Debbie Beadle

From: Melonie Anderson
Sent: Tuesday, June 4, 2013 10:59 AM
To: Debbie Beadle
Subject: FW: Electronic version of reference document
Attachments: 2-10 Evaluation Form Brockway Submittal.docx

From: Reid Brockway [mailto:waterat@comcast.net]
Sent: Tuesday, June 4, 2013 7:37 AM
To: John Curley; Don Gerend; John James; Tom Odell; Nancy Whitten; Ramiro Valderrama-Aramayo; Tom Vance
Cc: Melonie Anderson
Subject: Electronic version of reference document

Dear Council Members,

Attached is a document referenced in this evening's testimony that you are encouraged to refer to when considering the amendment proposed by Councilman Gerend, Topic 3 in the Decision Table supplied by Staff. It was Exhibit 210 from the Planning Commission phase. I am providing it in electronic form since the scanned pdf versions of testimony posted to the ECA web page can be more difficult to read and work with. It is a Word document with change tracking / color coding active.

Note that the additions and deletions are mine, and the numbers appearing throughout this mark-up reference comments that are listed at the end.

Thanks,
Reid Brockway

EXHIBIT NO. CC085

Site Specific Stream Buffer Location Item 2-10

Ratings are either: large positive (P), small positive (p), neutral, large negative (N), small negative (n)

Environmental	Neutral	Implementation	n[1]
• [2] • Neutral protection of public assets and resources (e.g. streets, water quality) • Neutral impact on streams • [3] • [4] • [5] • [6] • [7] • Can encourage reestablishment of viable habitat[8] This amendment is based upon the premise that buffers serve no value if separated from the stream by a physical barrier. A review of BAS indicates this is not an accurate premise. The proposed amendment will result in the elimination of buffer areas, decreasing the protection of on-site streams and increasing the cumulative impacts to streams and buffers. In the case of some low value buffer functions, BAS would suggest increasing buffers rather than elimination. The proposed amendment creates an increase in unpermitted alterations, which increases the risk of damage to streams, including unique streams corridors, and results in a net loss to stream functions and values. The amendment also reduces options for restoration of degraded buffer areas.[9]		• [10], increased chance for unintended consequences[11] • Decreased ability for consistent, efficient implementation by the staff[12] • Decreased likelihood of support/approval by other agencies[13] • Neutral on mitigation, neutral on monitor • Neutral on property owner[14] There is inherent variability in the quality of stream buffer analysis and review, which increases the chance for unintended consequences, and decreases the city's ability to ensure consistent and efficient implementation.The proposed amendment also appears to create a possible incentive for property owners to not obtain city approval prior to alterations to stream buffers; creating additional demands on resources for code compliance. Further, as this amendment does not appear to be supported by Best Available Science, there is a decreased likelihood of support or approval by other agencies.[15]	

Property	P[16]	Overall Effect
• Increased flexibility and options for property owner's use of property • Increased property value • Decreased predictability for permit applicants and neighbors[17] • Increased recognition of site improvements and existing uses in standards • More expensive / more time[18] • Provides current residents relief from inequities in the current one-size-fits-all approach • Provides developers increased flexibility with neutral environmental effect		**Positive**

Deleted: N
Deleted: N
Deleted: Decreased on-site protection of streams
Deleted: Less clear regulations
Deleted: Increased cumulative impacts to streams
Deleted:
Deleted: Negative potential to restore damaged stream channels or buffers
Deleted: Increased chance of damage to streams
Deleted: Increased potential to damage high quality, unique streams
Deleted: Net loss of stream functions and values
Deleted: p
Deleted: Negative
Deleted: ¶

Evaluation Form

Reid Brockway Submittal

Site Specific Stream Buffer Location Item 2-10

Existing Regulation(s)	Proposed Amendment & Description
Stream buffers are established based upon the edge of the stream (ordinary high water mark) and extend a specified distance (between 50 and 150 feet). The stream buffer is based solely upon the type of the stream, and may encumber land that is already improved in some fashion (e.g. house, driveway, landscaping, etc). Existing legally created development is afforded some protection for the restrictions associated with a stream buffer. However restrictions to land use do not currently take into account actual range of influence on the stream or watercourse.	Allow residents and developers the option of hiring qualified professionals to determine appropriate buffer extent based on site features and topography. Stream buffers would be established based upon the actual width of viable habitat, drainage patterns relative to the stream channel, and slope stability (if applicable). Exclude from stream buffers areas that have been improved (e.g. house, driveway, etc) and are perceived to provide little if any functions that contribute to the stream health, and areas that are effectively isolated from the stream by such features.
Desired Result of Amendment: Establish stream buffers based upon the actual site conditions between the stream and a regulated activity. Buffers would more accurately reflect the portions of a development site or existing use that will provide value to a stream, and not burden land use for negligible environmental benefit.	

Deleted:

Deleted: Regulate

Amendment Source:
Public comment

Best Available Science Support: Supported[20]

Deleted: Not supported

- Best Available Science Report "Streams and Fish and Wildlife Habitat Conservation Areas" by AMEC Environment & Infrastructure, Inc.
- AMEC Report Issues 3-5, Issue 3

Affected Code Section(s) (incudes duplicative and overlapping sections):

- 21A.50.330- Streams – Development standards
- 21A.50.340 - Streams – Permitted alterations
- 21A.50.350 - Streams – Mitigation requirements

Public Comment Reference(s):
5, 22, 73, 122

Notes:

Site Specific Stream Buffer Location Item 2-10

Note on terminology: In these remarks I refer to the process of site specific buffer location as "buffer delineation" or "delineation" for the sake of brevity. Several environmental scientists I have spoken with refer to it as that, and it is a recognized concept among these professionals.

---

[1] There is unquestionably more work for the city to review buffer delineation studies, and to regulate buffers whose boundaries are not defined by a simple fixed dimension. However, so long as the onus is placed on the resident or developer to submit a competent and thorough analysis by qualified professionals, with appropriate maps and other documentation, this impact should be manageable. As for the property owner, he will undertake the process because he sees a net benefit, so the effort involved will be a minor if not neutral factor to him.

[2] The effect on a stream, by design, should be neutral. The central purpose of buffer delineation is to determine the true range of influence on a critical area and define a buffer that assures protection in that range. To assert that the effect is negative reflects a lack of understanding of this concept.

[3] The cumulative effect of a neutral impact is still neutral. See #2.

[4] Highly questionable assumption. The code should pertain to the current reality, not some possible state in the future, e.g., that a house or road will be removed permitting a wider buffer. Further, the "potential to restore a stream buffer" still exists should this happen. If desired, code can be added to address that circumstance.

[5] See #2

[6] See #2

[7] See #2

[8] Buffer delineation is not unidirectional; expanded width can result as well. And since it focuses attention on areas where protection and/or habitat are high value, property owners may opt to restore buffer function where feasible (e.g., convert formal landscaping to native vegetation).

[9] The premise for this argument seems to be that a buffer of a standardized width provides necessary protection for the environmental feature regardless of circumstance, and that any reduction in width is to some extent harmful. This premise is not supported by science – a fact recognized by some jurisdictions willing to forego the one-size-fits-all approach in favor of a more insightful one (for references, see Best Available Science Support section). The following is an assessment of the assertions made within this paragraph:

"This amendment is based upon the premise that buffers serve no value if separated from the stream by a physical barrier." – Incorrect. This amendment is based on the premise that a stipulated width does not necessarily reflect the true range of influence on a stream, and that range can be determined by science-based analysis of features and topography present. It may be found to be more or less than the stipulated width. In some cases a feature like a road may not constitute a physical barrier to influence; a driveway crossing a grade where water can sheet flow across and enter a stream is one example. Buffer delineation takes such considerations into account. In buffer delineation a buffer is "cropped" (a practitioners' term for it) only where effect on the critical area truly stops.

"A review of BAS indicates this is not an accurate premise. " – Again, the true premise is that some features do constitute a true barrier to influence. If the city is aware of validated studies that show that features like a house or a road categorically do not constitute barriers to influence, they should be asked to produce them.

"The proposed amendment will result in the elimination of buffer areas, decreasing the protection of on-site streams and increasing the cumulative impacts to streams and buffers." – It is true that this approach can eliminate buffer areas that do not benefit the stream, but that is precisely the point – eliminating restricted land use where it is of no benefit. The assertion that his will necessarily decrease protection and increase cumulative impact it wholly unsupported. (See #2 above)

"In the case of some low value buffer functions, BAS would suggest increasing buffers rather than elimination." – This may be true; the city should be requested to provide specifics. But in any case an ***increase*** in buffer width is one possible result of the delineation. It works both ways.

"The proposed amendment creates an increase in unpermitted alterations, which increases the risk of damage to streams, including unique streams corridors, and results in a net loss to stream functions and values." – On the contrary, buffer delineation addresses the problem of unpermitted alterations done "under the radar" because regulations are perceived as unreasonable. A party who has gone thru the process of buffer delineation is inherently vested in the result.

"The amendment also reduces options for restoration of degraded buffer areas." – The city should be asked to explain this. Buffer delineation is not inherently irreversible, and if in the future a barrier like a house or road should be removed (or a property abandoned altogether}, there is nothing to prevent expanding the buffer accordingly.

[10] The new regulations will be unclear only if they are poorly written. Buffer delineation is an established approach that can be clearly spelled out. (This writer has offered to submit a draft.) In fact, it offers an alternative to regulations that are currently unclear, such as the nature and extent of grandfathering in the current code when it comes to stream buffers.

[11] Questionable assertion. See discussion of this element of the paragraph below (#15)

[12] It is true that fixed-width buffers are easier to apply and enforce. But this comes at a significant human cost to property owners who must deal with the inequities that often result from indiscriminate regulations. The way to ensure consistency is to maintain a high standard for the thoroughness and scientific substantiation of the buffer delineation studies when they are under review.

[13] If Sammamish were to be the first to implement this approach, this argument might be more compelling. But see discussion for Best Available Science section below. This is where the city needs to be thorough in its review of the science and efficacy of the concept and the practices of other jurisdictions so that a strong case for it can be made. AMEC's statement, "*In summary*, there is no method supported by BAS to establish buffers on a site-by-site basis" is simply wrong, and displays either a profound bias or an ignorance of the concept.

[14] This is an option for the resident or developer, not a requirement. If that party chooses to incur the cost and effort of buffer delineation, it is because he deems it worthwhile vis a vi a fixed width buffer. Providing him the option is therefore essentially of neutral effect.

[15] The following is an assessment of the assertions made within this paragraph:

"There is inherent variability in the quality of stream buffer analysis and review, which increases the chance for unintended consequences, and decreases the city's ability to ensure consistent and efficient implementation." – Some variability is unavoidable, perhaps, but that is where it is incumbent on the city to maintain standards for review of these studies, just as it does with other kinds of environmental studies it requires. The city should be asked to characterize the kinds of unintended consequences it anticipates as a result of the net variability remaining after adequate review.

"The proposed amendment also appears to create a possible incentive for property owners to not obtain city approval prior to alterations to stream buffers; creating additional demands on resources for code compliance." – The city should be asked to clarify its concern here. Presumably it is over the creation of features that would bound a buffer (paving, structure, solid wall) prior to the delineation study. Note that removing native vegetation is not basis for buffer reduction. In any case, this is an enforcement issue and not a flaw in the concept of buffer delineation.

"Further, as this amendment does not appear to be supported by Best Available Science, there is a decreased likelihood of support or approval by other agencies." – This approach is well supported by BAS. See Best Available Science section below.

[16] The human benefit of this amendment is large. The inequities in the current code are substantial. Numerous individual cases (victims) can be pointed to as evidence. Space does not permit relating them here, but I have attempted to portray the nature of this problem in my prior testimony, and individuals have come forward with their own stories during the current ECA process. Buffer delineation provides a means to bring environmental reality into the picture and offers a viable solution to many of these problems.

[17] The city should be asked to explain this. The kind of predictability that comes from one-size-fits-all buffers is not necessarily a good thing, especially for the homeowner who must get a permit to change a shrub. The unpredictability, to the extent that it exists, of the result of assessing the true range of influence is something the sponsor accepts. Neighbors will have the same option, or can stay with existing buffer as they see fit. This predictability aspect is of neutral consequence.

[18] As noted in #14 above, this is an option available to the resident or developer wherein he chooses to incur the cost in money and time because he sees a net benefit. This aspect should therefore be considered neutral.

[19] The problems with this paragraph are largely addressed by the remarks on the preceding bullets. As for the "possible mis-location of stream buffer areas", the risk of this is only as great as the city's quality standards for these analyses allow. As with any other environmental studies the city requires, buffer delineation should be performed only by qualified professionals and subject to careful review by Staff. Further, it should be recognized that there is also a risk to the citizens posed by the existing code, with buffers based as they are on forest practices, which can burden areas of urban property substantially in excess of that which has significant environmental value.

[20] Buffer delineation is a practical and scientifically sound process that has been used by other jurisdictions. As mentioned in my written testimony to both the 4/19 and 5/3 PC meetings, the city of Aberdeen recently completed theirs for all wetlands in the city. It was performed by the firm HDR Engineering at a cost of approximately $50K. One reason it is this inexpensive is that it makes extensive use of aerial photography and GIS (Geographic Info System) material that is readily available; surveying is not required. Performed for individual properties the cost would be much more modest. As for the scientific basis, there may or may not be a study AMEC is aware of on whether, for example, buildings can constitute barriers to influence on a stream or wetland, but there is plenty of

scientific basis for that presumption. I have spoken with multiple environmental scientists who state that the buffer delineation process is supported by BAS. I can refer the city to such an expert if desired.