



CITY OF
BAINBRIDGE ISLAND

ENVIRONMENTAL TECHNICAL ADVISORY COMMITTEE
REGULAR MEETING
THURSDAY, APRIL 20, 2017
3:00 PM – 5:00 PM
CITY HALL
COUNCIL CONFERENCE ROOM
280 MADISON AVENUE NORTH
BAINBRIDGE ISLAND, WA 98110

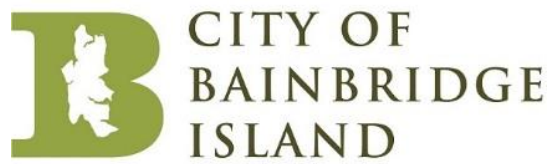
AGENDA

1. **CALL TO ORDER / ROLL CALL / ACCEPT OR MODIFY AGENDA / CONFLICT OF INTEREST DISCLOSURE**
3:00 PM

Chair: Frank Gremse

Members: Charlie Kratzer
Jason Flowers
Karl Shearer
Dylan Frazer

2. **LIAISON REPORT OUT** – Councilmember Roth
3. **REVIEW Critical Areas Ordinance** – All
4. **COMMENTS FROM THE PUBLIC** – All
5. **ACCEPTANCE OF MEETING NOTES – FEBRUARY 16, 2017 and March 16, 2017** – ETAC Members
6. **MISCELLANEOUS ITEMS** – All
7. **ADJOURNMENT**
5:00 PM



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

MEMORANDUM

Date: April 17, 2017
To: ETAC members
From: Christy Carr, AICP
Senior Planner
Subject: Critical Areas Ordinance (CAO) Update

The City is updating its critical areas ordinance (CAO) – the set of development regulations that support the comprehensive plan policies related to critical areas (wetlands, geologically hazardous areas, aquifer recharge areas, fish and wildlife habitat conservation areas, and frequently flooded areas). There are state-mandated updates required along with staff-identified needs for clarification/updates/etc. There are also opportunities for larger-scope change, such as implementing a watershed-based approach to wetland and stream mitigation and/or critical aquifer recharge area regulation.

Please review the existing critical areas ordinance and recommend to staff whether existing regulations should be updated and/or whether new regulations are needed. There are several places on the City's website where you can find additional information about the update:

Project Page

<http://www.bainbridgewa.gov/216/Projects>

This page houses project information, timelines, draft documents and meeting notices, including a link to the current critical areas ordinance.

Notify Me® listserv

<http://www.bainbridgewa.gov/list.aspx>

Sign up for this listserv to receive timely project notifications.

Map

<https://cityofbi.maps.arcgis.com/home/index.html>

Review the City's mapping application to see the location and extent of existing critical areas.

Please come to the next ETAC meeting on April 20th prepared to discuss the update.

This document provides a summary of topics and specific regulations to consider in the Critical Areas Ordinance Update based on Comprehensive Plan policies and implementing actions and staff input.

I. COMPREHENSIVE PLAN

The following implementing actions, goals and policies from the Environmental Element will be considered.

General Environment

EN Action #1 When updating the City's Critical Areas Ordinance, integrate the precautionary principle and mitigation sequencing to protect and preserve natural resources.

EN Action #2 Integrate sustainability and conservation into regulations.

EN Action #5 Incorporate *low impact development* principles, goals, and approaches into all land use and development codes.

Policy EN 1.2 Taking into account the present and future need to reduce the potential for personal injury, loss of life or property damage due to flooding, erosion, landslides, seismic events, climate change or soil subsidence, properties adjoining or adjacent to critical areas must be developed in observance of the following principles in descending order:

- Avoid the impact if possible.
- Minimize or limit the degree or magnitude of the action and its implementation by using appropriate technology to avoid or reduce impacts.
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- Rectify by repair, rehabilitation or restoration of the affected environment.
- Compensate for unavoidable impacts by replacing, enhancing or providing substitute resources or environments.

Policy EN 1.5 Create and maintain overlay maps that show the location of agricultural lands, critical aquifer recharge areas, geologically hazardous areas, floodplains, streams, wetlands and fish and wildlife habitat. Integrate the maps from the Bainbridge Island Climate Impact Assessment (2016).

Policy EN 1.8 Consider the potential impacts of climate change and its impacts in all decisions related to natural systems and environmental quality.

Goal EN-3 Consider the impact on critical areas whenever land is subdivided.

Policy EN 3.1 Design lots to protect natural systems and avoid or minimize impact to critical areas. In order to protect critical areas, the full density permitted under the zoning ordinance might not be achieved.

Policy EN 3.2 Use Transfer of Development Rights (TDRs) and Purchase of Development Rights (PDRs) to protect critical areas.

Policy EN 3.3 Include in any lot created by subdivision of land sufficient area to accommodate a building site outside of a critical area and its buffers.

Goal EN-4 Encourage sustainable development that maintains diversity of healthy, functioning ecosystems that are essential for maintaining our quality of life and economic viability into the future.

Policy EN 4.1 Employ conservation design methods and principles such as low impact development techniques for managing storm and waste water, green building materials, high-efficiency heating and lighting systems.

Policy EN 4.2 Create a program with effective mechanisms intended to offset development impacts to the Island's ecosystems.

Fish and Wildlife

Policy EN 5.5 Identify and classify streams and stream reaches which have an anadromous fish presence.

Policy EN 5.6 Protect wetlands and riparian areas.

Policy EN 5.7 Undertake appropriate, adequate and timely actions to protect and recover state priority species, species listed under the federal Endangered Species Act, local species of concern and their habitats located within the City to 1) avoid local extirpation of such species from the lands or fresh waters or nearshore and 2) contribute to the protection and recovery of such species throughout the greater region in cooperation with federal, state and other local agencies.

Policy EN 5.8 Work closely with Tribes, the Park District, local conservation organizations and the Washington State Department of Fish and Wildlife (the agency with expertise to "preserve, protect, and perpetuate" wildlife resources of the state) in matters involving wildlife including identifying "priority fish and wildlife habitat."

Frequently Flooded Areas

Goal EN-6 Protect the natural functions of frequently flooded areas.

Policy EN 6.1 Minimize public and private losses due to flood conditions by limiting development in frequently flooded areas as shown on the Flood Insurance Rate Maps. Educate property owners and residents in proximity to frequently flooded areas about vulnerability over time.

Policy EN 6.2 Limit the alteration of natural floodplains, stream channels and natural protective barriers that help accommodate, dissipate, or channel floodwaters.

Geologically Hazardous Areas

Goal EN-8 Protect landslide hazard areas and erosion hazard areas from the impacts of use and development for the protection of public safety, property and the environment.

Policy EN 8.1 Avoid land uses on landslide hazard and erosion hazard areas. If the hazard caused by development can be mitigated, then design land use to prevent damage to persons or property and environmental degradation and to preserve and enhance existing vegetation to the maximum extent possible.

Policy EN 8.2 As the degree of slope increases, decrease development intensity, site coverage, and

vegetation removal to mitigate problems of drainage, erosion, siltation and landslides.

Policy EN 8.3 In order to protect landslide and erosion hazard areas from damage during construction and from intrusion following construction, an analysis by a geotechnical engineer and a certified arborist may be required.

Policy EN 8.4 Construct roads, driveways and utility corridors to preserve the integrity of the existing land forms, drainage ways, and natural systems minimizing impact to the landslide and erosion hazard areas. Utilize common access drives and utility corridors where feasible.

Policy EN 8.5 Allow clearing, grading or filling on sloped areas containing landslide hazard and erosion hazard areas only when other alternatives are not feasible and when it will not destabilize those areas. Such activity is limited to the dry period of the year.

Policy EN 8.6 Any alteration of a landslide hazard area or erosion hazard area may not increase the rate of surface water discharge or sedimentation and may not decrease slope stability on adjacent property. Landscape the altered area to provide erosion control.

Goal EN-9 Identify and map areas that are at risk due to seismic activity and regulate activities in these areas for public safety and property protection.

Policy EN 9.1 Consider the best available science in mapping these high-risk areas and in regulating and permitting land use activities in areas that have a heightened risk from earthquakes such as liquefaction areas and fault rupture zones, tsunami or other geological hazards.

Policy EN 9.2 Consider tsunami hazards in regulating land use activities on Bainbridge Island.

Policy EN 9.3 Consider seismic activity and the potential for earthquake-induced landslides in the determination of geologically hazardous areas. Areas that are stable under normal conditions can become landslides during earthquake events.

Policy EN 9.4 Provide information and educational opportunities to the citizens of Bainbridge Island on the hazards posed by seismic events.

The following goals and policies from the Water Resources Element will be considered:

General Water Resources

Policy WR 1.2 Groundwater, surface water and stormwater are resources that shall be protected and managed to preserve water quality and quantity, and to retain natural ecological and hydrologic function.

Policy WR 1.3 The City will provide sustainable water resource planning, protection, management and monitoring in coordination with government agencies at all levels, drinking water purveyors, Tribes, non-profit organizations, and other stakeholders.

Policy WR 1.4 Apply the policies in this element together with the protective measures set by the City's Shoreline Management Master Program, Critical Areas Ordinance and any other environmental or water resources management ordinance established by the City and in compliance with county, State, and federal laws and regulations.

Groundwater Protection and Management

Policy WR 2.2 Identify and assess areas of high aquifer recharge as part of a land use application. Minimize the effect of development on these areas.

Policy WR 2.4 Assess the impacts of proposed activities and development on the flow of springs and streams and levels of wetlands that are either sustained by groundwater discharge or contribute recharge to groundwater, and require an assessment of anticipated hydrologic impacts. Activities or development may be restricted if the report indicates any adverse impacts.

Goal WR-3 Achieve no net loss of ecological functions and processes necessary to sustain aquatic resources including loss that may result from cumulative impacts over time.

Surface Water Protection and Management

Policy WR 3.1 Development in regulated aquatic critical areas or their associated water quality buffers shall not be allowed unless application of development regulations would deny any reasonable use of property. In such cases, minimize the allowed use and associated impacts, to maximize environmental protection.

Policy WR 3.2 Require that vegetated buffers be maintained between proposed development and the aquatic resource in order to protect the functions and values of such systems. Restore degraded buffers to enhance their function. Allow reductions in vegetated buffers only in areas where such reductions, if consistently applied, would not result in significant cumulative impacts to aquatic resources and fish and wildlife habitat.

Policy WR 3.3 Require that buffers be retained in their natural condition wherever possible while allowing for appropriate maintenance. Where buffer disturbance has occurred, require re-vegetation with appropriate species, with a preference for native species, to restore the buffers' protective values.

Policy WR 3.4 Ensure that development activities are conducted so that aquatic resources and natural drainage systems are maintained and water quality and quantity are protected.

Policy WR 3.5 Prior to any clearing, grading or construction on a site, all wetlands, streams and buffer areas are to be specifically identified and accurately located in the field in order to protect these areas during development.

Policy WR 3.6 Herbicides and pesticides approved for use near aquatic resources may only be used in aquatic resource areas and buffers when applied by licensed applicators.

Policy WR 3.7 Prohibit access to aquatic critical areas by farm animals. Require a farm management plan for agricultural activities within proximity of aquatic resources addressing water quality and other natural resource protection.

Policy WR 3.8 Require mitigation to compensate for unavoidable impacts to aquatic critical areas. Mitigation should be designed to achieve no net loss in functions and processes of aquatic resources.

Policy WR 3.9 Promote watershed-based mitigation to meet federal regulations, improve mitigation success and better preserve the ecological function of the island's watersheds.

Policy WR 3.11 Consider the impacts of climate change and ocean acidification when developing regulations or approving capital projects related to aquatic resources including marine nearshore, wetlands, streams, lakes, creeks, associated vegetated areas and frequently flooded areas.

Policy WR 3.12 Stream relocation will only be allowed where relocation would result in improved stream ecosystem function.

Policy WR 3.13 Degraded channels and banks should be rehabilitated by various methods (e.g., culvert replacement, volunteer efforts, public programs or as offsetting mitigation for new development) to restore the natural function of the riparian habitat for fish and wildlife.

Policy WR 3.14 Protect, preserve and enhance fish and wildlife habitat and adjacent riparian areas to ensure sustainable populations of resident aquatic life.

Policy WR 3.15 Require the construction of public facilities to avoid encroachment into and disturbances of aquatic resources.

Policy WR 3.18 Promote and support volunteer or community-driven restoration projects.

II. STAFF INPUT

The following topics, issues and specific regulations identified by staff will be considered.

16.20.020 Interpretation, procedures, and program review

- C. Non-Regulatory Program Review: The City does not have such a program. Delete section or create program.
- D. Regulatory Program Review: The City has not conducted a review or update of the ordinance since 2008. Delete section or add to PCD workplan.

16.20.030 Definitions

The following definitions should be reviewed and updated as necessary for clarity, compliance with best available science and consistency with other City regulations.

Aquifer recharge area	Reasonable alternative
Base flood	Repair
Best management practices (BMPs)	Seismic hazard area
Buffer	Site
Erosion hazard area	Streams
Existing development	Stream Types
Frequently flooded areas	Urban natural open space

Hazard tree	Variance
Hydrophyte or hydrophytic vegetation	Wetland
Impact of land use	Wetland boundary
Invasive/exotic species	Wetland category
Landslide hazard area	Wetland mitigation
Native or equivalent vegetation	Wetlands, regulated
Normal maintenance	Zone of Influence

16.20.040 Applicability, exemptions, and prior development activity

- B. Inventory of Critical Areas: Consider including process for when there is a conflict with the City's map and site conditions (or presumed site conditions).
- C(2). Ongoing agricultural activities: What is meant by "ongoing"?
- C(5). Structural alterations: Clarify that interior work does not require review; provide definition of "structural footprint" or change term, clarify that the building must have been legally constructed/permitted.
- C(8). Activities in a buffer located landward of an existing "substantially developed area": Need better clarity on this term and how to practically apply.
- C(9). Hazard tree removal: Need to clarify and make consistent with other provisions in code.
- C(10). Aquifer recharge areas: Revise as needed to be consistent with any changes to critical aquifer recharge areas section.
- D. Standards for Existing Development: Revise for clarity.

16.20.050 Prescriptive buffers variations

Buffer Averaging, Habitat Management Plan, Variances, Reasonable Use Exceptions require review. It can be difficult to determine which variation should/can be used on a specific site. Permitted buffer variations should be reviewed to determine effectiveness in protecting critical areas functions and values. This review will include 16.20.060, 16.20.070, 16.20.080 and include the review and approval process.

16.20.090 Application requirements

Review for consistency with Administrative Manual; clarify when support information is required.

16.20.100 Minimizing impacts to critical areas

Clarify when and how this is applied/required.

16.20.110 Mitigation plan requirements

Review and revise based on recent best available science/guidance from Ecology

16.20.120 Aquifer recharge areas

No issues identified by staff.

16.20.130 Fish and wildlife habitat conservation areas

- B.1.a. Consider removing Marine Critical Areas since they are included in the SMP
- B.1.b. Clarify that streams are defined by City's CAO, un-typing according to DNR's system doesn't mean that it isn't a stream, clarify that the burden of considering a drainage not a stream is on the applicant, not City.
- B.1.c and d. Update inventory as needed
- C.2. Development standards – streams – review requirements for encroaching into/eliminating water quality and/or habitat buffers. RUE and HMP best approach?
- C.2.c. Clarify by what is meant by "Buffers shall be retained in their natural condition." What is "natural"? What if buffer is degraded? Enhancement is "acceptable," should it be required?
- C.2.d. Define water dependent and water related
- C.2.h. Building setback line – Clarify "building surface setback line" and revisit structures allowed in it
- Table 2. Stream buffers – Review and revise as needed
- C.5 Stream Crossings. Clarify that roads include driveways; clarify how a plan demonstrates "that salmon habitat will be replaced on a 1:1 ratio"
- C.6. Stream Relocations – Review pursuant to comprehensive plan policy; consider changing should to shall
- C.7. Pesticides, Fertilizers and Herbicides – Review and update as needed
- C.8.d. Redundant; why are signs not required like at wetland buffer edge?
- C.9. Agricultural Restrictions – What type of development would permit introduction of agriculture?
- C.10. Trails and Trail-Related Facilities – Review for clarity, compare to language in wetlands section
- C.11. Utilities – Define "practicable," clarify whether SUR required (states "may" be required), does not recognize that utilities are installed outside of corridors and by people other than utility companies
- C.13. Fencing and Signs – why "may" require?
- C.15. Road/Street Repair and Construction – Clarify to include driveways, include fire code requirements
- C.16. Revisit using standard for Category II wetlands for all other uses

16.20.140 Frequently flooded areas

Modify to reference BIMC 15.16, Flood Hazard Prevention

16.20.150 Geologically hazardous areas

- Review third party review requirement; make consistent with SMP

- Clarify development standards for historic landslide areas
- Include language addressing complexes – when buffers of hazards overlap, single hazard
- Clarify when erosion control plan is required
- Clarify what “information specified by the City Engineer” means
- Remove review by Technical Review Committee – City does not use one
- Consider different factors of safety requirements for non-habitable structures
- Require assessments to include all modes of failure
- Review definition of “reasonable alternative” specific to geohazards
- Clarify what is allowed in building setback (below and at grade structures)
- Provide examples of LID required in zone of influence
- Requirement for exemptions need to be clarified (which standards need to be met)
- Clarify that meeting factors of safety means not decreasing hazard anymore that current conditions
- Consider “minor development” exemptions similar to SMP
- Need to differentiate new development vs. redevelopment/alteration
- Consider allowing septic systems in buffer
- Need thresholds for vegetation removal
- Hazard tree replacement tree language needs correction
- Vegetation removal needs to assess impacts on neighboring properties
- Need threshold on trimming and limbing; what requires geotech review?
- Add wet weather restrictions requirement

16.20.160 Wetlands

- Update to include new rating manual (Ecology) and delineation manual (Corps of Engineers)
- Review regulated and non-regulated wetlands
- Review requirements for encroaching/eliminating buffers – RUE and HMP best approach?
- Review development standards for buffers – clarify “undisturbed natural vegetation,” require enhancement? How is enhancement and/or limited view clearing reviewed?
- Revise buffer requirements using Ecology guidance
- Clarify what is allowed in building setback line
- Review regulated uses and activities
- Need clarity of definitions of listed regulated uses and activities
- Review trails and trail-related facilities – guidelines or requirements?
- Review Special Use Review requirements and decision criteria
- Review restoration, creation, mitigation or enhancement section – clarify when applicable; review replacement ratios, clarify that 1:1 buffer ratio is replacement of area, provide framework for offsite mitigation, mitigation banking and in-lieu fee based on watershed approach

16.20.200 Compliance and enforcement

- Clarify process for review of restoration plan
- Review performance standards for restoration plan



ENVIRONMENTAL TECHNICAL ADVISORY COMMITTEE
REGULAR MEETING
THURSDAY, FEBRUARY 16, 2017
3:00 PM – 5:00 PM
CITY HALL
COUNCIL CONFERENCE ROOM
280 MADISON AVENUE NORTH
BAINBRIDGE ISLAND, WA 98110

MINUTES

**1. CALL TO ORDER / ROLL CALL / ACCEPT OR MODIFY AGENDA / CONFLICT OF INTEREST DISCLOSURE
3:06 PM**

Chair: Frank Gremse

Members: Michael Bonoff Charlie Kratzer
 Jason Flowers Karl Shearer
 Dylan Frazer

**2. LIAISON REPORT OUT – DISCUSSED THE CURRENT STATE OF THE COMPREHENSIVE PLAN –
Councilmember Roth**

3. Presentation on Wyckoff East Harbor Cap Enhancement Project – Frank Gremse

4. COMMENTS FROM THE PUBLIC – No public comment was made.

5. ACCEPTANCE OF MEETING NOTES – JANUARY 19, 2017 – ETAC Members

6. ADJOURNMENT 4:40 PM

Frank Gremse, Chair 4/20/17



ENVIRONMENTAL TECHNICAL ADVISORY COMMITTEE
REGULAR MEETING
THURSDAY, MARCH 16, 2017
3:00 PM – 5:00 PM
CITY HALL
COUNCIL CONFERENCE ROOM
280 MADISON AVENUE NORTH
BAINBRIDGE ISLAND, WA 98110

MINUTES

**1. CALL TO ORDER / ROLL CALL / ACCEPT OR MODIFY AGENDA / CONFLICT OF INTEREST DISCLOSURE
3:06 PM**

Chair: Frank Gremse

Members: Karl Shearer
Dylan Frazer

Public: Olaf Ribeiro
Susan Reilly
Dianne Steber
Bob Bosserman
Herb Heathcote
Leslie Marshall

2. LIAISON REPORT OUT – Councilmember Roth

3. REVIEW SUZUKI PROPERTY ECOLOGICAL ASSESSMENT DRAFT REPORT – The city council had asked ETAC to review the report with respect to the ESA statement of work. ESA appears to have complied with the statement of work.

4. COMMENTS FROM THE PUBLIC on the ESA Report – several people commented on the lack of definition buffers for the property's significant environmental features. However, it was noted that this was not a requirement of ESA's statement of work and that it is likely that additional environmental work will be required in the permitting process which will result in the definition of buffers.

Herb Heathcote noted the following typos in the report:

On page 57 it should be "west-central" in the sentence "Potential Wetland Area 2 is a linear swale feature in the east-central portion of the property"

On page 68 it should be "Utilizing pervious pavement for roads, driveways, sidewalks, and other hardscapes."

In addition, Charlie Kratzer provided comments on the "Soil Infiltration and Aquifer Recharge" results provided by ESA, which are attached to these minutes. He also noted that a quote attributed to him in the ESA report was not made by him.



CITY OF
BAINBRIDGE ISLAND

ENVIRONMENTAL TECHNICAL ADVISORY COMMITTEE
REGULAR MEETING
THURSDAY, MARCH 16, 2017
3:00 PM – 5:00 PM
CITY HALL
COUNCIL CONFERENCE ROOM
280 MADISON AVENUE NORTH
BAINBRIDGE ISLAND, WA 98110

5. **DISCUSSION OF THE CLIMATE ACTION PLAN** – The ICLEI Clear Path protocols and processes for developing a local Climate Action Plan were discussed.
6. **ADJOURNMENT**
5:00 PM

Frank Gremse, Chair

04/20/2017