Draft Aquatic Lands Habitat Conservation Plan (HCP)

Chapter 1 - Introduction

Section 1.1.1 Benefits

DNR does not typically issue "permits" for the use of state-owned aquatic lands. The potential "streamlined permit processes" benefit should be better described/defined as it relates to the Draft Aquatic Lands HCP and management of state-owned aquatic lands.

Section 1.1.2 Term of the plan

This section states that "(t)his term ensures that Washington DNR will be able to implement the defined conservation strategies and monitoring efforts for all activities covered by the HCP **that currently exist on state-owned aquatic lands**." New proposed/authorized uses are not mentioned in this section as being covered by the HCP/Incidental Take Permit (ITP). Throughout the rest of the document, new uses are included in HCP/ITP coverage.

Section 1.2.1 Issuance criteria

Funding for DNR programs is discussed in Chapter 5, Section 5.3.2 - Funding the habitat conservation plan. This section states that "Washington DNR's capacity to fund implementation of the habitat conservation plan depends on legislative appropriation." Legislative appropriations in Washington State are determined through biennial budget processes. The funding section goes on to further explain specific sources of funding for DNR programs and also that "Washington DNR shall submit to the Washington State Legislature, on at least a biennial basis, an agency operating and capital budget that includes the funding to implement and enforce the Aquatic Lands Habitat Conservation Plan and fulfill Washington DNR's obligations under the incidental take permit and the implementation agreement. **Washington DNR recognizes that failure to maintain adequate funding shall be grounds for suspension or partial suspension of the incidental take permit**" It is unclear what suspension or partial suspension of the incidental take permit would mean for DNR and those authorized users of state-owned aquatic lands. Additional information should be provided by the federal services on how this biennial funding process meets the issuance criteria for "ensure(ing) that adequate funding for the plan will be provided. It is probable that adequate and consistent funding will not be available for implementation of the HCP/ITP over the 50 year term of the contract.

Section 1.3 Lands covered

DNR has jurisdictional and proprietary management authority over state-owned aquatic lands as described in this section, "(t)he Aquatic Lands HCP covers those lands directly owned by the State of Washington and managed by Washington DNR that underlie navigable freshwater, marine, and estuarine waters within the state of Washington." Section 4.4.3.1 of the EIS for the Draft Aquatic Lands HCP states that under Alternative 2 (the proposed alternative), "(b)y requiring applicants for new and renewed authorizations for overwater structures to develop and implement plans for reducing the direct input of hazardous substances and nutrients from upland areas adjoining state-owned aquatic lands, the Aquatic Lands HCP would be addressing

one of the key sources of water quality impacts in marine areas, particularly in Puget Sound." DNR clearly does not have the authority to require these types of plans to be developed for adjacent uplands (or tidelands) that they do not own and manage. This statement also clearly contradicts the statement that the "HCP covers those lands directly owned by the State of Washington….that underlie navigable freshwater, marine and estuarine waters…."

Section 1.4.3 Ecosystems present - Figure 1.12 Saltwater ecosystem

This figure depicting a natural saltwater ecosystem includes a representation of a dock and associated implied impacts from shading. Since docks are not a naturally occurring component of a saltwater ecosystem, the dock should be removed from the figure to eliminate any perception of bias. The graphic is still informative to describe the natural system without inclusion of the dock.

Section 1.5.3 Vegetation

One thing that is not mentioned in either this section or the section of Chapter 5 on protection of native aquatic vegetation is that WDFW allows recreational harvest of "seaweeds" that includes seagrasses. The permitted harvest of aquatic vegetation has the potential to significantly impact seagrasses. This topic should be discussed and quantified as an impact that occurs and how loss of seagrasses from this activity impacts calculations on ESA compliance under the Draft Aquatic Lands HCP. No discussion is provided in the aquatic vegetation sections regarding harvest of seagrasses for transplanting as a component of mitigation requirements.

Section 1.6 Covered activities

This section states that "(o)nly those activities listed as "covered" in this HCP will receive protection under an Incidental Take Permit from challenges brought by Section 10 of the federal Endangered Species Act." If this is the case, will the standards and programmatic measures developed for all uses of state-owned aquatic lands contribute to mitigating impacts to ESA listed species? It is unclear what liability authorized users of state-owned aquatic lands will have for non-covered uses when they are highly likely to be required to implement the standards and programmatic measures outlined in Chapter 5 of the HCP. This should be clarified.

Section 1.6.2 Determination of spatial overlap

This section states "Species experts used best professional judgement to arrive at a final recommendation of potential species (Washington DNR, 2007b)." The referenced document was not provided for review as an appendix with the Draft Aquatic Lands HCP. It is unclear why "professional judgement" was used instead of a rigorous scientific based criteria to determine which species are included for coverage under the Draft Aquatic Lands HCP.

Section 1.7 Species covered by this HCP

Only 14 of the 29 species proposed for coverage under this HCP are identified as having federal ESA listing status as endangered or threatened. Section 1.1 Purpose of the plan states "Washington DNR developed the Aquatic Lands HCP to ensure that legally authorized, planned, and mandated management actions may continue to occur on state-owned aquatic lands

without risk of violating the Endangered Species Act or resulting in an unlawful take of **threatened and endangered species**. The Aquatic Lands HCP is a contractual agreement between the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries), U. S. Department of the Interior, U.S. Fish and Wildlife Service and Washington DNR."

The federal categories provided under listing status in Table 1.13 of this section are Federal endangered, Federal threatened, Federal candidate, and Federal species of concern. A footnote on page 3-45 of the EIS for this draft HCP defines Federal Species of Concern as "Species of Concern are those species about which NMFS or USFWS has some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the ESA. **This status does not confer any procedural or substantive protections under the ESA.** Six (6) of the proposed covered species have this status.

Five (5) of the 29 proposed "covered species" have the status of "Not listed" in the listing status column. This indicates that there is no federal listing status for populations of these species. In total, eleven (11) of the proposed covered species have a status that does not provide protections under ESA. If adopted and issued, the Aquatic Lands HCP and Incidental Take Permit may be amended to include newly listed species.

Federal listing of a species as endangered or threatened under ESA is a scientifically rigorous, lengthy and public process generally intended to cover entire populations of a species that occur within a federal jurisdictional area. For smaller, discreet populations to be listed under ESA, a determination of a Distinct Population Segment (DPS) or Evolutionarily Significant Unit (ESU) is typically required. It does not appear that any of the proposed covered species that are not already listed as endangered or threatened have been identified as a DPS or ESU.

Although there is the potential to include species "likely to be listed" and non-listed species under a HCP, the underlying protection mechanism is still a federal "contractual agreement between the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries), U. S. Department of the Interior, U.S. Fish and Wildlife Service and Washington DNR" to prevent "violating the Endangered Species Act or resulting in an unlawful take of **threatened and endangered species."** The term "likely to be listed" is conjecture and species identified as such should not be used as a basis for the development and implementation of a state-wide land management plan.

The draft DNR Aquatic Lands HCP is the first proposed HCP in the United States to cover aquatic lands. Adoption of the HCP will be a precedent setting event. The Aquatic Lands HCP should be focused and limited in scope to include only those species that have received federal listing status as endangered or threatened. The amendment process and adaptive management strategy could then be used to include newly listed endangered or threatened species that have received listed status based on a scientific and public process.

Chapter 2 – Planning Context

Section 2.3 Regulatory framework

This section provides an accounting of the various federal, state and local regulatory mechanisms that also have authority over state-owned aquatic lands. These existing regulations (and the entities that implement them) provide a high level of ESA compliance for activities that occur on state-owned aquatic lands. The term of the proposed Aquatic Lands HCP is 50 years. Existing regulations will provide ESA compliance over that period without adoption of the proposed Aquatic Lands HCP.

Chapter 4 – Factors Affecting Species

Section 4.1 Covered species: life history, habitat use, and distribution

In this section, a description of the life history, habitat use and distribution for each of the proposed covered species is provided. The "Distribution" sections focus on distribution within Washington State while providing a brief description of historic ranges for each species. Listing status under ESA is typically related to the entire population structure and range of a species unless a Distinct Population Segment (DPS) or Evolutionarily Significant Unit (ESU) has been identified. Two categories should be provided under the "Distribution" sections for each species. One should describe the abundance and distribution of the entire population and a second may focus on Washington State, if necessary. Several of these species do not appear to have threats to the overall viability of their populations and are categorized as common throughout their range.

As an example, Pacific Sand lance have a status of "Not listed" in Table 1.13 and "have a wide distribution and are common in Puget Sound" according to the species account on page 4-14 of the Draft Aquatic Lands HCP. According to Section 3.8.2.1 of the draft EIS (p. 3-43) "abundance of sand lance in the analysis area is currently unknown." Section 3.8.2.3 of the draft EIS also notes that "Pacific sand lance burrow in sandy substrates in **shallow** shoreline areas." Recent (2012) mapping of the submerged floor of San Juan Channel in the San Juan Islands uncovered an underwater sand wave inhabited by an estimated 44 million juvenile sand lance. This is an area that is not likely to be considered a shallow shoreline area. Based on available information, recognition that Pacific sand lance are common in Puget Sound and lack of federal ESA listing status, it would appear that Pacific sand lance do not warrant coverage under the Draft Aquatic Lands HCP.

Section 4.2 Data analysis and methods

The 2005 and 2007 DNR technical documents that are referenced throughout Chapter 4 (and the HCP) were not provided for review as an appendix to the Draft Aquatic Lands HCP. These technical documents should have been included for review as they are indicated to have provided the basis for the determining impacts to listed species and development of the Operating Conservation Plan (Chapter 5).

The information used in the potential effects analysis was based on potentially suitable habitat at a broad scale (township and range) for where species may occur. The quality of the available GIS information is unclear and the broad scales of the analysis may have overestimated potentially suitable habitat which was then used to determine potential effects. DNR indicated that there was a lack of reliable spatial and temporal data for the over 4,000 use authorizations that they manage. It is unclear why the information in the sections on spatial extent of covered activities in Chapter 3 was insufficient. Spatial data should be available and could have been accurately assessed through a GIS exercise. This exercise would have provided a better reflection of spatial extent of uses toward more accurate spatial overlap, area of alteration and effect calculations.

It is unclear how the magnitude of effects analysis and application of conservation measures provides the quantified results in potentially affected area (acreages) described in Section 4.4. It is also unclear how the identified reduction in potentially affected area (take for each species) is viewed by the federal services as a condition for ESA compliance for uses managed by DNR. A total acreage of habitat used by each species for each of the covered activities should be provided to compare total habitat, potentially affected habitat and estimated decrease in potentially affected area.

Data should be provided to show how existing DNR programs for protection and restoration of habitat have already contributed to a reduction in potentially affected area. These existing programs should provide sufficient opportunities for additional ESA compliance without the initiation of new programs such as the landscape planning process discussed in Chapter 5.

Many of the determinations made in this effects analysis were based on “professional judgement.” Specific information on the extent of professional judgement and those providing it should be included.

Section 4.3 Covered activities: potential effects

Table 4.14 describes the assumed area of alteration for the overwater structures group. The area of alteration is determined by totaling the number of leases and multiplying the result by average width and length measurements. There are no average width and length measurements provided in the table, as described. There are two categories labeled “Assumed Width” and “Assumed Length” that may be these average dimensions but it is unclear. Multiple attempts at calculating the Area of Alteration from information provided in the table could not replicate the values in the Area of Alteration column. A review of the similar tables for shellfish aquaculture and log booming and storage tables revealed assumed width values that are greater than the maximum width values. These tables should be reviewed for accuracy and specific examples provided for how Area of Alteration was calculated. Further calculations throughout the Draft Aquatic Lands HCP based on the Area of Alteration should also be reviewed for accuracy.

Area of Alteration: marinas

The area of alteration, for purposes of the Draft Aquatic Lands HCP, should only include those activities that DNR has management authority over through use authorizations. This section should not include the general category of stormwater pollution, nor shoreline erosion caused by waves produced by “the” boat. The vast majority of stormwater impacts

are related to upland uses that DNR does not have management authority over through issuance of use authorizations for state-owned aquatic lands. The general operation of boats is beyond the management authority of the DNR Aquatics Program and any potential effects from boating should not be included in the calculation of area of alteration for marinas.

The area of alteration for marinas is calculated based on a 150 meter extension of the "typical" marina for each of four sides of the estimated footprint. It is unclear how 150 meters was determined. This calculation should include a reduced extension value for the side of the marina closest to shore. The distance between shore and the landward side of a marina is typically much less than 150 meters. This four sided calculation has resulted in an overestimation of the area of alteration for marinas.

Section 4.4 Covered species, potential effects, and expected outcomes

This section states that "(f)or certain fish species there was insufficient data to identify any threats warranting coverage in the habitat conservation plan, the potential effects of covered activities, or the expected outcomes with the application of conservation measures. The following are included in the Aquatic Lands Habitat Conservation Plan because of their listing status and assumed habitat overlap on state-owned aquatic lands. These species were listed under ESA and added to the HCP after the potential effects document was developed. The habitat protections provided in the HCP for these species will provide substantial benefits for the habitat within the areas of assumed habitat overlap with the aquatic lands covered in this HCP."

Three of the forage fish species and lamprey listed in this section are not listed under ESA as endangered or threatened according to Table 1.13. Pacific sand lance and Surf smelt are categorized as "Not listed" in Table 1.13 and have no federal listing status under ESA. It is unclear why these (and other non-listed species) are included in the HCP which is a federal contract for ESA compliance for uses managed by DNR. Spawning habitat used by Eulachon/Pacific Smelt, the only of these species to be listed as threatened (or endangered), is characterized as "generally spawn in lower gradient reaches with coarse sediments, during strong freshets, and at night." It is not clear that this is overlapping habitat with the other species in this section based on habitat uses described in Section 4.1. Habitat overlap should not be the primary basis for inclusion of non-listed species in the Draft Aquatic Lands HCP. It is unclear how removal of these non-listed species from HCP consideration would have modified the Chapter 4 calculations of potential effects and implied take of habitats. Calculations under this revised scenario should be provided for comparison.

Chapter 5 – The Operating Conservation Program

(Note: Non sequential numbering in the sections below indicate that comments are specific to item numbers in those sections of Chapter 5.)

Section 5.2 The operating conservation program of the habitat conservation plan

Existing uses

This section states that "(h)abitat stewardship specialists at Washington DNR will review materials submitted for proposed uses of state-owned aquatic lands…" This section covers existing uses so it appears that the use of the word "proposed" is in error? Also, this section states that habitat stewardship specialists will review materials submitted while in the prior section on new proposed uses it states that "biologists" will review materials. Is there a difference in these positions/responsibilities and if so, why?

Implementation schedule for structural requirements for existing uses

In this section, DNR states they will establish "a reasonable timeframe within which contractual users of state-owned aquatic lands must bring their facilities into compliance with the incidental take permit." The timeframe is based on a number of criteria. Two of the criteria under this section may conflict. One criteria for determining the compliance schedule is the age of the facility and life expectancy of the existing structure and materials. This criteria should also include the condition of the facility related to the age and life expectancy.

The second criteria is to require implementation related to compliance based on the length of the lease term. A potential conflict may arise if the life expectancy of the structure and materials is greater than the term of an existing or reauthorized use. DNR does not have the authority to include conditions into a new or reauthorized use that will not be carried out during the term of the authorization. The requirement to come into compliance with the terms of the incidental take permit within 20 years even if a lessee seeks a term of greater than 20 years is an arbitrary deadline and may not be reasonable as described. No decision making process is outlined for how life expectancy of the existing structure and materials will be determined or how differences of opinion on this topic between DNR and authorized users will be addressed or resolved.

It is also unclear how "high impact" vs "minor impact" will be defined as they relate to the "priority of replacement based on an assessment of current environmental impacts." Without additional information, there is a concern that these assessments could be subjective and arbitrary determinations.

Implementation schedule for nonstructural requirements

This section states that "DNR will require a lessee who enters into a new term with existing facilities to implement best management practices in the operation of the facility immediately." Best management practices are not defined in the Draft Aquatic Lands HCP. Operational best management practices should be defined and available for review.

Counterproposals

This section notes that counterproposals may be presented related to the conservation measures, standards and programmatic strategies in the operating conservation program. These counterproposals "must be equivalent to or better than the measures in the operating

conservation program." It is unclear how mitigation sequencing may be applied to this concept if avoidance and minimization cannot be achieved and compensatory mitigation is considered for unavoidable impacts. DNR staff should be able to determine if any counterproposal meets or exceeds the goals and objectives of the plan without review and concurrence from the federal services.

Conservation Measures

All overwater structures

1. If new overwater structures cannot be placed to avoid grounding out, an alternative is provided to place stoppers on structures that will keep the bottom of the structure at least 0.5 meters (1.5 feet) above the level of the substrate. It is unclear how this height requirement was determined and if lower heights above the substrate are sufficient based on site characteristics.

2. Naturally deep water is not defined. Existing authorized and permitted overwater structures should not be required to move into deeper water as a condition for reauthorization. A cost/benefit analysis for this proposed measure should be provided. It is unclear how decisions will be made that determine appropriate and acceptable water depth to avoid and minimize impacts from overwater structures and associated vessels. Opportunities to reach "naturally deep water" may be restricted by outer Harbor Area lines, navigational constraints, environmental contamination, habitat, and local regulations. Vessels used in conjunction with recreational overwater structures approach and depart from a facility at near idle speed limiting the potential impacts from prop scour.

3. It is unclear if this applies to the overwater structure itself or upland adjacent uses related to the overwater structure. This statement should be revised to provide a clear description of the conservation measure. If this statement refers to upland adjacent uses (or private tidelands) that are not state-owned aquatic lands, DNR does not have the authority to impose management requirements on those lands. Section 3.4 of the EIS states "The Washington DNR Aquatics Division manages only state-owned aquatic lands, which do not include upland areas." Stormwater runoff and associated discharges are managed by multiple local, state and federal jurisdictions with clear regulatory authority.

4. Aquatic vegetation monitoring sites have been established by DNR for state-owned aquatic lands. These sites have helped define relative conditions and requirements for growth of aquatic vegetation many areas of state-owned aquatic lands. In many areas it may be difficult or infeasible to conduct an aquatic vegetation survey based on conditions at a proposed leasehold due to turbidity, currents and other factors. Use of monitoring site data may help determine if/when an aquatic vegetation survey should not be required due to relative conditions affecting the growth and defining depth limits of aquatic vegetation. DNR should continue to use the WDFW aquatic vegetation survey protocol instead of developing a separate protocol. This would provide applicants with consistency and certainty.

Complex and multiple element structures

4. It is unclear how the 100% surface area and 60% open space grating requirements were determined. There should be a discussion and analysis about the height of a structure above the

water and how sufficient height above the water may positively influence shading patterns and avoid or minimize impacts to covered species and habitats. Anecdotal information shows that aquatic vegetation, including eelgrass, grows up to the boundary and underneath some structures on state-owned aquatic lands.

Boat ramps, launches, hoists, lifts and rails

3. Presence of forage fish spawning determined from spawning surveys should be the determining factor over potentially suitable forage fish habitat when making determinations for allowance of structure types. It may not always be possible to span suitable forage fish spawning substrate. For contaminated sites that have been remediated, institutional controls may not allow for any pile driving while a surface ramp may be acceptable.

Docks, piers, and wharves

1. Any requirements for buffer zones should be site specific based on the conditions and expected use of the site (vessel size, moorage limits, etc.). Technical reports that provide the background and rationale for development of the buffer zone distance and depth requirements should have been included in the appendices to the Draft Aquatic Lands HCP. Vessels used in conjunction with overwater structures typically approach and depart from a facility at near idle speed limiting the potential impacts to aquatic vegetation and from prop scour.

2. Naturally deep water is not defined. Placing signage on a structure that provides guidance to boaters on appropriate moorage areas related to vessel draft/water depth to prevent grounding out would eliminate these concerns. Opportunities to reach "naturally deep water" may be restricted by outer Harbor Area lines, environmental contamination, habitat, and local regulations.

3. It is unclear how the minimum grating requirements were developed. Technical reports that provide the background and rationale for development of grating requirements should have been included in the appendices to the Draft Aquatic Lands HCP.

5. It is unclear how the 100% surface area and 60% open space grating requirements were determined. There should be a discussion and analysis about the height of a structure above the water and how sufficient height above the water may positively influence shading patterns and avoid or minimize impacts to covered species and habitats. Anecdotal information shows that aquatic vegetation, including eelgrass, grows up to the boundary and underneath some structures on state-owned aquatic lands.

   No discussion of the potential need for this category of overwater structure to allow for vehicle traffic or other load bearing requirements is provided. Is there an allowance to install non-grated surfaces over nearshore areas if no grated products are available that will support required commercial and safety equipment?

Mooring buoys

1. Technical reports that provide the background and rationale for development of the depth requirements should have been included in the appendices to the Draft Aquatic Lands HCP.

Vessels used in conjunction with mooring buoys typically approach and depart at near idle speed limiting the potential impacts to aquatic vegetation and from prop scour. Minimum depth requirements for mooring buoys should be defined by the site characteristics and type of vessel that will be moored to the buoy.

2. It is unclear how DNR will determine which situations would allow for the use of non-embedded anchors for mooring buoys. DNR should rely on the knowledge and experience of mooring buoy installers to determine the appropriate type of buoy anchor.

3. Existing "non-compliant" anchor systems should not be required to be removed for any reasons unless they are failing and need replacement. Requiring replacement during non-anchor related maintenance and repair is likely to cause more impacts by resuspending sediments and scouring the area. Recreational mooring buoy licenses, where required, have short terms and the replacement requirement may cause undue economic burdens on licensees. Many existing block anchors become embedded in the sediments and cause minimal, if any impacts. A justification for how this anchor replacement measure provides required ESA compliance should be included.

Standards

Bank armoring

This section states that "(e)xisting bank armoring on state-owned aquatic lands must be removed or, if the need for continued protection is documented in an engineering report, replaced with softer (less intrusive) shoreline protection systems. As discussed in Section 5.2 "Implementation schedule for structural requirements for existing uses", DNR will establish a reasonable timeframe for contractual users of state-owned aquatic lands to bring their facilities into compliance. It is unclear how the implementation schedule will be applied to bank armoring. Potential conflicts may arise if removal of the bank armoring is required prior to end of its life expectancy or if the life expectancy is greater than the term of a reauthorization. Soft shoreline protection systems are not always viable based on site characteristics and wave energy. New hard bank armoring should be allowed in cases where a remedial action for a contaminated site would require it.

It is unclear what authority DNR has to require compensatory mitigation if continued use of a previously authorized armoring structure is reauthorized. This could be defined as retroactive compensatory mitigation and should not be required. Compensatory mitigation should not be required for any existing authorized and permitted uses as a condition for reauthorization. It is unclear if compensatory mitigation will be required for "sanctioned habitat creation or restoration" that requires new hard bank armoring. DNR does not have the authority to include conditions into a reauthorization that will not be carried out during the term.

Breakwaters

Timeframes for retrofitting existing breakwaters should only be included in a reauthorization if the breakwater will need to be replaced or have significant non-routine maintenance performed during the term of the reauthorization. DNR does not have the authority to include conditions into a reauthorization that will not be carried out during the term. It is unclear if compensatory

mitigation will be required for continued use of existing breakwaters as is proposed for existing bank armoring. New, fixed breakwaters may be required to protect remedial actions related to contaminated sites and/or habitat creation and restoration.

Derelict structures and abandoned equipment

Language describing requirements for removal of lessee or grantee owned structures is already included in use authorizations for state-owned aquatic lands. It is unclear who has authority to decide when structures are "no longer being used as part of the permitted use" and how conflicts related to this will be resolved.

Dredging and sediment removal

This section should also include specific allowances for dredging that include maintenance dredging, contaminated sites, wood waste cleanup or habitat creation/restoration.

Pressure washing

This section notes that "(e)quipment that contains or is covered with petroleum based products may not be pressure washed in or over the water, and wash water must be contained and taken to an approved treatment facility." It is unclear what authority DNR has to require wash water to be contained and taken to an approved treatment facility if the pressure washing is not being conducted on or over state-owned aquatic lands. Collection of and/or filtering of wash water may not always be feasible.

Tires

This section states that "(e)xisting tires used for floatation must be replaced with inert or encapsulated materials, such as plastic or enclosed foam, either during maintenance or repair of the structure, or at the time of reauthorization, whichever is sooner. Removal of tires used as nonstructural support elements of the structure (such as bumpers and fenders) will be required prior to the renovation life of the facility defined in the reauthorization." The first requirement appears to be in conflict with the discussion under "implementation schedule for structural requirements for existing uses" in Section 5.2. Tires used for floatation should be allowed to remain as a component of a structure until that structure has reached the end of its life expectancy or it is to be replaced. Maintenance and repair of a structure that does not include the floatation should not be a trigger for replacement of non-compliant floatation. It is unclear what the scheduling requirements will be for tires used as nonstructural support elements. If this differs from the "implementation schedule for structural requirements for existing uses" in Section 5.2, additional clarifying information should be provided.

Treated wood

Washington Department of Fish and Wildlife (WDFW) and the US Army Corps of Engineers (USACE) currently allow the use of treated wood pilings through their permitting processes. The implementation process for DNR reauthorizations under the Draft Aquatic Lands HCP includes the requirement to develop a schedule for replacing treated wood with other materials. The life expectancy criteria should be used to implement this requirement and not an arbitrary

replacement schedule. DNR does not have the authority to include conditions into a reauthorization that will not be carried out during the term.

Covered species work windows and buffer distances

Regulatory agencies typically define work windows for in-water construction related activities. It is unclear how the term *operational activities* is defined in this standard. Restricting operational (use) activities for a structure or facility during certain time periods may be infeasible. DNR should provide clarity on this. It is unclear, for example, if an overwater structure would be required to close during certain times of the year to avoid noise impacts to covered species or would activities at a facility be restricted that would risk the financial viability of the operation?

Programmatic measures

If required, as stated in the introduction to this section, a framework for compensatory mitigation should have been developed and included for review.

Protection of native aquatic vegetation

This section first describes avoiding shading and then discusses minimizing shading by maximizing light transmission. Minimization of shading through the implementation of grating in overwater structures without further avoidance measures should provide ESA compliance as discussed in other sections of the Draft Aquatic Lands HCP. This programmatic measure does not provide a discussion about the height of a structure above the water, especially for fixed piers and docks. Sufficient height above the water may positively influence shading patterns and minimize impacts to covered species and habitats. Buffers, if required should be developed based on the site characteristics and uses of a proposed structure or facility.

Installation of an outfall pipe below the substrate may not always be feasible. The diffuser or discharge point must exit above the surface. Locational requirements for diffusers or discharge points may be overly restrictive based on patterns and abundance of native aquatic vegetation and the definition of nearshore.

Marine vegetation surveys

DNR should rely on the WDFW marine vegetation survey protocols that are used for regulatory permitting processes and not establish a separate survey protocol. This would provide for consistency and certainty for users of state-owned aquatic lands.

Defining eelgrass bed boundaries

The precautionary approach adopted by DNR may be warranted, but should also consider that "eelgrass in Puget Sound has shown only a slight declining trend that has not resulted in a decrease in the spatial extent of eelgrass across Puget Sound in the last 9 years." Implementing the "Operational Definition of an Eelgrass Bed" should also take into account the overall public benefit provided by a project proposal in areas with very low densities of eelgrass.

Protection of forage fish spawning habitat

1. Pacific sand lance and Surf smelt have no ESA listing status, according to Table 1.13. Surveys that have identified forage fish spawning and not suitable forage fish spawning habitat should be the basis for implementing siting requirements to avoid impacts. Operational activities that may be considered to affect spawning behavior, disturb spawning substrate or sediment sources could include almost any use of state-owned aquatic lands. Without a better description, this requirement could result in large scale prohibitions on uses of state-owned aquatic lands in these areas.

2. This requirement should only apply to areas where surveys have identified forage fish spawning. Span length should be based on the proposed design and use of the structure in relation to the site characteristics.

3. Under this standard, it would appear that existing lessees would be required to implement forage fish protection measures if forage fish are found to be spawning at the site over two consecutive years. Forage fish protections measures are not defined. Forage fish protection measures should not be required based solely on the fact that spawning has been identified at a site with an existing authorized use. Quantifying impacts to forage fish spawning, if any, would be difficult considering that forage fish have been identified as spawning with the current use in place. Spawning surveys will take two years to complete. It is unclear if compensatory mitigation would be required for existing uses that are then found to have forage fish spawning occurring at the site? It is also unclear what authority DNR has to require compensatory mitigation for existing authorized uses, if any.

4. Language in this section is confusing. New authorizations for existing uses have consistently been referred to elsewhere in this document as reauthorizations. Is the definition of new authorization for existing uses in this section different than reauthorization? How will impacts to forage fish spawning from an existing use be determined and quantified? Work windows for *operational work* should be clearly defined. At minimum, a conceptual framework for development of plans designed to avoid and minimize impacts to forage fish spawning habitat for existing uses should be provided. Does operational work window mean that certain operational aspects (general use) of a facility will be prohibited or restricted during certain time periods? If so, this may be unfeasible for most, if not all, facilities, structures, etc. It is unclear if compensatory mitigation may be required for perceived impacts to forage fish spawning habitat from existing uses. If so, this should be clarified and described. Sampling and survey requirements could be costly and impact operations.

5. Surf smelt and Sand lance have no ESA listing status so it is unclear why these two species are identified separately from other listed species for specific conservation measures.

Washington DNR programs for protection and restoration of habitat

DNR has a robust system of programs in place “to ensure the protection of the aquatic lands and the species that depend on them.” DNR has also been applying “early implementation” of the conservation measures identified through the HCP planning process for several years. This early implementation of conservation measures applies to new proposed uses of state-owned aquatic lands and existing authorized uses. ESA compliance for the management of state-owned aquatic

lands should be achieved through existing DNR programs and federal, state and local regulatory processes without adoption of the Aquatic Lands HCP.

Aquatic Landscape Planning

It is unclear how DNR will identify and define important habitat areas or priority conservation areas which are both terms used in this section. This process, once completed, has the potential to strongly influence/limit opportunities for the development of water dependent uses. Will only lower value areas be allowable for authorized uses? What are "other" water dependent uses? DNR already has the authority to refuse to authorize activities if they do not provide public benefit. DNR also already has existing tools (see section on DNR programs for protection and restoration of habitat) for habitat protection so another program/management layer is not necessary.

Management practices

Private recreational docks

RCW 79.105.030 (3) does allow for DNR to revoke the allowance for installation and maintenance of private recreational docks based on a finding of public necessity. The intent of this section, however, appears to be directed at individual private recreational docks where circumstances provide for a finding of pubic necessity and not the development of a programmatic management practice for the entire use category.

Private recreational docks are highly regulated through local, state and federal authorities. Current implementation of design standards and construction methods that minimize impacts through regulatory permitting is effective and meets ESA requirements. DNR should rely on regulatory permitting processes to minimize impacts related to recreational docks and not implement an additional management practice that would require retroactive changes. If DNR chooses to pursue this management practice as stated in the draft Aquatic Lands HCP, a transparent, public and inclusive process should be used to first determine if a programmatic finding of public necessity would be required for ESA compliance for private recreational docks. A private recreational dock stakeholder group should have been convened by DNR to consider inclusion of this management practice in the Draft Aquatic Lands HCP. Since DNR does not issue authorizations for private recreational docks, many dock owners are likely not aware of this proposed practice and will not have the opportunity to review and comment on the Aquatic Lands HCP process.

Implementation

This section states that DNR will use the landscape prioritization process to define areas where "additional overwater structures could impact priority habitat." This statement implies that in those areas no additional private recreational docks would be allowed. It is unclear if and how this process would be used to determine a broad definition of public necessity for prohibiting uses or if it is an appropriate interpretation of RCW 79.105.030(3).

The implementation section also states that "Washington DNR will work with property owners whose docks are not meeting the operating conservation program standards, and a

schedule will be established for the necessary changes to the structure." DNR does not issue use authorizations for private recreational docks. Implementation of the operating conservation program for authorized uses is based on the expected lifespan of the components of a structure and term of the authorization or reauthorization. DNR should provide additional information on how scheduling for "necessary" changes will be determined. DNR should allow regulatory permitting processes to achieve desired outcomes for minimizing impacts from these uses. If implementing this management practice, DNR should allow for the expected life span of private recreational docks to direct scheduling of "necessary" changes and not apply arbitrarily determined modification/replacement schedules.

Item #4 in this section states "Washington DNR will provide a letter of approval (including conditions) or denial for all proposed new and replacement private recreational docks." It is unclear if this is a requirement of RCW 79.105.030? Has DNR determined that all private recreational dock projects may be denied if they do not meet the operating conservation program based on a finding of public necessity? If so, this should be clearly identified and discussed in the Draft Aquatic Lands HCP.

The outreach component of this implementation section should include development of a private recreational dock owner stakeholder group. If this management practice is adopted, the stakeholder group could engage with DNR on implementation, adaptive management and monitoring activities.

Section 5.4.1 Adaptive Management and Monitoring Plan

NMTA requests representation on the Adaptive Management and Monitoring Plan stakeholder group.

Section 5.4.2 Baseline and effectiveness monitoring

This section should discuss what DNR will use for developing a baseline from which to compare for effectiveness monitoring. A discussion should also be provided for how influences impacting listed species beyond the control of DNR management authority will be assessed and quantified for determining effectiveness of the HCP. If an outside influence such as stormwater is found to contribute a greater proportion of impacts than previously thought, would the adaptive management plan modify the operating conservation program to become less restrictive?

Chapter 6 – Alternatives to the Habitat Conservation Plan

Section 6.1 Alternative 1: No action

This section does not describe the "early implementation" of conservation measures that are (and have been for several years) systematically being applied to current DNR authorization processes for both existing and new proposed uses. Conservation measures that are currently being applied were developed through the Aquatic Lands HCP process. Under this current policy direction, DNR would have the opportunity to implement adaptive management strategies, compliance monitoring and effectiveness monitoring without an Aquatic Lands HCP.

Chapter 7 – Glossary

Maintenance

This is a very broad definition of maintenance. Routine minor maintenance, major maintenance, repair and rehabilitation, and replacement are all different activities. WDFW hydraulic code rules have different definitions for these categories in relation to the issuance of Hydraulic Project Approvals which are commonly required for in-water activities related to DNR aquatic use authorizations. It is unclear when minor routine maintenance will be allowed without additional authorization from DNR and what the triggers are that may require implementation of the Operating Conservation Program (HCP Chapter 5) for all other "maintenance" activities as defined. The components (maintenance, repair, rehabilitation and replacement) of this definition should be extracted and each provided with its own definition as it relates to implementation of the Draft Aquatic Lands HCP. The definition of maintenance and related terms should not vary considerably from regulatory definitions for consistency.

DRAFT AQUATIC LANDS HCP
ENVIRONMENTAL IMPACT STATEMENT (EIS)

Executive Summary

Section ES-1 Introduction

What is the process used to determine "could become listed during the permit term" for those species not currently listed under ESA? Species listing under ESA is a scientifically rigorous and public process. An HCP may be amended to include newly listed species. Amending an HCP is a formal process that should be preferred over including species in a HCP based on the notion that they "could" become listed during the permit term.

Section ES-3.1 Alternative 1 (No Action)

Throughout this EIS document, especially in discussions of "Alternative 1, No-action" for Section 4 Environmental Consequences, the following statement is made, "In contrast, under the No-action Alternative, requirements for any such (conservation) measures would result from the permitting and review processes of agencies with regulatory oversight." DNR is and has been implementing conservation measures for all use authorizations for several years. It is not accurate for the EIS to describe only that "requirement for any measures would result from the permitting and review processes of agencies with regulatory oversight."

Section ES-4 Environmental Effects

The short-term effects related to action alternatives described above should be considered long term-effects. Restricting the potential sites for new uses and increased costs, especially related to operations, are long term impacts for existing or potential users.

Section 1 – Purpose and Need

Table 1.1 Species proposed for ITP coverage through the Aquatic Lands HCP

This table provides footnotes with explanations of each type of listing status. These footnotes should be provided in Table 1.13 in the Draft Aquatic Lands HCP so reviewers have easy access to listing definitions to identify the rationale (or lack thereof) for inclusion of species in the Draft Aquatic Lands HCP.

Section 1.2.3.1 Endangered Species Act, Section 10

The EIS does not provide a discussion on how DNR will ensure funding of the plan beyond the two year Washington State legislature budget cycles. It is also unclear how this funding plan would meet the federal criteria to issue the ITP.

Section 1.2.3.3 National Environmental Policy Act. (NEPA)

The Draft EIS should provide a better description of how the SEPA process is being adhered to in conjunction with NEPA. It is unclear, except as stated, that the SEPA requirements are similar to NEPA. The economic analysis in the EIS contains mostly vague qualitative assessments of the economic impacts from the alternatives being considered. Additional quantitative analysis of economic impacts should be provided, including a cost/benefit analysis. It is likely that the Draft Aquatic Lands HCP process could be considered rulemaking covered under Chapter 34.05 RCW. RCW 34.05.328 describes the requirement to develop a cost/benefit analysis for rulemaking, even though the Draft Aquatic Lands HCP is not a formal draft statute. Development of a cost/benefit analysis would provide additional and beneficial analysis for economic impacts associated with the Draft Aquatic Lands HCP.

Section 2 - Alternatives

Section 2.2.3 Elements Common to Both Action Alternatives

Throughout the EIS and Draft Aquatic Lands HCP, the concept of implementing conservation measures (and work windows) and associated standards to the operational elements of structures and uses of state-owned aquatic lands is discussed. “Operational elements” or “operations” affected by the implementation of the Draft Aquatic Lands HCP are not defined. A definition should be provided especially if there will be cases where general operations of a facility or the requirement for timing/seasonal restrictions on use of a structure or facility may be required to protect species covered under the Draft Aquatic Lands HCP. For instance, how will potential noise impacts from the uses be considered in operational definitions and constraints? Would a marina be required to close during certain times of the year to minimize operational impacts?

Section 2.2.3.1 Requirements for Authorized uses of State-owned Aquatic Land

The Draft Aquatic Lands HCP should include the highlighted portion of the following statement, “The HCP Operating Conservation Program also provides that Washington DNR may make exceptions to the application of conservation measures to accommodate exceptional circumstances, to meet safety or regulatory requirements, **or to comply with existing legal designations such as harbor areas and waterways where conservation measures would thwart navigation and commerce**.” The Aquatic Lands HCP should to meet the Washington State Constitutional requirements for Harbor Areas and as a means to provide the public benefit mandate of fostering water dependent uses under RCW 79.105.030. Interim uses of Harbor Areas should also be considered for exceptions to the application of conservation measures, especially when providing the public access benefit.

Section 2.2.3.3 Protection of Aquatic Vegetation

There should be a discussion under this section for situations where new uses are not able to avoid existing native aquatic vegetation. Some uses may require a specific location based on ownership, physical characteristics and zoning/shoreline designations, etc. If existing authorized uses cannot be moved or modified to reduce impacts, will they be required to remove those uses (structures/facilities, etc.)? Existing permitted and authorized uses in good standing should

not be required to provide retroactive mitigation or be removed based on new HCP conditions that were not in effect at the time of authorization.

This section states that "When applying for reauthorization of existing structures and uses that impact native aquatic vegetation, lessees would be required to move or modify the structures or uses to reduce impacts. Uses authorized by Washington DNR under the requirements of the Aquatic Lands HCP would not be required to move to avoid vegetation that expands into the area after the use has been authorized." How will impacts to native aquatic vegetation from existing authorized structures be determined and quantified if there is no baseline information available that identifies condition prior to the use? Moving a structure to reduce impacts may not be feasible and should not be an option for reducing perceived impacts if that structure had previously been approved through permitting processes and authorized by DNR.

The following statement "Uses authorized by Washington DNR under the requirements of the Aquatic Lands HCP would not be required to move to avoid vegetation that expands into the area after the use has been authorized" should be revised to read "Uses authorized by Washington DNR would not be required to move to avoid vegetation that expands into the area after the use has been authorized."

Section 2.2.3.3 Protection of Forage Fish Spawning Habitat

This section states that "Under either action alternative, all new or reconfigured structures authorized by Washington DNR would be required to avoid impacts to documented habitat for forage fish. Washington DNR would require uses of those structures to be conducted in a manner that prevents alteration of spawning behavior (e.g., through implementation of work windows), substrate or vegetation." It is unclear how authorized users would be required to avoid impacts to documented forage fish habitat. Use (presence of spawning activity determined through surveys) of documented forage fish habitat should be the basis for implementing avoidance measures, not just the occurrence of habitat.

The Draft Aquatic Lands HCP discusses that existing structures must also be moved and/or modified to reduce impacts. Both the EIS and draft HCP should be consistent to these requirements.

Section 2.3 Alternatives Considered but Not Analyzed in Detail

An alternative should have been developed that only includes those species listed as endangered or threatened under ESA. This would have allowed for a focused and limited scope for DNR "to ensure that legally authorized, planned, and mandated management actions may continue to occur on state-owned aquatic lands without risk of violating the Endangered Species Act or resulting in an unlawful take of threatened and endangered species." The amendment process and adaptive management strategy could be used to include newly listed endangered or threatened species that achieve listing status based on a scientific and public process.

Section 3 – Affected Environment

Section 3.4.2.1 Marine Waters

The fact that stormwater from upland uses, not managed by the DNR Aquatics Program, contribute the majority of impacts to water quality in Washington State should be recognized by DNR. Focused and limited conservation measures, standards and programmatic measures should be developed that are reflective of the minimal contribution that uses of state owned aquatic lands contribute to water quality impacts. DNR should commit to working with state and local permitting entities to develop effective, targeted strategies to reduce stormwater issues impacting state-owned aquatic lands.

Section 3.8.2.1 Key Habitat Components in Marine Areas

This section states that "(c)ompared to historical conditions, the areal extent of eelgrass, kelp, and saltmarsh vegetation has decreased substantially the analysis area." Information and data should be provided to support this statement. This appears to be contradictory to information from EIS p. 3-30, lines 11-22.

Section 3.13.2.2 Revenue, Jobs and Income

This section states that "(t)he expiration dates for existing authorizations represent the earliest point at which habitat conservation measures can be incorporated, unless the tenant proposes changes to the use, operations, or improvements. This statement is not entirely accurate and does not include the fact that current early implementation of conservation measures requires tenants to incorporate the conservation measures when conducting non-routine maintenance, repair and replacement. The action alternatives would also require this.

Section 3.13.2.2 Recreation

The USFWS estimates in a 2011 report that expenditures related to recreational fishing is approximately 1 billion dollars. Much of this recreational activity is related to authorized uses of state-owned aquatic lands (docks, marinas, boat ramps, etc.) For the purposes of determining economic contributions from uses of state-owned aquatic lands related to recreation, a range of estimates should have been determined instead of reporting that the extent is unknown. Uses of state-owned aquatic lands that support revenue, jobs, and income in the recreation industry also include public access structures and parks on filled aquatic lands.

Section 3.13.2.3 Ecosystem Services

This section states that "(t)he ongoing work of the Puget Sound Partnership's Puget Sound Science Update also supports the assertion that protection and restoration of natural resources have social and economic value that can be measured in terms of human well-being. How is this assertion supported? How is "human well-being" defined? An assertion could also be provided that human well-being is supported by benefits derived from authorized uses of natural resources as well as protection and restoration.

Section 4 – Environmental Consequences

Section 4.1.3.1 Analysis Assumptions

This section states that "(t)o address the full potential risk to the resources, therefore, the analyses for Alternative 1 consider the potential effects associated with Washington DNR authorizing uses of state-owned aquatic lands without requiring the implementation of any conservation measures other than those required by other agencies with regulatory authority." This may allow for the full potential risk to the resources under Alternative 1 but the analysis should include that DNR is and has been implementing conservation measures identified during the Aquatic Lands HCP development process for all use authorizations for several years. The No-action alternative (Alternative 1) should include this early implementation of conservation measures.

Section 4.1.4.1 Effects of Substrate Modification

This section states "(i)n addition, boat wakes can create unnaturally large or frequent waves, leading to increased erosion of sediments in shallow areas, weakening or killing native plant communities. Boat wakes can also damage the nests and eggs of birds and amphibians that breed in shoreline habitats. DNR has little to no formal control over boat wake, in general, or through implementation of the Draft Aquatic Lands HCP.

Section 4.2.1 Effects Common to All Alternatives

This section states "(i)t is assumed for this analysis that Washington DNR would not modify the process for authorizing uses of state-owned aquatic lands under any of the alternatives in any way that would affect the ability of persons or entities to secure authorization to use state-owned aquatic lands." Implementation of the conservation measures whether through current early implementation or through the action alternatives has and will modify the process for authorizing uses. This will occur under the requirement to implement the conservation measures, standards and programmatic measures to secure a use authorization or reauthorize existing uses. As discussed earlier, costs associated with the conservation measures will increase. Opportunities for areas open to potential uses of state-owned aquatic lands will be reduced through the Landscape Planning process, aquatic vegetation and forage fish spawning protection measures.

Section 4.2.3.2 Uses of Aquatic Lands in Washington State

This section states "(t)o ensure compliance with the State's statutory obligation to foster water-dependent uses, utilize renewable resources, and encourage direct public access to state-owned aquatic lands, Washington DNR would implement the requirements for existing facilities in a manner that avoids an inordinate burden on the lessees who own the structures and improvements. The time frame for compliance would be established in each authorization agreement. In some cases, replacement of a facility may not be reasonable within the lease term. In such cases, Washington DNR would establish a reasonable time frame for replacement and would provide notice to the lessee that replacement will be expected in a future term, if there is one." This is a very important statement and one that should be included in the Draft Aquatic Lands HCP. It is unclear how an "inordinate burden" is defined. Currently, it is stated

that replacement schedules or life expectancy determinations for improvements will be defined in the next authorization. It is not clear how the Operating Conservation Plan (Chapter 5, Draft Aquatic Lands HCP) would be implemented for improvements that have a life expectancy beyond the term of a reauthorization. DNR does not have the authority to include conditions into a reauthorization that will not be carried out during the term.

Section 4.8.3 and 4.9.3 Alternative 2, proposed HCP

In these sections, the "Effects on Proposed Covered Species" are discussed for proposed covered species. "The outcomes from implementation of the Draft Aquatic Lands HCP **may** result in improved conditions for these species and will result in "slight" reductions in impacts." It is unclear how this relates to the reduction in potentially affected area calculations discussed in Chapter 4 of the Draft Aquatic Lands HCP used to determine/allow incidental take. There should be a better description of how this information provides ESA compliance identified in the Draft Aquatic Lands HCP.

Section 4.13 Social and Economic Environment

An attempt to quantify impacts to the social and economic environment should have been made due to the significant impacts likely associated with implementing the action alternatives presented in the EIS and Draft Aquatic Lands HCP. Enough information on economic impacts from the alternatives should be available to develop a range for consideration under this EIS. Under Section 4.13.3.1 Effects on Revenue, Jobs, and Income, the Recreation and Commerce subsections note that "the implementation of measures…..may result in increased operational costs under Alternative 2 compared to Alternative 1." It is a safe assumption that operational costs **will** increase under Alternative 2. These subsections also note that "No information is available to evaluate the potential costs of modifying or moving facilities." If a "typical" structure for all covered overwater activities can be defined in Chapter 4 of the Draft Aquatic Lands HCP, a range of estimated cost impacts could be derived from general construction practices, material costs and labor costs. Costs of removing structures, if required, and associated loss in revenues should also be considered in this analysis.

Section 5 – Cumulative Impacts

Section 5.2.2 Development

This section states "(b)ased on population projections from the Office of Financial Management, Washington's total population is expected to grow from 6.7 million in 2010 to 8.8 million in 2040. Most of the growth is projected to occur in four counties in western Washington: King, Snohomish, Pierce, and Clark. Notably, more than 66 percent of the state's projected growth is expected to occur in counties that border Puget Sound." While this projected population growth is expected to bring increased pressure on aquatic ecosystems in the analysis area, it also highlights a likely need for additional uses of aquatic lands to support a broad public benefit as described in RCW 79.105.030. Ensuring environmental protection of state-owned aquatic lands needs to be achieved while also fostering water dependent uses, encouraging direct public use and access and utilizing renewable resources. The Draft Aquatic Lands HCP should provide a focused and limited scope for protection of endangered and threatened species while allowing DNR to achieve the balanced mandate for management of state-owned aquatic lands.