

Lisa Clausen

From: Public Council Inbox
Sent: Tuesday, March 16, 2010 4:07 PM
To: 'Ryan, Andrew F'
Subject: RE: councilSMPbulkhead.doc

Thank you for cc'ing the Burien City Council on your message. It will be included in the Correspondence for the Record for an upcoming Council meeting.

L. Clausen
City Manager's Office

-----Original Message-----

From: Ryan, Andrew F [mailto:andrew.f.ryan@boeing.com]
Sent: Tuesday, March 16, 2010 2:22 PM
To: Susan Coles
Cc: Public Council Inbox; David Johanson
Subject: councilSMPbulkhead.doc

Good afternoon Susan, please distribute accordingly.
Thank you
Andy Ryan

CFTR: 03/22/10

Andrew Ryan
16525 Maplewild Ave SW
Burien, WA 98166
206-248-1822

15 March 2010

The Burien Planning Commission
Burien City Council
c/o Susan Coles, Community Development Department Assistant
The City of Burien
400 SW 152nd Street
Burien, WA 98166

To the Burien City Council and Burien Planning Commission,

I would like to comment on the Shoreline Management Plan that the Planning Commission is currently working. After watching last weeks commission meeting, I am pleased to see recognition of some of shoreline property owners inputs in the discussions and I appreciate their efforts. Given that however, I am concerned that commission is still intent on completing the Burien SMP by the end of March, especially with no plan to have additional public input. This appears to be in total disregard to the 400 plus property owners, the ones most impacted by the outcome, who signed a petition to the city council requesting additional time and input. I believe there are many issues, which require time and energy, to still be addressed.

- Although one of the goals of the SMP Update is simply promoted as “no net loss” of shoreline ecological functions, specific regulations directed at new and the repair and replacement of existing bulkheads go far beyond that goal. It holds shoreline property owners with existing structures primarily responsible for meeting that goal..

It fails to recognize what those of us that have lived here for many years understand, such as the seasonal wave activity, vessel wake impacts, typical conditions and winters storms and the importance of hard shoreline armoring for protecting our properties. The current SMP position does not consider the value or reasonable use that the bulkheads provide.

None of this should infer that we are not ecologically inclined, we are probably more attuned, and motivated, than anyone to the health of our shorelines, but the language in the SMP puts our properties and significant financial assets at risk.

My intent in this letter is to focus on **SMP Section 20.30.070 Bulkheads**. Outlined below are pertinent paragraphs from the SMP (bolded) that I am concerned about followed by my comments.

1. Policies

- a. **New development should be located and designed to avoid the need for future shoreline stabilization to the greatest extent feasible.**

Replacement bulkheads have been defined as “new” thereby requiring these structures to meet the same standards as those which never existed. The goal of “no net loss” of shoreline ecological functions fails to acknowledge that an existing bulkhead or hard shoreline armoring can be replaced with a similar but more environmentally friendly hard structure and still improve on the “no net loss” requirement. Repair, as opposed to “new” or “replacement” does not appear to be addressed anywhere in the SMP which I believe is an oversight. Perhaps language similar to the primary structure repair vs replace language could be incorporated. (i.e. – Catastrophic damages resulting in less than 75% of replacement value can be repaired in existing location and configuration)

- b. **“Bulkheads should be designed to blend in w/ natural surroundings.....”**

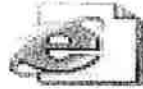
This is a “policy” statement, not one of the regulations, but not very practical and no guidance is provided. I’ve never seen a big cement wall that blends in w/ anything, and could put unreasonable financial constraints on the property owner. Nor have I seen any municipalities that own the numerous ports and marinas in Puget Sound do anything to comply with this. The city of Burien set precedence and demonstrated this when property owners along the 16500 block of Maplewild requested that some sort of visual improvements, etc be incorporated into the “great wall” built during the Nisqually earthquake road repair. The City’s response was that it was too expensive but apparently sees no problem levying similar cost on the private sector.

- e. **“Where feasible, any failing, harmful, unnecessary, or ineffectual structural shoreline armoring should be removed.....”**

Dept of Ecology (DOE) has encouraged local governments to use the “best available science” contained in reports and studies that are inconclusive and are primarily aimed at the restricting of residential piers and removal of residential bulkheads. The Grette Associates Shoreline Analysis and Characterization report, that was also DOE funded, is used as documenting support for the Burien SMP. This report maintains the DOE party line that all armoring is harmful thereby starting w/ the blanket assumption that all of our bulkheads should be removed. No mention is made as to who pays for this removal.

No mention is made in the Grette document regarding a large body of conflicting scientific data, that refutes a number of allegations identified in the City’s version of “best available science”. I’ve included the link one

such document and can provide references to several others if



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desired.

Additionally, no attempt has been made to address the errors and sweeping generalization in the Grette document, such as “shoreline is hardened with ... private bulkheads...that affect littoral drift...during MOST TIDAL STAGES” (page 12, Hydrolic Function). Since the majority of bulkheads are “near” the Ordinary High Water Mark (OWHM), anything below a high tide level should not be relevant. Additionally the sweeping generalizations such as “armoring can intensify the flooding”, or “can increase the nutrient load”, “can increase the “probability of landslides”. These are all true statements of potential issues but they are not sufficient justification for the enormous impacts to the private property owners being identified in the SMP.

The Grette document also addresses flooding w/ the comment “armoring of the shoreline can hinder flow of floodwaters to and from the shoreline”. This is contrary to CITY OF BURIEN Technical Report entitled COASTAL FLOOD HAZARD ZONE DELINEATION dated June 29, 2007. which states “This Technical Report documents the flooding hazard study and map production for updating the City of Burien’s coastal BFE. The full Burien shoreline was not studied, but only that part that is more intensely developed and is *exposed to potentially damaging waves*. FEMA standards were applied to the data processing, hydraulic analysis methodology, and mapping of *calculated wave runup and overtopping results*”.

The flooding scenario FEMA identifies is about storm surge creating *wave heights in the 2 -3 meter range* (ref pages 15 and 16 of the above reference Coastal Flood document), but Grette document uses the flood plain determination to allege that bulkheads create flood scenarios from the land side. It states “Twenty-six percent of Reach M3, and forty-eight percent of Reach M4, is mapped as 100-year floodplain (Figure 8D). Grette further states “As discussed previously, armoring can reduce the ability of the shoreline to accommodate floodwater”. (Reference pages 13 & 14, and others of the City of Burien Shoreline Master Program update, Shoreline Analysis and Characterization document) This so called “scientific report” uses the FEMA data to support a totally contrary position and further demonstrates why little dependence should be on placed on this document for the purposes of creating such far reaching regulations. Besides the misinterpretation of the FEMA flood designation, the majority of the areas under consideration for SMP applicability are also deemed as Critical Areas due to the steepness of the hillside arising from the

shoreline. Can someone please explain to me how a flood occurs on a 30 to 40 degree slope?

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2. Regulations

A. "Non-structural shoreline stabilization...shall be used....unless project proponent demonstrates that a non-structural solution is not feasible and there would be no net loss of shoreline ecological functions":

Replacement of existing structure does not constitute a "loss of shoreline ecological functions. It would maintain the status quo. Replacement in existing locations using current bulkhead design criteria will actually improve the ecological function and still provide necessary protection of the private property. Need to include some language on "repairs" as opposed to replacement also. Reference response to Section 1(a) above.

B. "construction of bulkheads... are only permitted when non-structural methods...are not feasible to protect a residence or other primary structure or essential public facilities"

The above language excludes appurtenant structures such as boat houses, garages etc that are common on a significant number of our properties. State RCW 90.58, entitled Shoreline Management Act of 1971, (excerpts provided below) includes protection of appurtenances, the city version eliminates that protection. This is unacceptable and significantly impacts the value of our properties

Suggested wording would be:are not feasible to protect a residence, or other primary structure, appurtenance, or essential public facilities

Excerpts from RCW 90.58

RCW 90.58.100 Programs as constituting use regulations — Duties when preparing programs and amendments thereto — Program contents. *(6) Each master program shall contain standards governing the protection of single family residences and appurtenant structures against damage or loss due to shoreline erosion. The standards shall provide for methods which achieve effective and timely protection against loss or damage to single family residences and appurtenant structures due to shoreline erosion.*

RCW 90.58.290 Restrictions as affecting fair market value of property. *The restrictions imposed by this chapter shall be considered by the county assessor in establishing the fair market value of the property*

Incidentally, RCW 90.58.290 addresses regulations affecting fair market value of property and property tax implications. Washington State Attorney General Rob

McKenna also addresses this in his Advisory Memorandum: Avoiding Unconstitutional Takings of Private Property.

C. New structural stabilization measures shall not be allowed except when the necessity to protect primary structures is demonstrated.....

Reference comments to item B above.

Suggested revision :to protect primary structure *and appurtenances*

D. An existing shoreline stabilization structure may be replaced with a similar structure if the following apply:

i:protect the primary structure

Language needs to be revised to *include appurtenant structures and add or where there is a need to protect established uses or structures from erosion caused by currents, tidal action, or waves.* (this language is taken from the DOE guidelines

ii: Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark (OHWM).....unless the residence was occupied prior to Jan 1, 1992

Definition of OHWM Section VI-3, 20.40.100, states that OHWM means the mark on lakes, streams and tidal waters that approximate the line of mean high water as commonly evidenced by a mark upon the soil a character distinct from that of abutting upland with respect to vegetation.

OHWM currently is about 4' up my bulkhead, but if the bulkhead failed under storm conditions, vessel waves, or whatever, subsequent erosion would take about 15 - 20 feet of my property and the new OHWM, as "evidenced by a mark on the soil", would be in a significantly different location, and diminish up to a quarter of my current dryland property. Loss of this property re-establishes the measuring point for the 65' building setback requirements, seriously impacting the impact other SMP property restrictions. The majority of my neighbors have similar situations.

The majority of these bulkheads, or their replacements, have been in place for 30 to 50 years or more. Many of the bulkheads are waterwards of the "natural" OHWM and back-filled at that time to create a raised level surface adjacent to the shoreline. These areas are used for multiple water oriented purposes related to shoreline recreation, water equipment related storage, and along SW 172nd, for parking and parking structures. Loss of these bulkheads in their current location is a serious detriment and financial impact to the property owners.

Recommend this language be revised to say:

ii. Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark or existing structure *unless the structure to be*

replaced currently exists in that location. unless the residence was occupied prior to January 1, 1992,

F. Bulkheads shall be located and constructed in a manner which will not result in adverse effects on littoral drift and adjacent properties.

Reference response to (d) above, plus:

"Best science" as provided in the consultant report that city is using pre-supposes that bulkheads are detrimental to littoral drift which by inference means all bulkheads as currently located have adverse effects whether demonstrated or not. Therefore any replacement bulkhead could not be replaced in it's current location. To base regulating on implications and inconclusive data by saying that bulkheads **can or could** threaten the ecosystem without solid substantiation with the significant impacts to the affected property owners is untenable. The words "**can**" "**or**" "**could**" are the same as saying "might". "Might" is not the result of sufficient science when discussing changes that will greatly affect our property values and the city's subsequent revenue for other more important things.

Regarding the "adjacent properties" portion of the clause, potentially if a bulkhead fails, all neighboring bulkheads are at risk due to possible storm surge, wave action around or behind the newly exposed ends. Replacement bulkheads need to be built in such a manner that also allows protection to neighboring bulkheads.

Note: City of SeaTac has some reasonable regulations relative to this regarding replacement bulkhead alignment. Draft Cumulative Impacts Analysis Component for City of SeaTacs Shoreline: Angle Lake, page 29 states: *Shoreline stabilization solutions developed to replace existing shoreline stabilization shall be placed along the same alignment as, or landward of, the shoreline stabilization being replaced...*

G. Bulkheads shall not be installed for the purpose of creating upland by filling behind the bulkhead.

Many of the existing bulkheads did create additional land when they were built decades ago. Replacing them in their current location should not constitute "creation of additional" land, nor would it contribute to additional loss of shoreline ecological functions. Replacement bulkheads should be able to be rebuilt in the same footprint w/ the required amount of fill required to get back to their previous configuration. In addition, reference the response to D (ii) above.

Suggested revised language for this item would be as follows:

Bulkheads shall not be installed for the purpose of creating upland by filling behind the bulkhead, except where *a structure is being replaced with a similar structure and fill is part of the original construction. In this case, no additional fill shall be added beyond what is needed to repair the structure to its original form and capacity*

H. The size & quantity of material utilized for the bulkhead shall be the minimum necessary....

Who would want to fly on an aircraft, or drive a car, designed to "minimum" standards? Five years ago a 60' bulkhead in our area cost ~\$70,000 and this regulation expects to build it to "minimal" standards. Any property owner w/ that kind of investment deserves to have the best, not the minimal, structure available. Who is liable when this minimal design fails? Will this be another case where the property owner is left holding the bag?

How is damage from a non-minimal design demonstrated to have negative impacts on shoreline ecological functions? If the "extra" material (i.e – "factor of safety" such as bulkhead wall thickness) is placed on the landward of OHWM? What about "wings" on the ends that project landward protecting the property from end erosion, are these defined as over and above "minimum" requirements? Unfortunately, since setback measurements are taken from the inside face of the bulkhead, additional wall thickness results in additional setback distances contributing to another property owner issue.

This requirement combined with requirement "i" below, virtually guarantees there will be future bulkhead failures resulting in substantial additional cost and burdens to the shoreline property owners.

Suggested language could be: The size and quantity of material utilized for the bulkhead shall be the minimum necessary (*including acceptable engineering factors of safety*) to protect the structure (*and adjoining properties if applicable*) from the estimated energy intensity of the shoreline hydraulic system

i. The maximum height of a bulkhead on the marine shoreline shall be no greater than four (4) vertical feet above the OHWM.

OHWM is a relative position along significant portions of Reach's 3 and 4. Since the bulkheads were built waterward of what the "natural" OHWM would have been given no human intervention, references to current OHWM have different set of implications than "a mark along the soil".

As such, this appears to be a case of ignorance on the part of the drafters of this document. In conjunction with a high tide, four foot is woefully inadequate to protect our properties from either storm surge or vessel wake. Four to five foot vessel wakes are extremely common. Winter storm surge, a regular event, prompted FEMA to designate portions of Reach 3 and 4 as "flood plain". The City of Burien's flood plain study (referenced in my response to Section 1. Policies (e) above) validated the projected storm surge elevations, of 2 -3 meters. In 1990, a large quantity (~ 20) of bulkheads in Reach 3 were destroyed from strong northerly developed storm surge. In 2003, I was living in a house on SW 172nd that had ~4 feet of bulkhead above OHWM and a storm sent waves and driftwood into the front yard and basement, undermining part of my and my neighbor's bulkheads from the landward side. This is not an uncommon occurrence. **This is a guaranteed bulkhead failure scenario that would include destruction of some primary structures and umerous appurtenances.**

I would recommend this clause be rewritten as follows: *The maximum height of a bulkhead on the marine shoreline shall be no greater than four (4) vertical feet above the OHWM or in the case of a replacement structure, the new structure height shall be no greater than the original height of the structure to be replaced*

Section VI-3, 20.40.095 Normal Protective Bulkhead means a bulkhead, common to single family residences, constructed at or near the ordinary high water mark to protect an existing single family residence, the sole purpose of which to protect land from erosion, not for the purpose of creating new land.

While not part of Section 20.30.070. This regulation needs to be reworded to recognize existing bulkheads that do have fill and be consistent w/ recommended wording for items B and G above.

The subject of bulkheads is obviously extremely important to those of us living along the Burien shoreline. Because of our geographical location, with such severe wave action, the existing bulkheads, in their existing locations, provide an extremely important function for the protection and utility of our properties. Our shoreline experiences more extreme environmental impacts than many of the other communities (i.e – Lake Washington) who are currently going through this process, and needs to be tailored to recognize those factors.

I respectfully request you give consideration to the many points I have raised above.

Thank you
Andrew Ryan

Lisa Clausen

From: Public Council Inbox
Sent: Tuesday, March 16, 2010 4:07 PM
To: 'bpovolny@aol.com'
Subject: RE: shoreline management plan

Thank you for your message to the Burien City Council. It will be included in the Correspondence for the Record for an upcoming City Council meeting.

L. Clausen
City Manager's Office

From: bpovolny@aol.com [mailto:bpovolny@aol.com]
Sent: Tuesday, March 16, 2010 11:58 AM
To: Public Council Inbox
Subject: shoreline management plan

Dear Sirs/Madames;

I urge you to delay finalizing the proposed shoreline management plan for 6 months as requested by our recent petition.

The new 65 foot setback exceeds state guidelines and will have a devastating effect on shoreline property owners' ability to sell their homes. An inevitable decrease in property values will result less tax revenue to the local municipalities and county as property values fall even further than they already have.

More time is needed to study the impact of the 65 foot setback/non conforming rule, and to study the trade offs, ie less tax revenue in exchange for questionable ecological benefits over state setback guidelines.

Sincerely,

Dr Brian Povolny

CFTR: 03/22/10

