-acre second class tideland (parcel #34045002) claimed by Orca Dreams for a portion of their dock site have not been determined. For now, Orca Dreams tidelands border the tidelands deeded to UW in 1974. The effects of the dock and its operations on the 43-year old FBBP is a serious matter that needs to be resolved before the county can adequately determine the environmental impacts of this project.

My specific comments follow and are additive to the attached letters:

Proposed Conservation Measures (Mitigation) General Comment: How will the county enforce their Mitigation Measures? Most require specialized knowledge and expertise that the county lacks. Will the DCD building official or code enforcement officer be assigned to monitor Orca Dreams to determine compliance? What county resources are available for required oversight? Given Orca Dreams' track record of misrepresentations on permit applications, violations, fines, appeals, intimidation of neighbors, and court decisions, what assurances do the county and public have the applicant will voluntarily adhere to these Measures?

1. Timing limitations Comment: Timing limitations to protect fish life during construction are prescribed by the WA Department of Fish and Wildlife (DFW) in the Hydraulic Permit Approval (HPA). In commenting on the 2015 Orca Dreams Corp of Engineers permit application, DFW recommended denial of the dock permit because of concerns over impacts to fish and shellfish. Surprisingly, DFW was not included for comment on this MDNS.
2. Dive survey Comment: Who determines 'qualified diver'? Dive surveys by others deemed 'qualified' to survey eelgrass and other marine life by the applicant were conducted contrary to DFW HPA requirements and had to be done over. Post-construction dive survey(s) should be a requirement to document the as-built structure and long-term disturbance/sedimentation of marine life.
3. Pile removal Comment: WA DNR has updated BMPs for piling removal that supersede EPA 2007 http://www.dnr.wa.gov/publications/aqr_rest_pileremoval_bmp_2017.pdf
4. Rubber cushion No comment
5. Collar No comment
6. Observers Comment: Who determines 'qualified observer'? What is the purpose of measure 6.e. restricting pile driving/removal operations to daylight hours only from September 1-15 to 'protect marbled murrelet nesting'? Should we conclude after September 15, pile driving/removal can occur during twilight/darkness? How does extending the work day in dim light affect observers' ability to detect marine wildlife?
7. SCCP Comment: This should be Spill **Prevention,** Containment, and Countermeasure Plan (SPCC). It applies to construction operations storing/handling more than 10,000 gallons of petroleum products over/near water. Similar to HPA, if the contractor's SPCC is a requirement by others, why is it considered mitigation by the county? Moreover, SPCC plans may reduce the size and frequency of oil spills, but they do not prevent them. Many notorious spills including *Exxon Valdez* and *Deepwater Horizon* occurred with SPCCs in place. In my experience, once oil is spilled into the environment, particularly at a remote and exposed location like Orca Dreams, it is very difficult to respond to and clean up.
8. Eelgrass and macroalgae Comment: How can this measure stipulate eelgrass and macroalgae will not be adversely impacted? The Biological Assessment depicts a "dense band of macroalgae", Laminaria and Ulva, under portions of the dock. It is unlikely the dock and its operation will avoid impacting eelgrass and it's impossible to avoid impacting macroalgae.
9. Stormwater BMPs Comment: BMP C101 Preserve Natural Vegetation was not followed when the applicant clear-cut 2-acres of adjacent natural shoreline vegetation in 2014. Three years after this egregious violation, the shoreline has not healed and there are fresh signs of shoreline erosion. Following this violation, the applicant continued, unsuccessfully, to overturn Ecology at the Shoreline Hearings Board and Superior Court. Given Orca Dream's track record, the county and public should not be assured the applicant will voluntarily adhere to this, or any other BMPs.

10. Construction cleanup Comment: See general comment above regarding enforcement. The Orca Dreams property has been under constant disturbance and construction for three years, with no completion in sight. Why should the county or public be assured construction debris will be cleaned up at the end of this project, or that additional construction and cumulative impacts will not occur in the future?
11. Petroleum products. Comment: See general comment above regarding enforcement. Fuel and oil are required to operate power boats. They are routinely transferred from docks to boats in 6-gallon boat cans and quarts of oil, regardless of whether major fueling occurs at a fuel dock. Moreover, even well-maintained engines drip small quantities of fuel/oil. Bilge water discharged by automatic pumps is often contaminated with small amounts of petroleum. If this Measure is intended to be a permanent requirement, how will the county or public know that 'petroleum products will not be transferred on or near the dock'?
12. Navigation buoy. Comment: This stipulation states 'installed' but does not require 'maintained'. If the navigation buoy is a permanent requirement to prevent grounding, it must be maintained for perpetuity. Again, who is responsible to monitor and enforce the buoy requirement?
13. Channel approaches. Comment: There are many rocks, shoals, kelp beds and wave swell in the approach to the dock site. A prudent mariner would hesitate to enter this area with anything larger than a skiff on a calm day. Miscalculation by an inexperienced or reckless operator could result in grounding and disaster. Who will enforce the prohibition on impacts to the False Bay Biological Preserve? How are Orca Dreams' dock operations consistent with the research and education mission of the FBBP?
14. Seasonal removal. Comment: Seasonal removal is a requirement in perpetuity. Who is responsible to ensure that the ramp/float is removed by November 1? See general comments above regarding enforcement. Removal of the ramp/float during winter months is no guarantee the dock and boats will escape storm damage. During May-October 2004-2008, gale force winds ranging from 35-43 knots and significant wave heights ranging from 4.5 - 6 feet were measured at the NOAA New Dungeness Buoy #46088. These data are relevant to analyzing environmental conditions at the dock site.
15. Orca Dreams SPCC Plan. Comment: See 7. and general comment above regarding enforcement. This Plan contains four pages of BMPs that are enforceable only at the applicants' personal discretion. How will the county determine the SPCC is 'strictly followed' for perpetuity? How does the county respond when a concerned citizen observes BMPs not being followed?
16. Compliance with UDC. Comment: This appears to be the only measure the county has authority for. My check of the UDC could not identify any 'applicable' sections pertaining to docks or RO systems. The DCD should identify specific UDC sections that are relevant to mitigating the impacts of this project.

Dock Siting and Design Considerations

DCD is taking on faith Waterfront Construction will engineer and construct the Orca Dreams dock to withstand all anticipated environmental conditions at the site. Moreover, DCD assumes applicants and their 'guests' are prudent mariners who are experienced in boat handling, follow BMPs, and make no navigational mistakes. A mistake or oversight here could lead to damage/loss of all or a portion of the dock with its attached boats. An accident would be catastrophic to the FBBP because boats and their integral fuel tanks can be holed and swamped many ways including penetration by broken dock fittings, grounding on submerged boulders and rocky shores, and battering by drift logs. Holed boat(s) leaking the contents of their fuel tanks could amount to hundreds of gallons of spilled fuel and oil. According to

ECY, as little as one quart of spilled oil can contaminate 100,000 gallons of seawater.
https://wsg.washington.edu/wordpress/wp-content/uploads/marina-handbook.pdf
Between 2011-2015 some 6,000 gallons of diesel and gasoline were reported spilled by recreational boaters in Washington; most spills were less than one gallon.

No engineering calculations/analysis were provided so it is not possible to determine whether this dock is designed for all wind/wave conditions at this site. The applicant provided no data/analysis of the physical environmental conditions at the site including wind speed, directions, current speed, direction, wave height, etc. DCD should consult with an independent professional marine engineer before approving the design of the applicants' dock.

The following pictures were taken of the Orca Dreams dock site during a 2015 storm looking south from the FBBP. At the time, NOAA Buoy #46088 reported gusting WSW 23 kts, wave height 3' :

Note the breaking surf and drift logs at the dock site. As previously mentioned, NOAA data indicates winds to 43 knots (50 mph) and seas to six feet can occur during the months of May-October. This site has no natural protection from westerly winds/seas that come in from the Strait of Juan de Fuca and Haro Strait. An additional problem with this site is the collection of large drift logs. Drift logs act as multi-ton battering rams on boats and docks. Large mats of drift kelp from the adjacent bull kelp beds snag on boats, docks, and mooring systems, weighing them down and increasing strain on lines and dock fittings.

The Department of Ecology Shoreline Management Handbook, Chapter 12, Piers, Docks, and Overwater Structures provides guidance that has not been followed for this project:

- *Pier and dock construction shall be restricted to the minimum size necessary to meet the needs of the proposed water-dependent use.*
- *Assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions.*
- *Use a north-south pier-dock orientation*
- *Avoid prop scour by placing docks at depths that are at least 4-5 feet above MLLW.*
- *Docks, piers and floats should be 8 meters from native aquatic vegetation* (including macroalgae) *or the distance that the structure will cast shade, whichever is greater.*
- *New activities and structures should avoid existing native vegetation attached to or rooted in the substrate.*
- *If space is not adequate, moorage facilities should be prohibited.*
- *Limit the length of piers and docks. Boats that need adequate water depth or located away from eelgrass areas can be moored to buoys.*

- *Allow private docks only if there are no other alternatives, such as marinas within a reasonable distance, shared facilities with neighbors, or mooring buoys.*
- *Limit the amount and types of mooring facilities that are allowed for each residence. If a mooring buoy is needed for adequate water depth, a long dock may not be necessary.*
- *Limit the total square footage of the overwater structures.*

Dock Operation Considerations

The Applicant proposes to moor four boats up to 35-feet in length. The identified 'safe channel' to the dock is through a narrow NE-SW gap through kelp beds, boulders, and shoals to the north side of the dock. The proposed 'navigation buoy' marks a group of shallow rocks off the end of the dock. Other unmarked shallow rocks and kelp beds occur in the dock area including approaches from the 'navigation buoy' to the south side of the dock. Following this 'safe channel' at low speed purportedly will 'prevent impacts to marine vegetation, pocket beach, and the marine preserve".

Below is a stock picture of a Boston Whaler 350 Outrage, of the type that Orca Dreams dock may use:

The specifications for this boat include:

LOA	35'-6"
Beam	10'-10"
Draft	25"

Weight w/engines, fuel and water	16,000 lbs.
Maximum horsepower	1,050
Minimum horsepower	750
Fuel capacity	400 gallons gasoline
Minimum speed (600 rpm)	2.5 knots

There are significant problems docking a large boat at the Orca Dreams site. A boat of this type requires more than a boat length to turn and leave the dock. Slowing a 16,000+ pound boat travelling at its slowest speed (2.5 knots) requires significant reverse thrust. Wind, waves, and operator inexperience/distraction increases the maneuvering space 2-3 times or more. Backing straight away reduces maneuverability and risks damaging the propellers on rocks or fouling in kelp. Even under calm conditions, any large boat maneuvering to/from this dock is likely to disturb sediments and adjacent eelgrass and macroalgae beds. The operator would have to use thrust from the engines to slow the boat and spin it, producing considerable prop wash. Proximity of the dock to the FBBP almost guarantees chronic boat disturbance will occur in the Preserve. Boat operations will likely scour a circular basin north of the dock devoid of vegetation. Rather than leaving this to chance, the applicant should be required to delineate and mark the restricted boat maneuvering area around the dock that avoids impacts to the FBBP.

Diagram from BA-p.20 showing channel, rocks, buoy and eelgrass. Approx. southern boundary of UW-FBBP (red line) added:

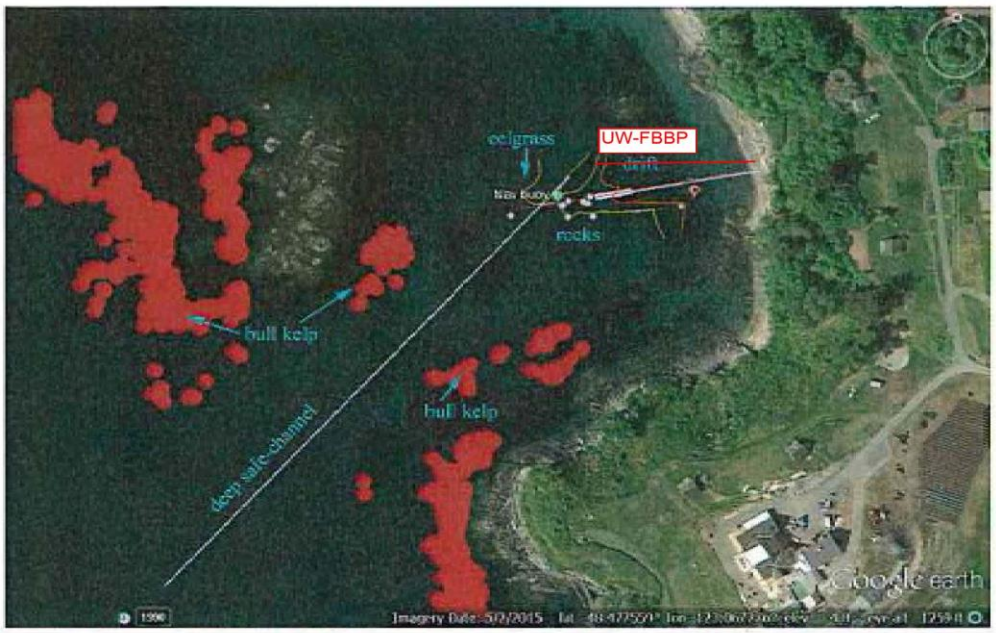

Figure 4. Deep safe-channel that boat operators will use to approach the dock. Following this channel will prevent impacts to marine vegetation, pocket beach and the marine preserve.

In summary, this is a poor location for a large private dock. The Orca Dreams proposal greatly exceeds the water-dependent needs of the upland owner. Reasonable access to the water can be met with a

smaller dock sited on the private tidelands. Reasonable alternatives for large boat moorage are available at existing marinas on San Juan Island. The False Bay Biological Preserve is a world-class asset for the University of Washington and San Juan County. It should not put at risk by hubris and private interest.

This concludes my comments.

Kimbal Sundberg
1853 False Bay Drive

May 30, 2014

San Juan County
Community Development & Planning
PO Box 947
Friday Harbor, WA 98250

ATT: Julie Thompson, Planner III juliet@sanjuanco.com

RE: PSJ000-14-0008

I am writing to comment on the determination of non-significance (DNS) and SEPA for joint use residential dock submitted by Francine Shaw, Law Office of Stephanie Johnson O'Day (LOSJO) on behalf of Orca Dreams LLC. I am a 27-year property owner on False Bay and have made my permanent home here since 2000. I am a retired habitat biologist and lead technical advisor for salmon recovery for the San Juan County Lead Entity. I also serve on the DHCS Water Resources Management Committee and volunteer for COASST (False Bay), the Land Bank, and San Juan Preservation Trust. I am very familiar with the location and environment of the proposed project. I am a biological oceanographer by training. My professional career has involved, among other things, conducting environmental analyses and assessing the impacts of shoreline development, including docks and marinas.

In addition to the SEPA Environmental Checklist (EC) I have also reviewed the Orca Dreams LLC Biological Assessment prepared by Fairbanks Environmental Services and the Shoreline Permit Application prepared by LOSJO. I will confine my comments to the DNS/SEPA-EC at this time.

The subject SEPA-EC contains numerous misrepresentations of fact and analyses. There are significant adverse environmental impacts not identified. There are adverse environmental impacts that have not been adequately discussed.

My comments specific to the SEPA-EC, referencing their numbering system, are as follows:

A.11. *The entire decking of the fixed pier, ramp and float will be constructed with 70% light penetrating grating which will allow approximately a significant amount of sunlight falling on the dock to pass through the structure to the seafloor below.* COMMENT: Quantify "approximately a significant amount". The environmental impact of this project on endangered juvenile Chinook salmon, other species, and their habitat is directly related to the overwater structure being proposed. Research in Puget Sound has shown that juvenile salmon avoid swimming under floating docks and piers because of shading effects. Research in the San Juan Islands has identified pocket beaches, such as the project location, as among the most critical shoreline habitats for endangered juvenile Chinook salmon. Best management practices call for docks to be oriented north-south, where possible, to reduce shading effects. The proposed dock is oriented east-west, casting the maximum shadow with the most deleterious impact on juvenile Chinook salmon. The proposed grating will decrease, but not eliminate adverse shading effects. Float tubs, structural components, and other non-transparent materials make the

effective shading of the dock more than 60%. And, there would be 100% shading under the six boats moored to the dock.

A.11.3. *On-site construction will consist of driving or drilling the pier piles near shore and driving outboard piles.* COMMENT: Describe how many piles will require drilling v. driving? The numerous bedrock outcrops and shallow, wave-scoured sediments/biota at this site are indicative of a high energy seafloor poorly suited for driving piles. What subsurface data has the applicant obtained? The duration of adverse environmental impacts of on-site construction including noise and disturbance to fish and wildlife are directly related to the duration of driving and drilling needed to properly set 10 proposed piles. And, given the extreme wind/sea conditions at this site, the safety, durability, and environmental impact of the structure is directly related to how well the piling are secured to the bottom.

B.1.d. *Are there any surface indications or history of unstable soils in the immediate vicinity?* COMMENT: The applicant checked NO, a misrepresentation of fact. There are many surface indications of unstable soils in the vicinity of the project. Within the tax parcel, including the shoreline to the north, there is extensive evidence of active bank slumping. I have observed tilted/fallen trees, seral vegetation, erosion, and exposed soils on this bank. These are common indicators of soil creep and instability. The Coastal Zone Atlas of WA classifies the shoreline at the project location as Eroding Bluff.

B.1.f. *No clearing is necessary for construction of the proposed joint use dock.* COMMENT: The SEPA-EC question asks, "Could erosion occur as a result of clearing, **construction**, or **use**? The applicant checked NO, another misrepresentation of fact. The construction and use of the proposed dock/marina by six families will significantly increase foot and vehicular traffic to the site and put additional erosional stresses on the Eroding Bluff. SEPA requires the applicant to address the erosion impacts of construction and use. What additional shoreline vegetation clearing will be required? What upgrades to the primitive road and trail will be required to accommodate increased use including vehicles? What shoreline structures will be constructed to house boat gear including oars, lines, PFDs, gas & oil, outboards, dinghies, kayaks, etc.? These are important questions to be addressed by SEPA. The applicant states that water and electricity will be extended to the dock, but does not discuss how this will be done nor prescribe any measures that will be used to minimize soil erosion from excavating, ditching, etc. It is known, but not addressed, that sediment erosion occurs in the vicinity of piling due to increased/altered currents. The phenomena called "sediment pumping" is an erosional impact not addressed, caused by floating docks over a shallow seabed exposed to wave action. Moreover, the prop wash from operating six 30' boats in this shallow cove is likely to increase bottom erosion, instability, and degrade the benthic community including eelgrass. The applicant does not adequately discuss cumulative impacts that could cause erosion including additional vegetation clearing, road upgrading, and construction of accessory structures associated with the proposed dock.

B.1.g. *The existing pier head shore mount consists of 63 sq.ft. of impervious surface. It has been located on the property for many years….* COMMENT: The referenced 'pier head shore mount' is located on the active beach surrounded by drift logs. Describing this as part of the property is a misrepresentation of fact if it is located all, or in part, on state-owned tidelands. A valid shoreline boundary survey should be provided to establish which portions of this project

are, in fact, *on the property*, and which are on public tidelands. That the applicant proposes to incorporate this derelict wooden "pier head", a dubious- looking block of weathered timbers, rusted bolts, and corroded iron as a structural element in a large dock constructed in an extreme environment raises serious questions about the competency of the project design/build team.

B.2.a. *Long term emissions created by this proposal will be minimal and consist of exhaust from boats using the dock.* COMMENT: There is growing scientific evidence that Polycyclic Aromatic Hydrocarbons (PAHs) from boat exhaust and unburned gasoline and oil, are detrimental to salmon and forage fishes, including the salmon and forage fish that utilize this pocket beach habitat. PAHs are passed up the food chain into birds and marine mammals. Introducing a new chronic source of PAHs from six or more large marine engines in this shallow and relatively pristine nearshore environment is not inconsequential (minimal) to the fish and wildlife living here, and may be significantly detrimental to their health.

B.3.5. *Does the proposal lie within a 100-year floodplain?* COMMENT: The applicant checked NO yet the entire project lies within the coastal floodplain. The applicant provides no analysis of how this project will be affected by coastal flooding and sea level rise. According to the recent National Climate Assessment, the Pacific Northwest should plan for 24-inches of sea level rise by the end of this century. Due to its exposed location and using best available scientific information, the proposed +2-ft EHT pier will likely be overtopped during storm surges within the decade and submerged by the end of the century. Sea level rise continues to erode the soft base of the bank with consequences to the Eroding Bluff and all built structures on this shoreline.

B.3.a. *The property lies adjacent to the Strait of Juan de Fuca, a marine water of the state.* COMMENT: The proposed project is located in an area of extreme western exposure to winds and waves from the Strait of Juan de Fuca and Haro Strait. A check of NOAA's nearby buoy data confirms that storms with peak wind velocities exceeding 50 knots and seas exceeding 9 feet occur during the winter months of November through March, and can spring up at any time. There is little natural protection afforded by this cove to westerly winds and waves which bring drift logs weighing multiple tons to batter the shoreline and any docks/boats located there. There are sound reasons why no docks are located on the exposed west shore of San Juan Island. During COASST surveys of False Bay I routinely see remnants of docks washed up in winter along with broken beach stairs, Styrofoam logs, boat parts, etc. Last winter, during a King Tide storm, I witnessed waves/spray washing over False Bay Drive. The environmental impacts from storm damage could be significant and include grounding, sinking, boats/floats set adrift, and associated release of oil, fuel, and other pollutants hazardous to fish and wildlife. A storm-related incident here could easily require emergency services to save lives and put first responders at risk.

B.3.c.2) *Could waste materials enter ground or surface waters?* COMMENT: The applicant checked NO, another misrepresentation of fact. Boat docks and marinas commonly produce waste materials that enter surface waters including spills of gasoline, diesel and oil; paints, solvents, and varnish; scrapings and sanding dust; bilge pumping; tools/trash/debris that blow off/fall into the water; fishing line; fish/crab guts; food waste; and cleaning detergents/soaps. It is not credible to assert that no waste will enter this cove from the proposed marina.

B.3.d *No mitigating measures are proposed…* COMMENT: This is an inadequate analysis and response to commonly known environmental impacts of docks and marinas (see B.3.c.2 above).

B.4.a. COMMENT: Misrepresentation of fact. Eelgrass occurs at this site, yet it is not checked.

B.5.b. COMMENT: Misrepresentation of fact. The applicant is requested by SEPA to list "any threatened or endangered species known to be on or near the site". Threatened and endangered species likely to occur on/near the project site include: Chinook salmon, chum salmon, cutthroat trout, steelhead trout, canary rockfish, marbled murrelet, Southern Resident killer whale and Steller sea lion. Candidate/Species of concern occurring on/near the project site include: Pacific herring, copper rockfish, quillback rockfish, black rockfish, china rockfish, widow rockfish, tiger rockfish, common murre, bald eagle, peregrine falcon, golden eagle, western grebe, Pacific harbor porpoise, pinto abalone, island marble butterfly. The applicant is required to address how these protected species are impacted by the proposal, including proposed mitigation during construction and operation.

B.5.d. COMMENT: This section needs to identify and analyze impacts of the proposed dock and marina operations to wildlife species' use of nearshore habitat, including the nearshore rock outcrops immediately adjacent to the proposed dock. For example, I have observed the rock group near the end of the proposed float is used for hauling out by harbor seal, and roosting/ feeding by harlequin duck, and shorebirds including black turnstone and black oystercatcher. I have also observed killer whale, Steller sea lion, Pacific harbor porpoise, marbled murrelet, common murre, Pacific herring, bald eagle, western grebe and juvenile salmon on or near the site. The proposed dock will greatly increase human disturbance of this habitat degrading its value to wildlife. The close proximity of the proposed dock to nearshore rock outcrops allows access by dogs and other predators, additionally degrading habitat value. Damage from the float anchoring system to benthic biota should be analyzed and discussed.

B.7.b 2) *Short term noise sources will be associated with the construction of the dock when the piles are driving, the barge mount crane sets the fixed pier, ramp, and float sections in place and hand held construction tools. After construction is complete noise sources will be from boat motors and voices from people using the dock.* COMMENT: The applicant fails to identify or analyze the effects of underwater noise from operation on endangered Southern Resident Killer Whale (SRKW). It is well known that SRKW react to underwater noises, including boat engines and traffic by altering their normal behavior, and in some cases, ceasing feeding and leaving the area. The effects of underwater boat noise and disturbance was cited by NOAA as the primary justification for proposing a ½ mile "no go zone" along the west coast of San Juan Island. The proposed project is centrally sited within critical habitat used by SRKW for summer feeding. It is a serious omission that the applicant fails to acknowledge or analyze the operational impacts of the proposal including increase boat engine noise and traffic disturbance on the endangered SRKW and their critical habitat. Similarly, the applicant fails to identify and analyze the impacts of noise and disturbance from construction and operation on the numerous marine bird species using this area, including threatened and endangered species.

B.10.b. *Views for the water toward the dock will be altered due to the presence of a dock in an area where no dock exists.* COMMENT: The property owners have recently severely impacted

the aesthetics of the relatively natural shoreline of this cove in the False Bay Area by illegally clear cutting the bank. The west coast of San Juan Island is known by visitors and residents alike for its relatively natural and wild looking shoreline. This dock/marina would be the only in-water facility visible for more than 14 miles along west coast of San Juan Island from Mitchell Bay to Fish Creek.

B.10.c. *The dock will be low in profile and will be set along a 40 foot steep shoreline bank which will allow the dock to blend in with its surroundings.* COMMENT: This is a gross misrepresentation of fact. To assert that 10 galvanized steel pilings, a 271' dock and six 30' boats set in a natural pocket cove will "blend in with its surroundings" strains credulity. It should also be noted that the applicant's recent, extensive, and unauthorized clearing of shoreline riparian vegetation, including numerous mature native trees makes it less likely for this, or any other proposed shoreline development on this property to "blend in with its surroundings".

B.11.b. *There is no site illumination planned with the proposed dock construction.* COMMENT: The applicant's response is misleading. SEPA-EC asks about the finished project not construction. Lack of dock illumination creates a serious safety and navigation hazard. The applicant has identified that the dock will have electricity extended from the uplands. Why are dock lighting and its impacts not addressed?

B.12.b. *Would the project displace any existing recreational uses?* COMMENT: The applicant has checked NO, a misrepresentation of fact. The proposed pier height of 2 feet extending perpendicular to the beach will block beach walkers. Wildlife including deer will need to climb over the structure to utilize their beach habitat. Railings/fencing and private property signs will further discourage access to public tidelands. Similarly, the extreme length of the dock protruding into the cove will discourage public access by kayaks and other watercraft. The structure would become a private intrusion into a public space and reduce shoreline recreational opportunities. My friends and family have used this cove for recreation and wildlife watching for over 27 years. We have accessed this site numerous times by kayak and skiff, and via upland trails, with permission of landowners. We have included this cove in the annual Audubon Christmas Bird Count for over a decade because of its productive marine bird community. The proposed project will significantly curtail our recreational use of this cove, as it will for friends and family, adjacent property owners and their families, and countless residents and visitors who recreate in the False Bay Area.

B.12.c. *The dock will enhance the ability of six families to enjoy recreational boating and fishing activities offered in the San Juan archipelago.* COMMENT: Existing recreational activities by the public, more numerous than those of six families, will be degraded by the proposed dock/marina. Recreational opportunities in the San Juans are degraded when public tidelands, waters and resources are appropriated for private use. Alternatively, the six families can avoid degrading their neighbors' recreational experiences, and enjoy their boating and fishing activities from the Port of Friday Harbor, as we and others happily do.

B.15.a. Would *the project result in increased need for public services…* COMMENT: The applicant has checked NO. Studies in San Juan County have shown increasing population and infrastructure demand more public services than the tax base supports. Boating activity and marinas typically place increasing demand on the Coast Guard, Sheriff, IOSA, CBP, and

environmental protection agencies. It is a more efficient use of county services, and consistent with the Shoreline Master Program, to make use of existing marina facilities and their support services, like the Port of Friday Harbor, rather than a proliferation of private docks.

B16.b. *The applicant intends on (sic) extend water and electrical lines to the dock.* COMMENT: This was not adequately discussed in the SEPA nor were any potential environmental impacts of extending utilities analyzed.

Thank you for opportunity to comment.

Sincerely,

--Signed--

Kimbal Sundberg
1853 False Bay Drive
Friday Harbor, WA 98250

From: Kimbal Sundberg [mailto:sundberg@centurytel.net]
Sent: Thursday, June 18, 2015 9:04 AM
To: 'susan.m.powell@usace.army.mil'; 'ecyrefedpermits@ecy.wa.gov'
Subject: Orca Dreams, LLC., NWS-2014-476

U.S. Army Corps of Engineers (ACE),
Regulatory Branch
ATT: Ms. Susan Powell
PO Box 3755
Seattle, WA 98124-3755

WA Department of Ecology (DOE)
ATT: Federal Permit Coordinator
PO Box 47600
Olympia, WA 98504-7600

RE: Orca Dreams, LLC., NWS-2014-476

I am writing to comment on the referenced application for dock work on San Juan Island.

I am a 28-year property owner on False Bay near the project the location and have made my permanent home here since 2000. I am a retired habitat biologist and lead technical advisor for salmon recovery for the San Juan County Lead Entity. I also serve on the DHCS Water Resources Management Committee and volunteer for COASST (False Bay), the Land Bank, and San Juan Preservation Trust. I am very familiar with the location and environment of the proposed project. I am a biological oceanographer by training. My professional career has involved, among other things, conducting environmental analyses and assessing the impacts of shoreline development, including docks and marinas. My comments follow:

1. This project has the potential to have direct impacts on Endangered juvenile Chinook salmon. The San Juan Island Salmon Recovery Strategy identifies the project area as a High Priority Fish Use Region with medium probability for rearing Chinook salmon. The San Juan Salmon Recovery Chapter was developed with local input. It is an ecosystem based recovery plan supporting multiple salmon species with an emphasis on Puget Sound Chinook Salmon listed under the Endangered Species Act in 1999. The local salmon recovery chapter is part of the Puget Sound Chinook Salmon Recovery Plan which was adopted by NOAA January 2007. Research in Puget Sound as summarized by Clancy, et al 2009 (PSNRP) has shown that juvenile salmon avoid swimming under floating docks and piers because of shading effects. Research in the San Juan Islands (Beamer & Fresh 2012) has identified pocket beaches, including the project location, as among the most important shoreline habitats for juvenile Chinook salmon. Best management practices call for docks to be placed in deep water and oriented north-south, where possible, to minimize impacts to the bottom and reduce shading effects. The proposed dock is in shallow water and oriented east-west, casting the maximum shadow with the most deleterious potential impact on juvenile Chinook salmon. The proposed grating will decrease, but not eliminate adverse shading effects. Float tubs, structural components, moored boats, and other non-transparent materials reduce ambient light transmission to the seabed by more than 50%. Sediment pumping will be caused by the floating dock over the shallow seabed exposed to wave action. Prop wash will be caused by boats using

the dock in this shallow cove. These impacts will likely increase bottom erosion, instability, and degrade the eelgrass/surf grass meadow found here.

2. The numerous bedrock outcrops and thin veneer of bottom sediments at this site are indicative of a shallow high-energy seafloor poorly suited for driving piles. The duration of adverse environmental impacts of on-site construction including noise and disturbance to fish and wildlife are directly related to the duration of driving and drilling needed to properly set 10 proposed piles. And, given the extreme wind/sea conditions at this site, the safety, durability, and environmental impact of the structure is directly related to how well the piling are secured to the bottom.

3. There are many surface indications of unstable soils in the vicinity of the project. Within the project location, including the shoreline to the north, there is extensive evidence of active bank slumping. And, the applicant has done extensive, and unauthorized clearing of native shoreline vegetation. Moreover, the applicant was recently cited/fined by DOE for causing, among other things, increased potential for shoreline erosion. I have observed tilted/fallen trees, seral vegetation, erosion, and exposed soils on this bank. These are common indicators of soil creep and instability. The Coastal Zone Atlas of WA classifies the shoreline at the project location as <u>Eroding Bluff</u>. The construction and operation of the proposed dock/marina by three families will significantly increase foot and vehicular traffic to the site and put additional erosional stresses on the Eroding Bluff and shoreline.

4. A check of NOAA's buoy data near the proposed dock site (Station 46088) confirms that storms with peak wind velocities exceeding 50 knots and seas exceeding 9 feet occur during the winter months of November through March. Westerly/southwesterly winds routinely exceed 30 knots during the summer months. There is little natural protection afforded at the dock site to westerly winds and waves off the Strait of Juan de Fuca. Storms bring drift logs weighing multiple tons to batter the shoreline and any docks/boats located there. There are good reasons why no docks have been permitted on the exposed western shore of San Juan Island. The environmental impacts from storm damage could be significant and include grounding, sinking, boats/floats set adrift, and associated release of oil, fuel, and other pollutants hazardous to fish and wildlife. A storm-related incident here could easily require emergency services to save lives and put first responders at risk. Sea level rise will greatly exacerbate the natural hazards at this site.

5. The project site is located in the Critical Habitat (summer feeding area) for the Endangered Southern Resident Killer Whale (SRKW). SRKW commonly migrate and feed on Chinook salmon along the western shoreline of San Juan Island. It is known that SRKW react to underwater noises, including boat engines and traffic by altering their normal behavior, and in some cases, cease feeding and leave the area. The construction and operation of the proposed dock will increase underwater noise and disturbance in this area. The impacts of increasing underwater noise and disturbance was cited by NOAA as justification for proposing a ½ mile "no go zone" for boat traffic along the west coast of San Juan Island. Moreover, SRKW are dependent on Chinook salmon for their diet. Scientists believe Chinook salmon recovery is directly linked to recovery of SRKW (see comment 1 concerning impacts on Chinook salmon).

6. The project will restrict public access to the shoreline and reduce recreational opportunities. The proposed pier and ramp on public tidelands will the cause people and

wildlife to have to climb over the structure to continue to utilize the public shoreline. Railings/fencing and private property signs will further discourage access to public tidelands. Similarly, the extreme length of the dock will discourage public use of this site by kayaks and other personal small watercraft. Recreational opportunities in the San Juans are degraded when public tidelands, waters and resources are appropriated for private use.

7. There is no compelling need for a private dock in this area, other than for the convenience of the upland land owner. The impacts identified above can be avoided because private boat moorage is available at the nearby Port of Friday Harbor, in addition to other existing marinas on San Juan Island. Alternatively, the upland owner can apply for a mooring buoy, which would be far less impactful to the environment and public access than the proposed dock.

Prior to issuing a decision concerning permit(s) for this project, I request ACE and DOE to conduct a Public Hearing in Friday Harbor to address issues contained in my comments and those of others. I understand that this project will require a Substantial Development Permit, among others, under the San Juan County Shoreline Master Program. It would be premature for ACE to issue a decision on the subject permit, until the additional environmental analyses and public comment opportunities are incorporated into the overall project review.

Thank you for the opportunity to comment.

Sincerely,

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