

Appendix B – Critical Area Regulations Applicable to Shoreline Jurisdiction

The Edmonds Shoreline Master Program adopts this version of the City’s critical area ordinance for inclusion into the Shoreline Master Program except for certain sections which are specifically excepted pursuant to ECDC 24.40.020.D. Additionally certain provisions as detailed in ECDC 24.24.020.C may only be applied through a shoreline variance permit process. Those provisions that have been excepted by the Shoreline Master Program are shown in this appendix with a ~~strike through~~. Those provisions that require a shoreline variance have been noted with a **SHORELINE VARIANCE REQUIRED** at the beginning of the related code section.

Chapter 23.40

ENVIRONMENTALLY CRITICAL AREAS GENERAL PROVISIONS

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Part I. Purpose and General Provisions

23.40.000 Purpose.

A. The purpose of this title is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, ~~while also allowing for reasonable use of private property.~~

B. This title is to implement the goals, policies, guidelines, and requirements of the comprehensive plan and the Washington State Growth Management Act.

C. The city of Edmonds finds that critical areas provide a variety of valuable and beneficial biological and physical functions that benefit Edmonds and its residents, and/or may pose a threat to human safety or to public and private property. The beneficial functions and values provided by critical areas include, but are not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation of flood waters, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical, archaeological, and aesthetic value protection, and recreation. These beneficial functions are not listed in order of priority.

D. Goals. By limiting development and alteration of critical areas, this title seeks to:

1. Protect members of the public and public resources and facilities from injury, loss of life, or property damage due to landslides and steep slope failures, erosion, seismic events, or flooding;
2. Maintain healthy, functioning ecosystems through the protection of unique, fragile, and valuable elements of the environment, including ground and surface waters, wetlands, and fish and wildlife and their habitats, and to conserve the biodiversity of plant and animal species;
3. Direct activities not dependent on critical areas resources to less ecologically sensitive sites and mitigate unavoidable impacts to critical areas by regulating alterations in and adjacent to critical areas; and
4. Prevent cumulative adverse environmental impacts to water quality, wetlands, and fish and wildlife habitat, and the overall net loss of wetlands, frequently flooded areas, and fish and wildlife habitat conservation areas.

E. The regulations of this title are intended to protect critical areas in accordance with the Growth Management Act and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925 and RCW 36.70A.172, and in consultation with state and federal agencies and other qualified professionals.

F. This title is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this title ~~to make a parcel of property unusable by denying its owner reasonable economic use of the property nor~~ to prevent the provision of public facilities and services necessary to support existing development.

G. The city of Edmonds' enactment or enforcement of this title shall not be construed to benefit any individual person or group of persons other than the general public. [Ord. 3527 § 2, 2004].

23.40.010 Authority.

A. As provided herein, the Edmonds development services director or his/her designee (hereafter referred to as "the director") is given the authority to interpret and apply, and the responsibility to enforce, this title to accomplish the stated purpose.

B. The director may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this title. [Ord. 3527 § 2, 2004].

23.40.020 Relationship to other regulations.

A. These critical areas regulations shall apply as an overlay and in addition to zoning, site development, building and other regulations adopted by the city of Edmonds.

B. Any individual critical area adjoined or overlain by another type of critical area shall have the buffer and meet the requirements that provide the most protection to the critical areas involved. When any provision of this title or any existing land use regulation conflicts with this title, that which provides more protection to the critical area shall apply.

C. These critical areas regulations shall be coordinated with review conducted under the State Environmental Policy Act (SEPA), as necessary and locally adopted.

D. Compliance with the provisions of this title does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, shoreline substantial development permits, Hydraulic Permit Act (HPA) permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, and National Pollution Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this title. [Ord. 3527 § 2, 2004].

23.40.030 Severability.

If any clause, sentence, paragraph, section, or part of this title or the application thereof to any person or circumstances shall be judged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered. The decision shall not affect or invalidate the remainder of any part thereof and to this end the provisions of each clause, sentence, paragraph, section, or part of this law are hereby declared to be severable. [Ord. 3527 § 2, 2004].

23.40.040 Jurisdiction – Critical areas.

A. The director shall regulate all uses, activities, and developments within, adjacent to, or likely to affect one or more critical areas, consistent with the best available science and the provisions herein.

B. Critical areas regulated by this title include:

1. Wetlands as designated in Chapter 23.50 ECDC, Wetlands;
2. Critical aquifer recharge areas as designated in Chapter 23.60 ECDC, Critical Aquifer Recharge Areas;
3. Frequently flooded areas as designated in Chapter 23.70 ECDC, Frequently Flooded Areas;
4. Geologically hazardous areas as designated in Chapter 23.80 ECDC, Geologically Hazardous Areas; and
5. Fish and wildlife habitat conservation areas as designated in Chapter 23.90 ECDC, Fish and Wildlife Habitat Conservation Areas.

C. All areas within the city of Edmonds meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this title.

D. Areas Adjacent to Critical Areas Subject to Regulation. Areas adjacent to critical areas shall be considered to be within the jurisdiction of these requirements and regulations to support the intent of this title and ensure protection of the functions and values of critical areas. “Adjacent” shall mean any activity located:

1. On a site immediately adjoining a critical area; and
2. Areas located within 200 feet of a subject parcel containing a jurisdictional critical area. [Ord. 3527 § 2, 2004].

23.40.050 Protection of critical areas.

Any action taken pursuant to this title shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. All actions and developments shall be designed and constructed in accordance with ECDC 23.40.120, Mitigation sequencing, to avoid, minimize, and restore all adverse impacts. Applicants must first demonstrate an inability to avoid or reduce impacts before the use of actions to mitigate potential impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas. [Ord. 3527 § 2, 2004].

Part II. Critical Areas Review Process

23.40.060 General requirements.

A. As part of this review, the director shall:

1. Verify the information submitted by the applicant;
2. Evaluate the project area and vicinity for critical areas;
3. Determine whether the proposed project is likely to impact the functions or values of critical areas; and
4. Determine if the proposed project adequately assesses all impacts, avoids impacts, and/or mitigates impacts to the critical area associated with the project.

B. If the proposed project is within, adjacent to, or is likely to impact a critical area, the director shall:

1. Require a critical areas report from the applicant that has been prepared by a qualified professional;
2. Review and evaluate the critical areas report;
3. Determine whether the development proposal conforms to the purposes and performance standards of this title, including the criteria in ECDC 23.40.160, Review criteria;
4. Assess the potential impacts to the critical area and determine if they can be avoided or minimized; and
5. Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this title. [Ord. 3527 § 2, 2004].

23.40.070 Critical areas preapplication consultation.

Any person preparing to submit an application for development or use of land that may be regulated by the provisions of this title may request a preapplication meeting with the director prior to submitting an application for development or other approval. At this meeting, the director shall discuss the requirements of this title; provide critical areas maps, scientific information, and other source materials; outline the review process; and work with the activity proponent to identify any potential concerns that might arise during the review process, in addition to discussing other permit procedures and requirements. All applicants, regardless of participation in a preapplication meeting, are held fully responsible for knowledge and disclosure of critical areas on, adjacent to, or associated with a subject parcel and full compliance with the specific provisions and goals, purposes, objectives, and requirements of this title. [Ord. 3527 § 2, 2004].

23.40.080 Notice of initial determination.

A. If the director determines that no critical areas report is necessary, the director shall state this in the notice of application issued for the proposal.

B. If the director determines that there are critical areas on the site that the proposed project is unlikely to impact and the project meets the requirements for and has been granted a waiver from the requirement to complete a critical areas report, this shall be stated in the notice of application for the proposal.

C. If the director determines that critical areas may be affected by the proposal and a critical areas report is required, public notice of the application shall include a description of the critical area that might be affected and state that a critical areas report(s) is required. [Ord. 3527 § 2, 2004].

23.40.090 Critical areas report – Requirements.

A. Preparation by Qualified Professional. The applicant shall submit a critical areas report prepared by a qualified professional as defined herein. For wetlands, frequently flooded areas and fish and wildlife habitat conservation areas, an applicant may choose one of the qualified technical consultants on the city's approved list to prepare critical areas reports per the requirements of this title or may apply to utilize an alternative consultant. Critical areas studies and reports developed by an alternative consultant shall be subject to independent review pursuant to subsection B of this section. Applicants utilizing the services of a qualified technical consultant from the city's approved list shall enter into a three- party contract between the applicant, the consultant and the city. All costs associated with the critical areas study shall be borne by the applicant.

B. Independent Review of Critical Areas Reports. Critical areas studies and reports on geologically hazardous areas and those developed by an applicant representative or consultant not as part of a three-party contract may, at the discretion of the director, be subject to independent review. This independent review shall be performed by a qualified technical consultant selected by the city with all costs borne by the applicant. The purpose of such independent review is to provide the city with objective technical assistance in evaluating the accuracy of submitted reports and/or the effects on critical areas which may be caused by a development proposal and to facilitate the decision-making process. The director may also have technical assistance provided by appropriate resource agency staff if such assistance is available in a timely manner.

C. Best Available Science. The critical areas report shall use scientifically valid methods and studies in the analysis of critical areas data and field reconnaissance and reference the source of science used. The critical areas report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this title.

D. Minimum Report Contents. At a minimum, the report shall contain the following:

1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;
2. A copy of the site plan for the development proposal including:
 - a. A map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared; and
 - b. A description of the proposed storm water management plan for the development and consideration of impacts to drainage alterations;
3. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;
4. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, and buffers adjacent to the proposed project area;
5. A description of reasonable efforts made to apply mitigation sequencing pursuant to ECDC 23.40.120, Mitigation sequencing, to avoid, minimize, and mitigate impacts to critical areas; and
6. Report requirements specific to each critical area type as indicated in the corresponding chapters of this title.

E. Unless otherwise provided, a critical areas report may incorporate, be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the director. At the discretion of the director, reports previously compiled or submitted as part of a proposal for development may be used as a critical areas report to the extent that the requirements of this section and the report requirements for each specific critical area type are met. [Ord. 3527 § 2, 2004].

23.40.100 Critical areas report – Modifications to requirements.

A. Limitations to Study Area. The director may limit the required geographic area of the critical areas report as appropriate if:

1. The applicant, with assistance from the city of Edmonds, cannot obtain permission to access properties adjacent to the project area; or
2. The proposed activity will affect only a limited part of the subject site.

B. Modifications to Required Contents. The applicant may consult with the director prior to or during preparation of the critical areas report to obtain approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential critical area impacts and required mitigation.

C. Additional Information Requirements. The director may require additional information to be included in the critical areas report when determined to be necessary to the review of the proposed activity in accordance with this title. Additional information that may be required includes, but is not limited to:

1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;
2. Grading and drainage plans; and
3. Information specific to the type, location, and nature of the critical area. [Ord. 3527 § 2, 2004].

23.40.110 Mitigation requirements.

A. The applicant shall avoid all impacts that degrade the functions and values of critical areas. Unless otherwise provided in this title, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical areas report and SEPA documents, so as to result in no net loss of critical area functions and values.

B. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area and to prevent risk from a hazard posed by a critical area.

C. Mitigation shall not be implemented until after the director has provided approval of a critical areas report that includes a mitigation plan. Mitigation shall be implemented in accordance with the provisions of the approved critical areas report. [Ord. 3527 § 2, 2004].

23.40.120 Mitigation sequencing.

A. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas.

B. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
3. Rectifying the impact to wetlands, frequently flooded areas, and fish and wildlife habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;
4. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineering or other methods;

5. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
6. Compensating for the impact to wetlands, frequently flooded areas, and fish and wildlife habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and/or
7. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

C. Mitigation for individual actions may include a combination of the above measures. [Ord. 3527 § 2, 2004].

23.40.130 Mitigation plan requirements.

When mitigation is required, the applicant shall submit for approval by the director a mitigation plan as part of the critical areas report. The mitigation plan shall include:

A. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;
2. A review of the best available science supporting the proposed mitigation;
3. An analysis of the likelihood of success of the compensation project; and
4. Specific mitigation plan and report requirements for each critical area type as indicated in this title.

B. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this title have been met.

C. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

1. The proposed construction sequence, timing, and duration;
2. Grading and excavation details;
3. Erosion and sediment control features;
4. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and
5. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

~~D. Monitoring Program. The mitigation plan shall include a program for monitoring construction and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years one, three, and five after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than three years.~~

E. Contingency Plan. The mitigation plan shall include identification of potential courses of action and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

F. Financial Guarantees. The mitigation plan shall include financial guarantees, as necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with ECDC 23.40.290, Bonds to ensure mitigation, maintenance, and monitoring. [Ord. 3527 § 2, 2004].

23.40.140 Innovative mitigation.

A. The city of Edmonds may encourage, facilitate, and approve innovative mitigation projects that are based on the best available science. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this section wherein one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:

1. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;
2. The group demonstrates the organizational and fiscal capability to act cooperatively;
3. The group demonstrates that long-term management of the habitat area will be provided; and
4. There is a clear potential for success of the proposed mitigation at the identified mitigation site.

B. Conducting mitigation as part of a cooperative process provides for retention or an increase in the beneficial functions and values of critical areas within the Edmonds jurisdiction. [Ord. 3527 § 2, 2004].

23.40.150 Critical areas decision.

The city of Edmonds development services director shall make a decision as to whether the proposed activity and mitigation, if any, is consistent with the provisions of this title. The decision shall be based on the criteria of ECDC 23.40.160, Review criteria, and shall affect and be incorporated within the larger project decision. [Ord. 3527 § 2, 2004].

23.40.160 Review criteria.

A. Any alteration to a critical area, unless otherwise provided for in this title, shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria:

1. The proposal minimizes the impact on critical areas in accordance with ECDC 23.40.120, Mitigation sequencing;
2. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;
3. The proposal is consistent with the general purposes of this title and the public interest;
4. Any alterations permitted to the critical area are mitigated in accordance with ECDC 23.40.110, Mitigation requirements;
5. The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values; and
6. The proposal is consistent with other applicable regulations and standards.

B. The director may condition the proposed activity as necessary to mitigate impacts to critical areas and to conform to the standards required by this title. Except as provided for by this title, any project that cannot adequately mitigate its impacts to critical areas in the sequencing order of preferences in ECDC 23.40.120 shall be denied. [Ord. 3527 § 2, 2004].

23.40.170 Favorable critical areas decision.

If the director determines that the proposed activity meets or is exempt from the criteria in ECDC 23.40.160, Review criteria, and complies with the applicable provisions of this title, the development services director shall prepare a written notice of decision for the applicant and identify any required conditions of approval as part of the larger project decision. The notice of decision and conditions of approval shall be included in the project file and be considered in the next phase of the city's review of the proposed activity in accordance with any other applicable codes or regulations.

Any conditions of approval included in a notice of decision shall be attached to the underlying permit or approval. Any subsequent changes to the conditions of approval shall void the previous decision pending re-review of the proposal and conditions of approval previously set by the director.

A favorable decision should not be construed as endorsement or approval of any underlying permit or approval. [Ord. 3527 § 2, 2004].

23.40.180 Unfavorable critical areas decision.

If the director determines that a proposed activity is not exempt or does not adequately mitigate its impacts on critical areas and/or does not comply with the criteria in ECDC 23.40.160, Review criteria, and the provisions of this title, the director shall prepare a written decision for the applicant that includes findings of noncompliance.

No proposed activity or permit shall be approved or issued if it is determined that the proposed activity does not adequately mitigate its impacts on the critical areas and/or does not comply with the provisions of this title.

Following notice of decision that the proposed activity does not meet the review criteria and/or does not comply with the applicable provisions of this title, the applicant may request consideration of a revised critical area report. If the revision is found to be substantial and relevant to the critical area review, the director may reopen the critical area review and make a new decision based on the revised report. [Ord. 3527 § 2, 2004].

23.40.190 Completion of the critical areas review.

The director's decision regarding critical areas pursuant to this title shall be final concurrent with the final project decision to approve, condition, or deny the development proposal or other activity involved. [Ord. 3527 § 2, 2004].

23.40.200 Appeals.

Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this title may be appealed according to, and as part of, the appeal procedure, if any, for the permit or approval involved. [Ord. 3736 § 71, 2009; Ord. 3527 § 2, 2004].

~~23.40.210 Variances.~~

~~A. Variances from the standards of this title may be authorized through the process of hearing examiner review in accordance with the procedures set forth in Chapter 20.85 ECDC only if an applicant demonstrates that one or more of the following two conditions exist:~~

- ~~1. The application of this title would prohibit a development proposal by a public agency or public utility. A public agency and utility exception may be granted as a variance if:~~
 - ~~a. There is no other practical alternative to the proposed development with less impact on the critical areas;~~
 - ~~b. The application of this title would unreasonably restrict the ability to provide utility services to the public;~~
 - ~~c. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;~~
 - ~~d. The proposal attempts to protect and mitigate impacts to the critical area functions and values consistent with the best available science; and~~
 - ~~e. The proposal is consistent with other applicable regulations and standards.~~

~~2. The application of this title would deny all reasonable economic use (see the definition of “reasonable economic use(s)” in ECDC 23.40.320) of the subject property. A reasonable use exception may be authorized as a variance only if an applicant demonstrates that:~~

- ~~a. The application of this title would deny all reasonable economic use of a property or subject parcel;~~
- ~~b. No other reasonable economic use of the property consistent with the underlying zoning and the city comprehensive plan has less impact on the critical area;~~
- ~~c. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;~~
- ~~d. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of the ordinance codified in this title or its predecessor;~~
- ~~e. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;~~
- ~~f. The proposal minimizes net loss of critical area functions and values consistent with the best available science; and~~
- ~~g. The proposal is consistent with other applicable regulations and standards.~~

~~B. Specific Variance Criteria. A variance may be granted if the applicant demonstrates that the requested action conforms to all of the following specific criteria:~~

- ~~1. Special conditions and circumstances exist that are peculiar to the land, the lot, or something inherent in the land, and that are not applicable to other lands in the same district;~~
- ~~2. The special conditions and circumstances do not result from the actions of the applicant;~~
- ~~3. A literal interpretation of the provisions of this title would deprive the applicant of all reasonable economic uses and privileges permitted to other properties in the vicinity and zone of the subject property under the terms of this title, and the variance requested is the minimum necessary to provide the applicant with such rights;~~
- ~~4. Granting the variance requested will not confer on the applicant any special privilege that is denied by this title to other lands, structures, or buildings under similar circumstances;~~
- ~~5. The granting of the variance is consistent with the general purpose and intent of this title, and will not further degrade the functions or values of the associated critical areas or otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property; and~~
- ~~6. The decision to grant the variance is based upon the best available science and gives special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat.~~

~~C. Hearing Examiner Review. The city hearing examiner shall, as a Type III - A decision (see Chapter 20.01 ECDC), review variance applications and conduct a public hearing. The hearing examiner shall approve, approve with conditions, or deny variance applications based on a proposal’s ability to comply with general and specific variance criteria provided in subsections (A) and (B) of this section.~~

~~D. Conditions May Be Required. The director retains the right to prescribe such conditions and safeguards as are necessary to secure adequate protection of critical areas from adverse impacts, and to ensure conformity with this title for variances granted through hearing examiner review.~~

~~E. Time Limit. The director shall prescribe a time limit within which the action for which the variance is required shall be begun, completed, or both. Failure to begin or complete such action within the established time limit shall void the variance, unless the applicant files an application for an extension of time before the expiration. An application for an extension of time shall be reviewed by the director as a Type II decision (see Chapter 20.01 ECDC).~~

~~F. Burden of Proof. The burden of proof shall be on the applicant to bring forth evidence in support of a variance application and upon which any decision has to be made on the application. [Ord. 3783 § 15, 2010; Ord. 3775 § 15, 2010; Ord. 3736 §§ 72, 73, 2009; Ord. 3527 § 2, 2004].~~

Part III. Allowed Activities, Exemptions and Noncompliance Penalties

23.40.220 Allowed activities.

A. Critical Area Report. Activities allowed under this title shall have been reviewed and permitted or approved by the city of Edmonds or other agency with jurisdiction, but do not require submittal of a critical area report, unless such submittal was required previously for the underlying permit. The director may apply conditions to the underlying permit or approval to ensure that the allowed activity is consistent with the provisions of this title to protect critical areas.

B. Required Use of Best Management Practices. All allowed activities shall be conducted using the best management practices that result in the least amount of impact to the critical areas. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The city may observe or require independent inspection of the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a critical area shall be restored, rehabilitated, or replaced at the responsible party's expense.

C. Allowed Activities. The following activities are allowed:

1. Permit Requests Subsequent to Previous Critical Areas Review. Development permits and approvals that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits) and construction approvals (such as building permits) if all of the following conditions have been met:

- a. The provisions of this title have been previously addressed as part of another approval;
- b. There have been no material changes in the potential impact to the critical area or buffer since the prior review;
- c. The permit or approval has not expired or, if no expiration date, no more than five years have elapsed since the issuance of that permit or approval; and
- d. Compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;

2. Modification to Structures Existing Outside of Critical Areas and/or Buffers. Structural modification of, addition to, or replacement of a legally constructed structure existing outside of a critical area or its buffer that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement;

3. Permitted Alteration to Structures Existing Within Critical Areas and/or Buffers. Permitted alteration to a legally constructed structure existing within a critical area or buffer that does not increase the footprint of development or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement (additions to legally constructed structures existing within a critical area or buffer that do increase the existing footprint of development shall be subject to and permitted in accordance with the development standards of the associated critical area type (see ECDC 23.50.040 and 23.90.040)). This provision shall be interpreted to supplement the provisions of the Edmonds Community Development Code relating to nonconforming structures in order to permit the full reconstruction of a legal nonconforming building within its footprint;

4. Activities Within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, when such facilities are located within the improved portion of the public right-of-way or a city-authorized private roadway;

5. Minor Utility Projects. Utility projects that have minor or short-duration impacts to critical areas, as determined by the director in accordance with the criteria below, and which do not significantly impact the function or values of a critical area(s); provided, that such projects are constructed with best management practices and additional restoration measures are provided. Minor activities shall not result in the transport of sediment or increased storm water. Such allowed minor utility projects shall meet the following criteria:

- a. There is no practical alternative to the proposed activity with less impact on critical areas;
- b. The activity involves the placement of utility pole(s), street sign(s), anchor(s), or vault(s) or other small component(s) of a utility facility; and
- c. The activity involves disturbance of an area less than 75 square feet;

6. Public and Private Pedestrian Trails. New public and private pedestrian trails subject to the following:

- a. The trail surface shall meet all other requirements, including water quality standards set forth in the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19;
- b. Critical area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and
- c. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report;

7. Select Vegetation Removal Activities. The following vegetation removal activities:

- a. The removal of the following vegetation with hand labor and light equipment:
 - i. Invasive and noxious weeds;
 - ii. English ivy (*Hedera helix*);
 - iii. Himalayan blackberry (*Rubus discolor*, *R. procerus*);
 - iv. Evergreen blackberry (*Rubus laciniatus*);
 - v. Scot's broom (*Cytisus scoparius*); and
 - vi. Hedge and field bindweed (*Convolvulus sepium* and *C. arvensis*);
- b. The removal of trees from critical areas and buffers that are hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property; provided, that:
 - i. The applicant submits a report from an ISA- or ASCA-certified arborist or registered landscape architect that documents the hazard and provides a replanting schedule for the replacement trees;
 - ii. Tree cutting shall be limited to pruning and crown thinning, unless otherwise justified by a qualified professional. Where pruning or crown thinning is not sufficient to address the hazard, trees should be removed or converted to wildlife snags;
 - iii. All vegetation cut (tree stems, branches, etc.) shall be left within the critical area or buffer unless removal is warranted due to the potential for disease or pest transmittal to other healthy vegetation or unless removal is warranted to improve slope stability;
 - iv. The land owner shall replace any trees that are removed with new trees at a ratio of two replacement trees for each tree removed (two to one) within one year in accordance with an approved restoration plan. Replacement trees may be planted at a different, nearby location if it can be determined that planting in

- the same location would create a new hazard or potentially damage the critical area. Replacement trees shall be species that are native and indigenous to the site and a minimum of one inch in diameter at breast height (dbh) for deciduous trees and a minimum of six feet in height for evergreen trees as measured from the top of the root ball;
- v. If a tree to be removed provides critical habitat, such as an eagle perch, a qualified wildlife biologist shall be consulted to determine timing and methods of removal that will minimize impacts; and
 - vi. Hazard trees determined to pose an imminent threat or danger to public health or safety, to public or private property, or of serious environmental degradation may be removed or pruned by the land owner prior to receiving written approval from the city; provided, that within 14 days following such action, the land owner shall submit a restoration plan that demonstrates compliance with the provisions of this title;
- c. Measures to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act, Chapter 76.09 RCW; provided, that the removed vegetation shall be replaced in kind or with similar native species within one year in accordance with an approved restoration plan; and
 - d. Unless otherwise provided, or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a fish and wildlife habitat conservation area or wetland shall be prohibited;

~~8. Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored; and~~

9. Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers. [Ord. 3527 § 2, 2004].

~~23.40.230 — Exemptions.~~

~~A. Exemption Request and Review Process. The proponent of the activity may submit a written request for exemption to the director that describes the activity and states the exemption listed in this section that applies.~~

~~The director shall review the exemption request to verify that it complies with this title and approve or deny the exemption. If the exemption is approved, it shall be placed on file with the city of Edmonds. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this title.~~

~~B. Exempt Activities and Impacts to Critical Areas. All exempted activities shall use reasonable methods to avoid potential impacts to critical areas. To be exempt from this title does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.~~

~~C. Exempt Activities. The following developments, activities, and associated uses shall be exempt from the provisions of this title; provided, that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements:~~

~~1. Emergencies. Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this title.~~

~~Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the director within one working day following commencement of the emergency activity. Within 30 days, the director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then enforcement provisions of ECDC 23.40.240, Unauthorized critical area alterations and enforcement, shall apply.~~

~~After the emergency, the person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical areas report and mitigation plan. The person or agency undertaking the action shall apply for review, and the alteration, critical area report, and mitigation plan shall be reviewed by the director in accordance with the review procedures contained herein. Restoration and/or mitigation activities must be initiated within one year of the date of the emergency and completed in a timely manner;~~

~~2. Operation, Maintenance, or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair; and~~

~~3. Passive Outdoor Activities. Recreation, education, and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching. Trails must be constructed pursuant to ECDC-23.40.220(C)(6), Public and Private Pedestrian Trails. [Ord. 3527 § 2, 2004].~~

23.40.240 Unauthorized critical area alterations and enforcement.

A. When a critical area or its buffer has been altered in violation of this title or the provisions of Chapter 7.200 ECC, all ongoing development work shall stop and the critical area shall be restored. The director shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of the provisions of this title. The director may also require an applicant or property owner to take immediate action to ensure site stabilization and/or erosion control as needed.

B. Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by the director. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum requirements described in subsection C of this section. The director shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

C. Minimum Performance Standards for Restoration.

1. For alterations to frequently flooded areas, wetlands, and fish and wildlife habitat conservation areas, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

- a. The historic structural and functional values shall be restored, including water quality and habitat functions;
- b. The historic soil types and configuration shall be replicated;
- c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration; and
- d. Information demonstrating compliance with the requirements in ECDC 23.40.130, Mitigation plan requirements, shall be submitted to the city planning division.

2. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area; provided, that if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

- a. The hazard shall be reduced to a level equal to, or less than, the predevelopment hazard;
- b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

D. Site Investigations. The director is authorized to make site inspections and take such actions as are necessary to enforce this title. The director shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

E. Penalties. Any person, party, firm, corporation, or other legal entity convicted of violating any of the provisions of this title shall be guilty of a misdemeanor and subject to penalties set forth in ECDC 18.45.070 and 18.45.075. Each day or portion of a day during which a violation of this title is committed or continued shall constitute a separate offense. Any development carried out contrary to the provisions of this title shall constitute a public nuisance and may be enjoined as provided by the statutes of the state of Washington. The city of Edmonds may levy civil penalties against any person, party, firm, corporation, or other legal entity for violation of any of the provisions of this title. The civil penalty shall be assessed as proscribed in ECDC 18.45.070 and 18.45.075. [Ord. 3828 § 2, 2010; Ord. 3527 § 2, 2004].

Part IV. General Critical Areas Protective Measures

23.40.250 Critical areas markers and signs.

A. The boundary at the outer edge of a critical area, critical area buffer or critical area tract may, at the discretion of the director, be required to be delineated with wood fencing.

B. The boundary at the outer edge of the critical area or buffer may be identified with temporary signs prior to any site alteration. Such temporary signs may be replaced with permanent signs prior to occupancy or use of the site.

C. These provisions may be modified by the director as necessary to ensure protection of sensitive features or wildlife needs. [Ord. 3527 § 2, 2004].

23.40.270 Critical areas tracts.

A. At the discretion of the director, critical areas tracts may be required in development proposals for subdivisions, short subdivisions, and planned unit developments. These critical areas tracts shall delineate and protect those contiguous critical areas and buffers greater than 5,000 square feet including:

1. Landslide hazard areas and buffers;
2. Wetlands and buffers;
3. Fish and wildlife habitat conservation areas; and
4. Other lands to be protected from alterations as conditioned by project approval.

B. Critical areas tracts shall be recorded on all documents of title of record for all affected lots.

C. Critical areas tracts shall be designated on the face of the plat or recorded drawing in a format approved by the director. The designation shall include the following restrictions:

1. An assurance that native vegetation will be preserved for the purpose of preventing harm to property and the environment, including, but not limited to, controlling surface water runoff and erosion, maintaining slope stability, buffering, and protecting plants, fish, and animal habitat; and
2. The right of the director to enforce the terms of the restriction.

D. The director may require that critical areas tracts be dedicated to the city, to be held in an undivided interest by each owner of a building lot within the development with the ownership interest passing with the ownership of the lot, or held by an incorporated homeowner's association or other legal entity (such as a land trust), which ensures the ownership, maintenance, and protection of the tract and contains a process to assess costs associated therewith.

E. The use of herbicides within critical areas tracts is prohibited. [Ord. 3527 § 2, 2004].

23.40.280 Building setbacks.

Unless otherwise provided, buildings and other structures shall be set back a distance of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

- A. Landscaping;
- B. Uncovered decks;
- C. Building overhangs, if such overhangs do not extend more than 30 inches into the setback area; and
- D. Impervious ground surfaces, such as driveways and patios; provided, that such improvements may be subject to water quality regulations as adopted in the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19. [Ord. 3527 § 2, 2004].

23.40.290 Bonds to ensure mitigation, maintenance, and monitoring.

A. When mitigation required pursuant to a development proposal is not completed prior to final permit approval, such as final plat approval or final building inspection, the applicant shall be required to post a performance bond or other security in a form and amount deemed acceptable by the director. If the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the city to ensure mitigation is fully functional.

B. The bond shall be in the amount of 120 percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater. The amount of the performance bond shall include a reasonable allocation for inflation based on the length of anticipated delay and the provisions of subsection D of this section.

C. The bond shall be in the form of a surety bond, performance bond, and/or maintenance bond from an acceptable financial institution, with terms and conditions acceptable to the city of Edmonds' attorney.

D. Bonds or other security authorized by this section shall remain in effect until the director determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the city for a minimum of three years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.

E. Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

F. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

G. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the city may demand payment of any financial guarantees or require other action authorized under this title or any other law.

H. Any funds recovered pursuant to this section shall be used to complete the required mitigation. [Ord. 3527 § 2, 2004].

23.40.300 Critical area inspections.

Reasonable access to the site shall be provided to the city, state, and/or federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period. Failure to provide access shall constitute grounds for issuance of a stop work order. [Ord. 3527 § 2, 2004].

Part V. Incorporation of Best Available Science

23.40.310 Best available science.

A. Protect Functions and Values of Critical Areas with Special Consideration to Anadromous Fish. Critical areas reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat, where applicable.

B. Best Available Science to Be Consistent with Criteria. The best available science is that scientific information applicable to the critical area prepared by local, state, or federal natural resource agencies, a qualified scientific professional, or a team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through 365-195-925 and RCW 36.70A.172.

C. Characteristics of a Valid Scientific Process. In the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions, and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the permit review process is reliable scientific information, the director shall determine whether the source of the information displays the characteristics of a valid scientific process. Such characteristics are as follows:

1. Peer Review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The proponents of the information have addressed the criticism of the peer reviewers. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed;
2. Methods. The methods used to obtain the information are clearly stated and reproducible. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to ensure their reliability and validity;
3. Logical Conclusions and Reasonable Inferences. The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained;
4. Quantitative Analysis. The data have been analyzed using appropriate statistical or quantitative methods;
5. Context. The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge; and
6. References. The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

D. Nonscientific Information. Nonscientific information, such as anecdotal observations, may supplement scientific information, but it is not an adequate substitute for valid and available scientific information.

E. Absence of Valid Scientific Information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the director shall:

1. Take a "precautionary or a no-risk approach" that strictly limits development and land use activities until the uncertainty is sufficiently resolved; and
2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:
 - a. Address funding for the research component of the adaptive management program;

- b. Change course based on the results and interpretation of new information that resolves uncertainties; and
- c. Commit to the appropriate time frame and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries. [Ord. 3527 § 2, 2004].

Part VI. Definitions

23.40.320 Definitions pertaining to critical areas.

For the purposes of this chapter and the chapters on the five specific critical area types (Chapters 23.50, 23.60, 23.70, 23.80 and 23.90 ECDC) the following definitions shall apply:

“Adjacent” means those areas located within 200 feet of a development proposal or subject parcel and those areas located within 800 feet of a documented bald eagle nest.

“Alteration” means any human-induced action which changes the existing condition of a critical area or its buffer. Alterations include, but are not limited to: grading; filling; dredging; draining; channelizing; cutting, pruning, limbing or topping, clearing, relocating or removing vegetation; applying herbicides or pesticides or any hazardous or toxic substance; discharging pollutants; paving, construction, application of gravel; modifying for surface water management purposes; or any other human activity that changes the existing landforms, vegetation, hydrology, wildlife or wildlife habitat value of critical areas.

“Best management practices” means a system of practices and management measures that:

1. Control soil loss and reduce water quality degradation caused by nutrients, animal waste, and toxics;
2. Control the movement of sediment and erosion caused by land alteration activities;
3. Minimize adverse impacts to surface and ground water quality, flow, and circulation patterns; and
4. Minimize adverse impacts to the chemical, physical, and biological characteristics of critical areas.

“Buffer” means the designated area immediately next to and a part of a steep slope or landslide hazard area and which protects slope stability, attenuation of surface water flows and landslide hazards reasonably necessary to minimize risks to persons or property; or a designated area immediately next to and part of a stream or wetland that is an integral part of the stream or wetland ecosystem.

“Chapter” means those sections of this title sharing the same third and fourth digits.

“City” means the city of Edmonds.

“Class” or “wetland class” means descriptive categories of wetland vegetation communities within the wetlands taxonomic classification system of the U.S. Fish and Wildlife Service (Cowardin, et al., 1979).

“Clearing” means the act of cutting and/or removing vegetation. This definition shall include grubbing vegetation and the use or application of herbicide.

“Compensation project” means an action(s) specifically designed to replace project-induced critical area or buffer losses. Compensation project design elements may include, but are not limited to: land acquisition procedures and detailed plans including functional value assessments, detailed landscaping designs, construction drawings, and monitoring and contingency plans.

“Compensatory mitigation” means replacing project-induced losses or impacts to a critical area, and includes, but is not limited to, the following:

1. “Restoration” means actions performed to reestablish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.

2. "Creation" means actions performed to intentionally establish a wetland at a site where it did not formerly exist.

3. "Enhancement" means actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.

4. "Preservation" means actions taken to ensure the permanent protection of existing high-quality wetlands.

"Creation" means a compensation project performed to intentionally establish a wetland or stream at a site where one did not formerly exist.

"Critical areas" for the city of Edmonds means wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas as defined in Chapters 23.50, 23.60, 23.70, 23.80 and 23.90 ECDC, respectively.

"Development proposal" means any activity relating to the use and/or development of land requiring a permit or approval from the city, including, but not limited to: commercial or residential building permit; binding site plan; conditional use permit; franchise; right-of-way permit; grading and clearing permit; mixed use approval; planned residential development; shoreline conditional use permit; shoreline substantial development permit; shoreline variance; short subdivision; special use permit; subdivision; flood hazard permit; unclassified use permit; utility and other use permit; variance; rezone; or any required permit or approval not expressly exempted by this title.

"Director" means the city of Edmonds development services director or his/her designee.

"Division" means the planning division of the city of Edmonds development services department.

"Enhancement" means an action taken to improve the condition and function of a critical area. In the case of wetland or stream, the term includes a compensation project performed to improve the conditions of an existing degraded wetland or stream to increase its functional value.

"Erosion" means the process in which soil particles are mobilized and transported by natural agents such as wind, rain, frost action, or stream flow.

Erosion Hazard Areas. See ECDC 23.80.020(A).

Fish and Wildlife Habitat Conservation Areas. See Chapter 23.90 ECDC.

"Floodplain" means the total area subject to inundation by a "100-year flood." "100-year flood" means a flood having a one percent chance of being equaled or exceeded in any given year.

Frequently Flooded Areas. See Chapter 23.70 ECDC.

"Functions" means the roles served by critical areas including, but not limited to: water quality protection and enhancement; fish and wildlife habitat; food chain support; flood storage, conveyance and attenuation; ground water recharge and discharge; erosion control; wave attenuation; aesthetic value protection; and recreation. These roles are not listed in order of priority.

Geologically Hazardous Areas. See Chapter 23.80 ECDC.

"Geologist" means a person licensed as a geologist, engineering geologist, or hydrologist in the state of Washington who has earned a degree in geology from an accredited college or university and has at least five years of experience as a practicing geologist or four years of experience and at least two years of postgraduate study, research or teaching. The practical experience shall include at least three years of work in applied geology and landslide evaluation in close association with qualified, practicing geologists and geotechnical/civil engineers.

"Geotechnical engineer" means a practicing geotechnical/civil engineer licensed as a professional civil engineer in the state of Washington who has at least four years of professional employment as a geotechnical engineer in responsible charge including experience with landslide evaluation.

“Grading” means any one or a combination of excavating, filling, or disturbance of that portion of the soil profile which contains decaying organic matter.

“Habitats of local importance” include a seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alteration, such as cliffs, shorelines, coastal beaches, mudflats, eelgrass beds, and wetlands. (See ECDC 23.90.010(A)(4).)

Landslide Hazard Areas. (See ECDC 23.80.020(B).)

“Mitigation” means the use of any or all of the following actions, which are listed in descending order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps such as project redesign, relocation, or timing to avoid or reduce impacts;
3. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;
4. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;
5. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
6. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
7. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

“Native vegetation” means vegetation comprised of plant species which are indigenous to the Puget Sound region and which reasonably could have been expected to naturally occur on the site. “Native vegetation” does not include noxious weeds as defined by the state of Washington or federal agencies.

“Noxious weeds” means any plant which, when established, is highly destructive, competitive or difficult to control by cultural or chemical practices, as further listed in Chapter 16-750 WAC.

“Planning staff” means those employed in the planning division of the city of Edmonds development services department.

“Qualified critical areas consultant” or “qualified professional” means a person who has the qualifications specified below to conduct critical areas studies pursuant to this title, and to make recommendations for critical areas mitigation. For areas of potential geologic instability, the qualified critical areas consultant shall be a geologist or geotechnical engineer. For wetlands and streams, the qualified critical areas consultant shall be a specialist in botany, fisheries, wetland biology, and/or hydrology with a minimum of two years’ field experience with wetlands and/or streams in the Pacific Northwest. Requirements defining a qualified critical areas consultant or qualified professional are contained within the chapter on each critical area type.

“Reasonable economic use(s)” means the minimum use to which a property owner is entitled under applicable state and federal constitutional provisions in order to avoid a taking and/or violation of substantive due process.

“Redeveloped land(s)” means those lands on which existing structures are demolished in their entirety to allow for new development. The director shall maintain discretion to determine if the demolition of a majority of existing structures or portions thereof constitute the re-development of a property or subject parcel.

“Restoration” means the actions necessary to return a stream, wetland or other critical area to a state in which its stability, functions and values approach its unaltered state as closely as possible.

Seismic Hazard Areas. (See ECDC 23.80.020(C).)

“Species of local importance” means those species that are of local concern due to their population status, their sensitivity to habitat manipulation, or that are game (hunted) species. (See ECDC 23.90.010(A)(4).)

“Storm Water Management Manual” means the Storm Water Management Manual for the Puget Sound Basin by the Washington State Department of Ecology (as included in Chapter 18.30 ECDC).

“Streams” means any area where surface waters produce a defined channel or bed which demonstrates clear evidence, such as the sorting of sediments, of the passage of water. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices (drainage ditches) or other entirely artificial watercourses unless they are used by salmonids or used to convey streams naturally occurring prior to construction of such watercourse. Streams are further classified into Categories S, F, Np and Ns and fishbearing or nonfishbearing 1, 2 and 3. (See ECDC 23.90.010(A)(1).)

“Title” means all chapters of the city of Edmonds Development Code beginning with the digits 23.

“Undeveloped land(s)” means land(s) on which manmade structures or land modifications (clearing, grading, etc.) do not exist. The director retains discretion to identify undeveloped land(s) in those instances where historical modifications and structures may have existed on a property or subject parcel in the past.

“Wetland functions” means those natural processes performed by wetlands, such as facilitating food chain production; providing habitat for nesting, rearing and resting sites for aquatic, terrestrial or avian species; maintaining the availability and quality of water; acting as recharge and/or discharge areas for ground water aquifers; and moderating surface water and storm water flows.

“Wetlands” means those areas that are inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street or highway. However, wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands if permitted by the city (WAC 365-190-030(22)). Wetlands are further classified into Categories 1, 2, 3 and 4. (See ECDC 23.50.010(B).) [Ord. 3952 § 1, 2013; Ord. 3931 § 2, 2013; Ord. 3527 § 2, 2004].

Chapter 23.50

WETLANDS

Sections:

Part I. Designation, Rating and Mapping

23.50.000 Wetlands compliance requirements flowchart.

23.50.010 Designation, rating and mapping – Wetlands.

Part II. Allowed Activities – Wetlands

23.50.020 Allowed activities – Wetlands.

Part III. Additional Report Requirements – Wetlands

23.50.030 Special study and report requirements – Wetlands.

Part IV. Development Standards – Wetlands

23.50.040 Development standards – Wetlands.

23.50.050 Mitigation requirements – Wetlands.

23.50.060 Performance standards – Subdivisions.

Part V. City of Edmonds Wetland Field Data Form

23.50.070 Wetland field data form.

Part I. Designation, Rating and Mapping

23.50.000 Wetlands compliance requirements flowchart.

See Figure 23.50.000 at the end of this chapter. [Ord. 3527 § 2, 2004].

23.50.010 Designation, rating and mapping – Wetlands.

A. Designating Wetlands. Wetlands are those areas, designated in accordance with the Washington State Wetland Identification and Delineation Manual (1997), that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within the city of Edmonds meeting the wetland designation criteria in the Identification and Delineation Manual, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this title.

~~B. Wetland Ratings. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the Washington State Wetland Rating System documents (Western Washington, Ecology Publications Nos. 93-74 and 04-06-025). These documents contain the definitions and methods for determining the criteria and parameters defining the following wetland rating categories:~~

~~1. The City of Edmonds Wetland Rating Categories:~~

~~a. Category 1 Wetlands. Category 1 wetlands are those that meet one or more of the following criteria:~~

~~i. Relatively undisturbed estuarine wetlands larger than one acre;~~

~~ii. Wetlands that are identified by scientists of the Washington Natural Heritage Program/DNR as high quality wetlands;~~

~~iii. Bogs larger than one half acre;~~

~~iv. Mature and old growth forested wetlands larger than one acre;~~

~~v. Wetlands in coastal lagoons;~~

~~vi. Wetlands that perform many functions well as indicated by a score of 70 or more on the city of Edmonds wetland field data form.~~

~~b. Category 2 Wetlands. Category 2 wetlands are:~~

- ~~i. Estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre;~~
- ~~ii. A wetland identified by the state Department of Natural Resources as containing “sensitive” plant species;~~
- ~~iii. A bog between one quarter and one half acre in size; or~~
- ~~iv. Wetlands with a moderately high level of functions as indicated by a score of 51 to 69 on the city of Edmonds wetland field data form.~~

~~e. Category 3 Wetlands. Category 3 wetlands are wetlands with a moderate level of functions as indicated by a score of 30 to 50 points on the city of Edmonds wetland field data form.~~

~~d. Category 4 Wetlands. Category 4 wetlands are those with the lowest levels of functions as indicated by scores below 30 on the city of Edmonds wetland field data form.~~

~~The city of Edmonds wetland field data form is provided in ECDC 23.50.070.~~

C. Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the local government, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.

D. Mapping. The approximate location and extent of wetlands are shown on the city of Edmonds critical areas inventory. In addition, the National Wetlands Inventory and Soil Maps produced by the U.S. Department of Agriculture, National Resources Conservation Service may be useful in helping to identify potential wetland areas. The inventory and cited resources are to be used as a guide for the city of Edmonds, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

E. Delineation. The exact location of a wetland’s boundary shall be determined through the performance of a field investigation by a qualified professional wetland scientist applying the Washington State Wetlands Identification and Delineation Manual as required by RCW 36.70A.175 (Ecology Publication No. 96-94, 1997).

F. Lake Ballinger. Lake Ballinger is designated on the U.S. National Wetlands Inventory as a lacustrine (lake) environment and should not be delineated as a wetland in its entirety. Lake fringe wetlands existing along the periphery of Lake Ballinger shall be identified according to specific criteria provided in the Washington State Wetlands Identification and Delineation Manual (Ecology Publication No. 96-94, 1997) and updated guidance provided in Washington State Wetlands Rating System for Western Washington – Revised (Ecology Publication No. 04-06-025, 2004). Consistent with guidance for delineating lake fringe wetlands provided in these resources, the existence of jurisdictional wetlands along Lake Ballinger shorelines shall be largely based upon the presence of persistent emergent vegetation in shoreline areas less than 6.6 feet in depth. Provisions for protection of Lake Ballinger shorelines not meeting criteria for jurisdictional wetlands are provided in the city of Edmonds shoreline master program. [Ord. 3527 § 2, 2004].

Part II. Allowed Activities – Wetlands

23.50.020 Allowed activities – Wetlands.

The activities listed below are allowed in wetlands in addition to those activities listed in, and consistent with, the provisions established in ECDC 23.40.220, and do not require submission of a critical areas report, except where such activities result in a loss to the functions and values of a wetland or wetland buffer. These activities include:

A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing wetland.

B. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

C. Drilling for utilities under a wetland; provided, that the drilling does not interrupt the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column could be disturbed.

D. Enhancement of a wetland through the removal of nonnative invasive species. Weeding shall be restricted to hand removal and weed material shall be removed from the site. Bare areas that remain after weed removal shall be revegetated with native shrubs and trees at natural densities. Some hand seeding may also be done over the bare areas with native herbs.

E. Permitted alteration to a legally constructed structure existing within a wetland or wetland buffer that does not increase the footprint of development or impervious surfacing or increase the impact to a wetland or wetland buffer. [Ord. 3527 § 2, 2004].

Part III. Additional Report Requirements – Wetlands

23.50.030 Special study and report requirements – Wetlands.

A. Additional Requirements for Wetlands. In addition to the general critical areas report requirements of ECDC 23.40.090, critical areas reports for wetlands must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

B. Critical areas report requirements for wetlands may be met in “stages” or through multiple reports. The typical sequence of potentially required reports that may in part or in combination fulfill the requirements of this section include:

1. Wetland reconnaissance report documenting the existence and general location of wetlands in the vicinity of a project area;
2. Wetland delineation report documenting the extent and boundary of a jurisdictional wetland per RCW 36.70A.175; and
3. Wetland mitigation report documenting potential wetland impacts and mitigation measures designed to retain or increase the functions and values of a wetland in accordance with ECDC 23.50.050 and the general provisions of this title.

C. A wetland critical areas report may include one or more of the above three report types, depending on the information required by the director and the extent of potential wetland impacts. The Edmonds development services director maintains the authority and discretion to determine which report(s) alone or combined are sufficient to meet the requirements outlined below and to waive report requirements based upon site conditions and the potential for project impacts.

D. Preparation by a Qualified Professional. A critical area report for wetlands shall be prepared by a qualified professional who is a certified professional wetland scientist or a noncertified professional wetland scientist with a minimum of five years of experience in the field of wetland science and with experience preparing wetland reports. Pursuant to ECDC 23.40.090(A), applicants may choose one of the qualified technical consultants on the city’s approved list in preparing critical areas reports for wetlands, or may utilize an alternative consultant. Critical areas studies and reports developed by an alternative consultant shall be subject to independent review pursuant to ECDC 23.40.090(B).

E. Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for wetlands:

1. The project area of the proposed activity;

2. All wetlands and recommended buffers within 200 feet of the project area; and
3. All shoreline areas, water features, floodplains, and other critical areas, and related buffers within 200 feet of the project area. The location and extent of wetlands and other critical areas existing outside of the project area or subject parcel boundary may be shown in approximation as practical and necessary to provide an assessment of potential project effects.

F. Wetland Analysis. In addition to the minimum required contents of ECDC 23.40.090, Critical areas reports – Requirements, a critical areas report for wetlands shall contain an analysis of the wetlands, including the following site- and proposal-related information at a minimum:

1. A written assessment and accompanying maps of the wetlands and buffers within 200 feet of the project area, including the following information at a minimum:
 - a. Wetland delineation and required buffers;
 - b. Existing wetland acreage;
 - c. Wetland category;
 - d. Vegetative, faunal, and hydrologic characteristics;
 - e. Soil and substrate conditions;
 - f. Topographic elevations, at two-foot contours; and
 - g. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, and evidence of recharge or discharge, evidence of water depths throughout the year: drift lines, algal layers, moss lines, and sediment deposits).

The location, extent and analyses of wetlands not contiguous with the subject parcel existing outside of the immediate project area may be described in approximation as practical and necessary to provide an assessment of potential project effects and hydrologic/ecological connectivity to on-site wetlands and other critical areas.

2. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.
3. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.
4. Functional evaluation for the wetland and adjacent buffer using a local or state agency staff-recognized method and including the reference of the method and all data sheets.
5. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:
 - a. Existing and proposed wetland acreage;
 - b. Vegetative and faunal conditions;
 - c. Surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;
 - d. Relationship to the watershed and existing waterbodies;
 - e. Soil and substrate conditions, topographic elevations;
 - f. Existing and proposed adjacent site conditions;

- g. Required wetland buffers; and
 - h. Property ownership.
6. A scale map of the development proposal site and adjacent area. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs.
7. A bond estimate for the installation (including site preparation, plant materials and installation, fertilizers, mulch, and stakes) and the proposed monitoring and maintenance work for the required number of years. [Ord. 3527 § 2, 2004].

Part IV. Development Standards – Wetlands

23.50.040 Development standards – Wetlands.

- A. Activities may only be permitted in a wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.
- B. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this title.
- C. Category 1 Wetlands. Activities and uses shall be prohibited from Category 1 wetlands, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this title.
- D. Category 2 Wetlands. With respect to activities proposed in Category 2 wetlands, the following standards shall apply:
- 1. Water-dependent activities may be allowed where there are no practicable alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas.
 - 2. Where non-water-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:
 - a. The basic project purpose cannot be accomplished as proposed and successfully avoid, or result in less adverse impact on, a wetland on another site or sites in the general region; and
 - b. All alternative designs of the project as proposed, such as a reduction in the size, scope, configuration, or density of the project, would not avoid or result in less of an adverse impact on a wetland or its buffer.
- E. Category 3 and 4 Wetlands. Activities and uses that result in unavoidable and necessary impacts may be permitted in Category 3 and 4 wetlands and associated buffers in accordance with an approved critical areas report and mitigation plan.
- F. Wetland Buffers.

~~1. Standard Buffer Widths. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate, then, at the discretion of the director, the buffer width may be increased or an applicant may be required to develop and implement a wetland buffer enhancement plan to maintain the standard width (see subsection (F)(3) of this section). Required standard wetland buffers, based on wetland category, are as follows:~~

- ~~a. Category 1: 200 feet;~~
- ~~b. Category 2: 100 feet;~~
- ~~c. Category 3: 50 feet;~~
- ~~d. Category 4: 35 feet.~~

2. Increased Wetland Buffer Widths. The director shall require increased buffer widths in accordance with the recommendations of an experienced, qualified professional wetland scientist and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

- a. A larger buffer is needed to protect other critical areas;
- b. The buffer or adjacent uplands has a slope greater than 15 percent or is susceptible to erosion and standard erosion control measures will not prevent adverse impacts to the wetland; or
- c. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, development and implementation of a wetland buffer enhancement plan in accordance with subsection (F)(3) of this section may substitute.

3. SHORELINE VARIANCE REQUIRED FOR BUFFER WIDTH REDUCTION BEYOND 25% Buffer Width Reductions Through Buffer Enhancement. At the discretion of the Edmonds development services director, wetland buffer width reductions (or approval of standard buffer widths for wetlands where existing buffer conditions require increased buffer widths) may be granted concomitant to the development and implementation of a wetland buffer enhancement plan for Category 3 and 4 wetlands only. Approval of a wetland buffer enhancement plan shall, at the discretion of the director, allow for wetland buffer width reductions to no less than 50 percent of the standard width; provided, that:

- a. The plan provides evidence that wetland functions and values will be increased or retained through plan implementation to at least the level provided by a standard buffer or through additional mitigation;
- b. The plan documents existing native plant densities and provides for increases in buffer native plant densities to no less than three feet on center for shrubs and eight feet on center for trees;
- c. The plan requires monitoring and maintenance to ensure success in accordance with ECDC 23.40.130(D); and
- d. The plan specifically documents methodology and provides performance standards for assessing increases in wetland buffer functioning as related to:
 - i. Water quality protection;
 - ii. Provision of wildlife habitat;
 - iii. Maintenance of wetland hydrology; and
 - iv. Restricting wetland intrusion and disturbance.

~~4. Wetland Buffer Width Averaging. The director may allow modification of a standard or reduced wetland buffer width in accordance with an approved critical areas report and the best available science on a case by case basis by averaging buffer widths. Only those portions of a wetland buffer existing within the project area or subject parcel shall be considered the total standard or reduced buffer for buffer averaging. Averaging of buffer widths may only be allowed where a qualified professional wetland scientist demonstrates that:~~

- ~~a. It will not reduce the function and value of wetlands or associated buffers;~~
- ~~b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;~~
- ~~c. The total area contained in the buffer area, or the total buffer area existing on a subject parcel for wetlands extending off site, after averaging is no less than that which would be contained within a standard or reduced buffer; and~~

~~d. The buffer width at any single location is not reduced to less than 50 percent of the standard or reduced buffer width.~~

5. Measurement of Wetland Buffers. All buffers shall be measured from the wetland boundary as surveyed in the field. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

6. Buffer Consistency. All mitigation sites shall have buffers consistent with the buffer requirements of this chapter.

7. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this title, wetland buffers shall be retained in an undisturbed or enhanced condition. Removal of invasive nonnative weeds is required for the duration of the mitigation bond.

8. Buffer Uses. The following uses may be permitted within a wetland buffer in accordance with the review procedures of this title; provided, they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

a. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

~~b. Passive Recreation. Passive recreation facilities designed and in accordance with an approved critical area report, including:~~

~~i. Walkways and trails; provided, that those pathways are generally constructed with a surface that does not interfere with substrate permeability. Raised boardwalks utilizing nontreated pilings may be acceptable;~~

~~ii. Wildlife viewing structures; and~~

~~iii. Fishing access areas down to the water's edge that shall be no larger than six feet.~~

c. Storm Water Management Facilities. Storm water management facilities, limited to outfalls, pipes and conveyance systems, storm water dispersion outfalls and bioswales, may be allowed within the outer 25 percent of a standard or modified buffer for Category 3 or 4 wetlands only; provided, that:

i. No other location is feasible; and

ii. The location and function of such facilities will not degrade the functions or values of the wetland.

Storm water management facilities are not allowed in buffers of Category 1 or 2 wetlands.

G. Signs and Fencing of Wetlands.

1. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and is subject to inspection by the director prior to the commencement of permitted activities. The director may require the use of fencing to protect wetlands from disturbance and intrusion. Temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the director may require the applicant to install permanent signs along the boundary of a wetland or buffer.

a. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

Protected Wetland Area

Do Not Disturb

Contact the City of Edmonds

Regarding Uses and Restrictions

- b. The provisions of subsection (G)(2)(a) of this section may be modified as necessary to assure protection of sensitive features or wildlife.

H. Additions to Structures Existing Within Wetlands and/or Wetland Buffers. Additions to legally constructed structures existing within wetlands or wetland buffers that increase the footprint of development or impervious surfacing shall be permitted consistent with the development standards of this section. Provisions for standard wetland buffers, buffer reductions through enhancement, and wetland buffer averaging require applicants to locate such additions in accordance with the following sequencing:

1. Outside of the standard wetland buffer;
2. Outside of a wetland buffer reduced through enhancement per subsection (F)(3) of this section;
3. Outside of a wetland buffer reduced through buffer averaging per subsection (F)(4) of this section; or
4. Outside of the inner 25 percent of the standard wetland buffer width through the use of both buffer reduction and buffer averaging.

Additions to legally constructed structures existing within wetlands or wetland buffers that cannot be accommodated in accordance with the above sequencing (i.e., additions proposed within a wetland or the inner 25 percent of a standard buffer width) may be permitted at the director's discretion as a variance subject to review by the city hearing examiner and the provisions of ECDC 23.40.210.

~~I. Exemptions. The director may allow isolated Category 3 or 4 wetlands under 500 square feet in area to be exempt from the provisions of this title. A wetland exemption shall only be granted if a submitted critical areas report, in the form of a critical areas reconnaissance or delineation, provides evidence that all of the following conditions are met:~~

- ~~1. The wetland is under 500 square feet in area;~~
- ~~2. The wetland is a low quality Category 3 or 4 wetland;~~
- ~~3. The wetland does not provide significant habitat value for wildlife; and~~
- ~~4. Filling of the wetland can maintain equivalent or greater habitat functions and values over existing site conditions. [Ord. 3527 § 2, 2004].~~

23.50.050 Mitigation requirements – Wetlands.

Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Wetland mitigation plans shall be consistent with the state Department of Ecology Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals, 1994, as revised.

A. Mitigation shall be required in the following order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of an action.
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
4. Reducing or eliminating the impact over time by preservation and maintenance operations.

5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.

B. Mitigation for Lost or Affected Functions. Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost, except when:

1. The lost wetland provides minimal functions as determined by a site-specific function assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or
2. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

C. Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

1. Restoring wetlands on upland sites that were formerly wetlands.
2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative, introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.
3. Enhancing Significantly Degraded Wetlands in Combination with Restoration or Creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area meeting appropriate ratio requirements.

D. Type and Location of Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be in-kind and conducted on the site or in the vicinity of the alteration except when all of the following apply:

1. On-site opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
2. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
3. Off-site locations for compensatory mitigation are consistent with city of Edmonds goals for jurisdiction-wide ecological restoration. Specific areas targeted for restoration efforts include:
 - a. Lake-fringe wetlands and habitat areas associated with Lake Ballinger;
 - b. Edmonds marsh;
 - c. Yost Park wetlands;
 - d. Good Hope wetlands; and
 - e. Wetlands and habitat areas peripheral to anadromous fish-bearing streams.

This list is not comprehensive and may change as the city of Edmonds identifies areas suitable for restoration and capital improvement projects consistent with goals for jurisdiction-wide habitat retention and enhancement provided in the city's comprehensive plan.

E. Mitigation Timing. Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

~~F. Mitigation Ratios.~~

~~1. Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state-certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered:~~

- ~~a. Category 1: six to one;~~
- ~~b. Category 2: three to one;~~
- ~~c. Category 3: two to one;~~
- ~~d. Category 4: one and one-half to one.~~

~~2. Increased Replacement Ratio. The director may require increased compensatory mitigation ratios under the following circumstances:~~

- ~~a. Uncertainty exists as to the probable success of the proposed restoration or creation;~~
- ~~b. A significant period of time will elapse between impact and replication of wetland functions;~~
- ~~c. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or~~
- ~~d. The impact was an unauthorized impact.~~

~~G. Wetlands Enhancement as Mitigation.~~

~~1. Impacts to wetland functions may be mitigated by enhancement of existing significantly degraded wetlands, but may, at the discretion of the director, be used in conjunction with restoration and/or creation. Applicants proposing to enhance wetlands must produce a critical areas report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site. An enhancement proposal must also show whether existing wetland functions will be reduced by the enhancement actions.~~

~~2. At a minimum, enhancement acreage shall be double the acreage required for creation or restoration under subsection F of this section. The ratios shall be greater than double the required acreage where the enhancement proposal would result in minimal gain in the performance of wetland functions and/or result in the reduction of other wetland functions currently being provided in the wetland.~~

~~3. Mitigation ratios for enhancement in combination with other forms of mitigation shall range from six to one to three to one and be limited to Class 3 and 4 wetlands.~~

H. Wetland Mitigation Banks.

1. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

- a. The bank is certified under Chapter 173-700 WAC;

- b. The director determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
 - c. The proposed use of credits is consistent with the terms and conditions of the bank's certification.
2. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.
3. In lieu of wetland mitigation bank credit, the director may provide credit for compensatory mitigation through applicant provision of funds to identified capital improvement projects for wetland restoration. The director retains discretion to establish a monetary value for applicant provision of funds which shall be, at a minimum, equal to the cost of designing, developing, implementing and monitoring in-kind compensatory mitigation on-site or in the project vicinity. Applicant provision of funds for compensatory mitigation shall only be approved if:
- a. Such funding can be demonstrated to directly support wetland restoration efforts;
 - b. Funding can be demonstrated to provide compensatory wetland mitigation consistent with the provisions and ratios of this title;
 - c. A restoration area and plan have been identified and shall be implemented within three years of project development;
 - d. Restoration efforts are focused in those areas identified in subsection (D)(3) of this section and areas identified as suitable for restoration by the director; and
 - e. A suitable capital improvement project and plan for implementation is in place prior to receipt of an applicant proposal. [Ord. 3527 § 2, 2004].

23.50.060 Performance standards – Subdivisions.

The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

- A. Land that is located wholly within a wetland or its buffer may not be subdivided.
- B. Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and buildable contiguous portion of each new lot is located outside of the wetland and its buffer.
- C. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only at the discretion of the director. [Ord. 3527 § 2, 2004].

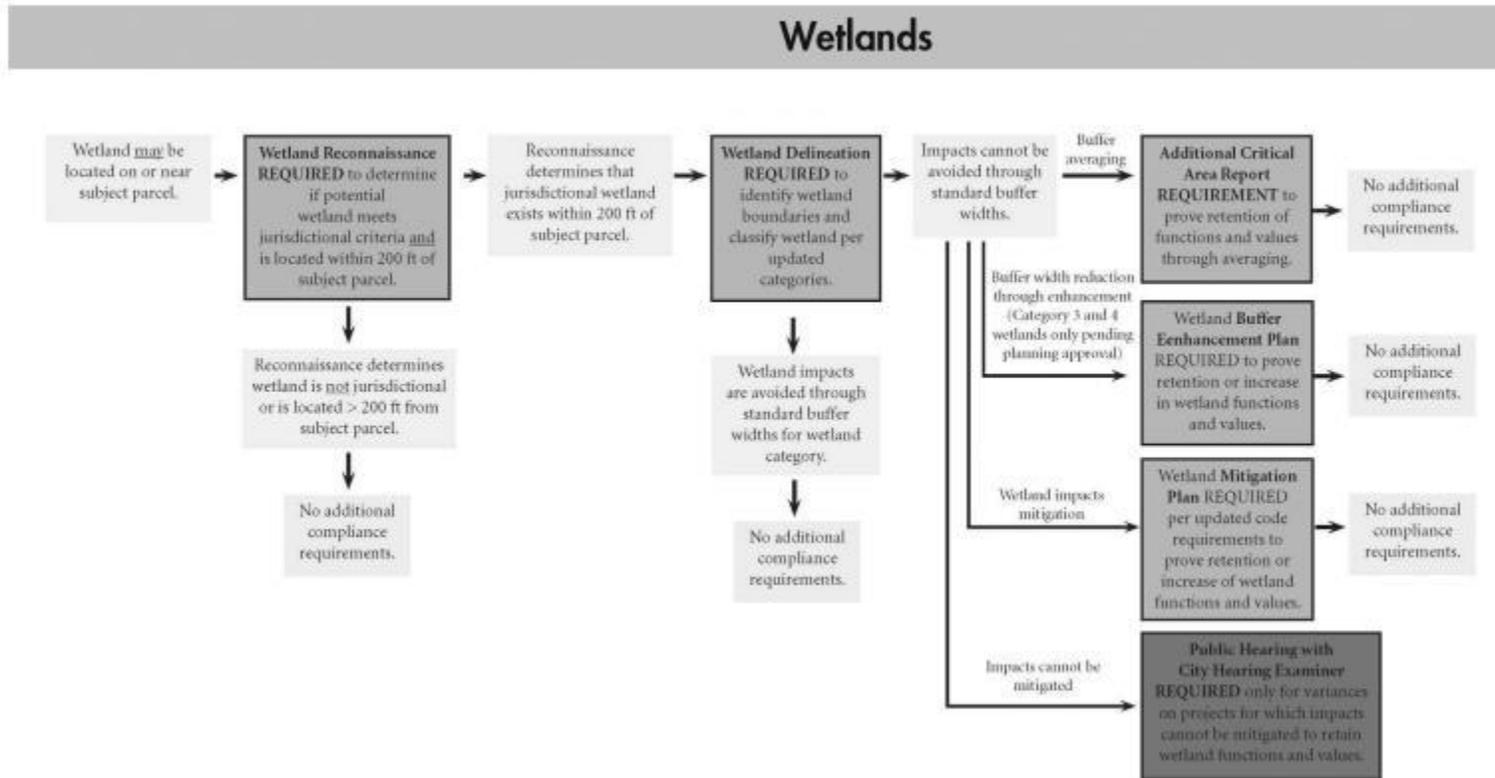
Part V. City of Edmonds Wetland Field Data Form

23.50.070 Wetland field data form.

The city of Edmonds wetland field data form is available in the city of Edmonds development services department and on the city of Edmonds website. [Ord. 3527 § 2, 2004].

Figure 23.50.000

CITY OF EDMONDS CRITICAL AREAS Critical Areas Compliance Requirements*



*Report requirements may be met through submission of a single critical area report or multiple reports in combination.

Chapter 23.60

CRITICAL AQUIFER RECHARGE AREAS

Sections:

Part I. Designation, Rating and Mapping

23.60.010 Critical aquifer recharge areas designation.

Part I. Designation, Rating and Mapping

23.60.010 Critical aquifer recharge areas designation.

Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARAs have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. CARAs are protected as critical areas under the Washington State Growth Management Act. However, no areas meeting criteria for CARAs exist in the vicinity of the city of Edmonds. Thus, additional specific provisions for protection of this critical area type are not provided within this title. [Ord. 3527 § 2, 2004].

Chapter 23.70

FREQUENTLY FLOODED AREAS

Sections:

Part I. Designation, Rating and Mapping

23.70.010 Designation, rating and mapping – Frequently flooded areas.

Part II. Additional Report Requirements – Frequently Flooded Areas

23.70.020 Special study and report requirements – Frequently flooded areas.

23.70.030 Warning and disclaimer of liability.

Part III. Development Standards – Frequently Flooded Areas

23.70.040 Development standards – Frequently flooded areas.

Part I. Designation, Rating and Mapping

23.70.010 Designation, rating and mapping – Frequently flooded areas.

A. Frequently Flooded Areas. Frequently flooded areas shall include:

1. Those areas identified on FEMA flood insurance maps as areas of special flood hazard, which include those lands in the floodplain subject to a one percent or greater chance of flooding in any given year. For the purposes of this title, areas of special flood hazard for the city of Edmonds are hereby declared generally to be those areas shown as Zone A (including Zones A, AE, A1–A30, AH, AO, AR and A99) on the following FEMA maps or panels: 53061C00; 53061C1292 E, Panel 1292; 53061C1285 E, Panel 1285; 53061C1315 E, Panel 1315; and 53061C1305 E, Panel 1305. The following maps and panels were revised and effective on January 30, 1998, and such maps and panels are adopted by this reference as a part of this chapter as if fully set forth herein. Base flood elevations and flood hazard factors for those areas shown as Zone A on the map have not been determined and the local flood management administrator shall utilize such other data as may be reasonably available from federal, state or other sources in administering this chapter as provided in the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19.

2. Those areas identified as frequently flooded areas on the city of Edmonds critical areas inventory. Identified frequently flooded areas are consistent with and based upon designation of areas of special flood hazard on FEMA flood insurance maps as indicated above.

B. City Discretion and Designation. Flood insurance maps and the city's critical areas inventory are to be used as a guide for the city of Edmonds development services department, project applicants and/or property owners, and the public and should be considered a minimum designation of frequently flooded areas. As flood insurance maps may be continuously updated as areas are reexamined or new areas are identified, newer and more restrictive information for flood hazard area identification shall be the basis for regulation. The city of Edmonds shall retain the right to designate and identify areas known to be prone to flooding outside of the 100-year floodplain and subject them to the provisions and protections of this title and the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19. [Ord. 3527 § 2, 2004].

Part II. Additional Report Requirements – Frequently Flooded Areas

23.70.020 Special study and report requirements – Frequently flooded areas.

In addition to the general critical areas report requirements of ECDC 23.40.090, critical areas reports for frequently flooded areas must meet the requirements of this section and the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Preparation by a Qualified Professional. A frequently flooded areas report shall be prepared by a qualified professional who is a hydrologist or engineer, licensed in the state of Washington, with experience in preparing flood hazard assessments. Pursuant to ECDC 23.40.090(A), applicants may choose one of the qualified technical consultants on the city's approved list in preparing critical areas reports for frequently flooded areas, or may utilize an

alternative consultant. Critical areas studies and reports developed by an alternative consultant shall be subject to independent review pursuant to ECDC 23.40.090(B).

B. Areas to Be Addressed. The following areas shall be addressed in a critical areas report for frequently flooded areas:

1. The site area of the proposed activity;
2. All areas of a special flood hazard area, as indicated on the flood insurance map(s), within 200 feet of the project area; and
3. All other flood areas indicated on the flood insurance map(s) within 200 feet of the project area.

C. Flood Hazard Assessment. A critical area report for a proposed activity within a frequently flooded area shall contain a flood hazard assessment including the following site- and proposal-related information at a minimum:

1. Site and Construction Plans. A copy of the site and construction plans for the development proposal showing:
 - a. Floodplain (100-year flood elevation), 10- and 50-year flood elevations, floodway, other critical areas, buffers, and shoreline areas;
 - b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
 - c. Clearing limits; and
 - d. Elevation of the lowest floor (including basement) of all structures, and the level to which any nonresidential structure has been floodproofed.
2. Watercourse Alteration. Alteration of natural watercourses shall be avoided, if feasible. If unavoidable, a critical areas report shall include:
 - a. Extent of Watercourse Alteration. A description of and plan showing the extent to which a watercourse will be altered or relocated as a result of a proposal;
 - b. Maintenance Program Required for Watercourse Alterations. A maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood-carrying capacity is not diminished.

D. Information Regarding Other Critical Areas. Potential impacts to wetlands, fish and wildlife habitat, and other critical areas shall be addressed in accordance with the applicable sections of this title. [Ord. 3527 § 2, 2004].

23.70.030 Warning and disclaimer of liability.

The degree of flood protection required by this chapter and the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19, is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city of Edmonds, any officer or employee thereof, or the Federal Insurance Administration for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder. [Ord. 3527 § 2, 2004].

Part III. Development Standards – Frequently Flooded Areas

23.70.040 Development standards – Frequently flooded areas.

Development standards and provisions for protection of frequently flooded areas are provided as applicable to areas of special flood hazard in the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19. Conformance with the provisions for flood hazard reduction of the current editions of the International Residential Code and International Building Code, as adopted in ECDC Title 19, shall constitute

conformance with ECDC 23.40.050, Protection of critical areas, per the mandates of the Washington Growth Management Act and the purposes and objectives of this title. [Ord. 3527 § 2, 2004].

Chapter 23.80

GEOLOGICALLY HAZARDOUS AREAS

Sections:

Part I. Designation, Rating and Mapping

- 23.80.000 Geologically hazardous areas compliance requirements flowchart.
- 23.80.010 Designation, rating and mapping – Geologically hazardous areas.
- 23.80.020 Designation of specific hazard areas.
- 23.80.030 Mapping of geologically hazardous areas.

Part II. Allowed Activities – Geologically Hazardous Areas

- 23.80.040 Allowed activities – Geologically hazardous areas.

Part III. Additional Report Requirements – Geologically Hazardous Areas

- 23.80.050 Special study and report requirements – Geologically hazardous areas.

Part IV. Development Standards – Geologically Hazardous Areas

- 23.80.060 Development standards – General requirements.
- 23.80.070 Development standards – Specific hazards.

Part I. Designation, Rating and Mapping

23.80.000 Geologically hazardous areas compliance requirements flowchart.

See Figure 23.80.000 at the end of this chapter. [Ord. 3527 § 2, 2004].

23.80.010 Designation, rating and mapping – Geologically hazardous areas.

Geologically hazardous areas include areas susceptible to erosion, land sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

- A. Erosion hazard;
- B. Landslide hazard; and
- C. Seismic hazard. [Ord. 3527 § 2, 2004].

23.80.020 Designation of specific hazard areas.

A. Erosion Hazard Areas. Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard. Erosion hazard areas are also those areas impacted by shoreland and/or stream bank erosion. Within the city of Edmonds erosion hazard areas include:

1. Those areas of the city of Edmonds containing soils that may experience severe to very severe erosion hazard. This group of soils includes, but is not limited to, the following when they occur on slopes of 15 percent or greater:
 - a. Alderwood soils (15 to 25 percent slopes);
 - b. Alderwood/Everett series (25 to 70 percent slopes);
 - c. Everett series (15 to 25 percent slopes);
2. Any area with slopes of 15 percent or greater and impermeable soils interbedded with granular soils and springs or ground water seepage; and

3. Areas with significant visible evidence of ground water seepage, and which also include existing landslide deposits regardless of slope.

B. Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Within the city of Edmonds landslide hazard areas specifically include:

1. Areas of ancient or historic failures in Edmonds which include all areas within the earth subsidence and landslide hazard area as identified in the 1979 report of Robert Lowe Associates and amended by the 1985 report of GeoEngineers, Inc.;

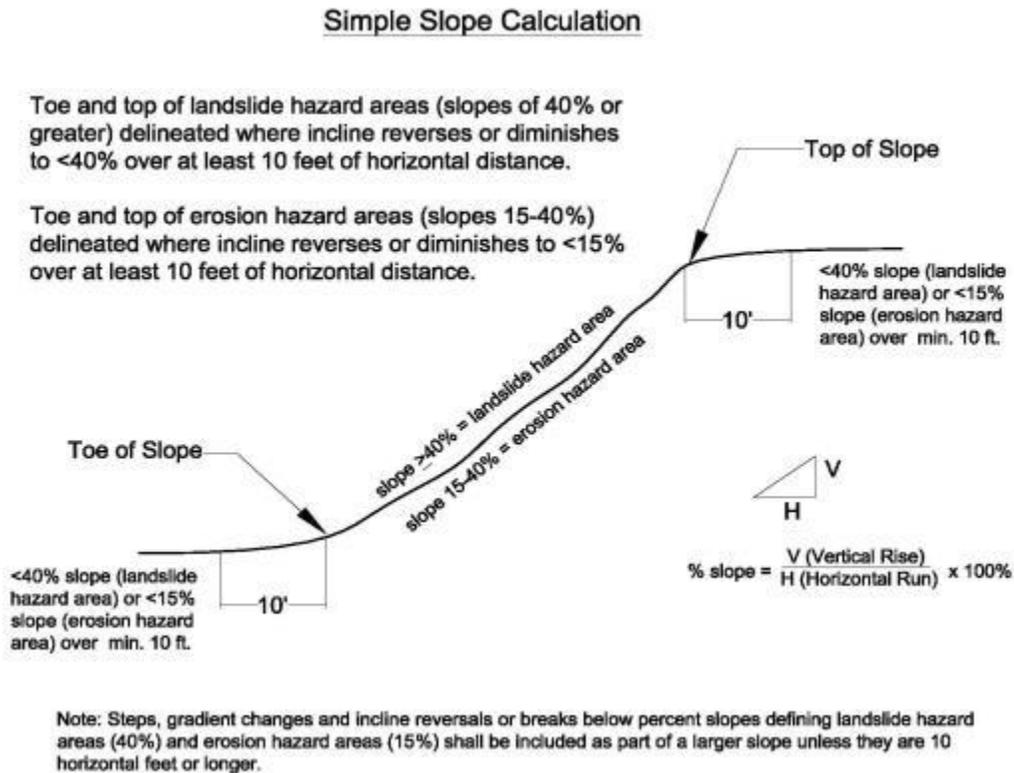
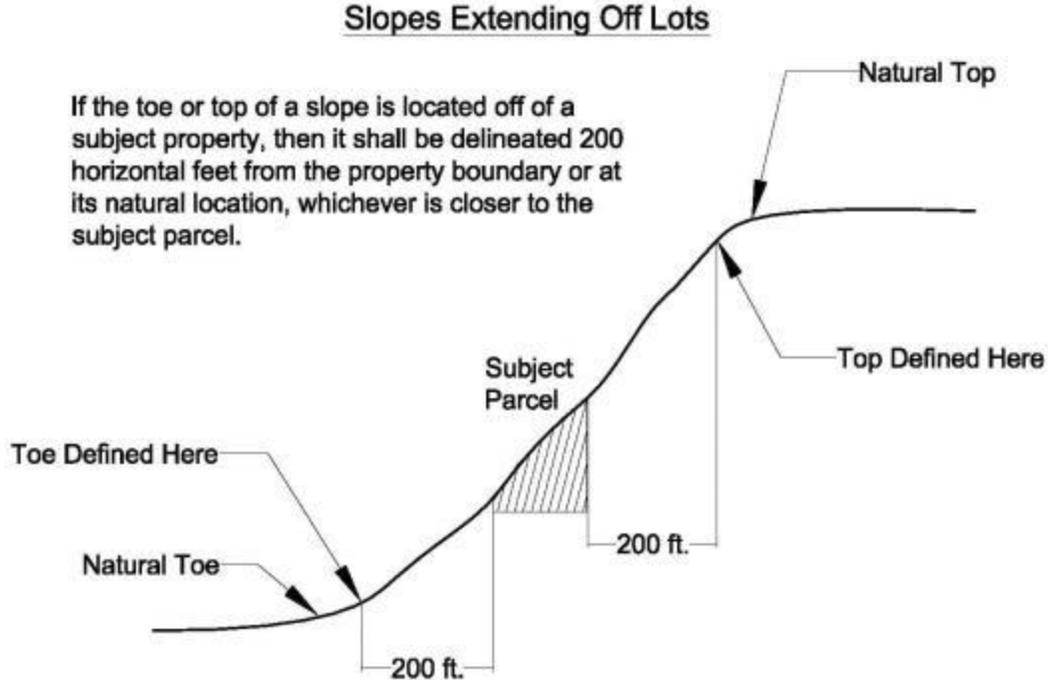


Figure 12. Any area with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top (as defined in Figure 1 in subsection (B)(1) of this section) and is measured by averaging the inclination over at least 10 feet of vertical relief or 25 feet of horizontal distance. Benches, steps and variations in gradient shall be incorporated into a larger slope if they do not meet criteria defining toe and/or top depicted in Figure 1 in subsection (B)(1) of this section (see also Figure 2 at the end of this subsection). If the toe or top of a slope is located off of a subject property, then the location of the toe or top shall be delineated 200 horizontal feet from the property boundary or at its natural location, whichever is closer to the subject parcel (see Figure 2 at the end of this subsection);

Figure 2



3. Any area potentially unstable as a result of rapid stream incision or stream bank erosion; and
4. Any area located on an alluvial fan, presently subject to, or potentially subject to, inundation by debris flow or deposition of stream-transported sediments.

C. Seismic Hazard Areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table. [Ord. 3527 § 2, 2004].

23.80.030 Mapping of geologically hazardous areas.

A. The approximate location and extent of geologically hazardous areas are shown on the city of Edmonds critical areas inventory. In addition, resources providing information on the location and extent of geologically hazardous areas in Edmonds include:

1. Washington Department of Ecology coastal zone atlas (for marine bluffs);
2. U.S. Geological Survey geologic maps, landslide hazard maps, and seismic hazard maps;
3. Washington State Department of Natural Resources seismic hazard maps for Western Washington;
4. Washington State Department of Natural Resources slope stability maps;
5. National Oceanic and Atmospheric Administration tsunami hazard maps; and
6. Federal Emergency Management Administration flood insurance maps.

B. The critical areas inventory and the resources cited above are to be used as a guide for the city of Edmonds development services department, project applicants and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation. [Ord. 3527 § 2, 2004].

Part II. Allowed Activities – Geologically Hazardous Areas

23.80.040 Allowed activities – Geologically hazardous areas.

The following activities are allowed in geologically hazardous areas as consistent with ECDC 23.40.220, Allowed activities, Chapter 19.10 ECDC, Building Permits – Earth Subsidence and Landslide Hazard Areas, and Chapter 18.30 ECDC, Storm Water Management, and do not require submission of a critical area report:

A. Erosion and Landslide Hazard Areas. Except as otherwise provided for in this title, only those activities approved and permitted consistent with an approved critical areas report in accordance with this title shall be allowed in erosion or landslide hazard areas.

B. Seismic Hazard Areas. The following activities are allowed within seismic hazard areas:

1. **SHORELINE VARIANCE REQUIRED** Construction of new buildings with less than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
2. **SHORELINE VARIANCE REQUIRED** Additions to existing single-story residences that are 250 square feet or less; and
3. Installation of fences. [Ord. 3527 § 2, 2004].

Part III. Additional Report Requirements – Geologically Hazardous Areas

23.80.050 Special study and report requirements – Geologically hazardous areas.

Critical area report requirements for geologically hazardous areas are generally met through submission to the director of one or more geotechnical engineering reports. In addition to the general critical areas report requirements of ECDC 23.40.090, critical areas reports for geologically hazardous areas must meet the requirements of this section and Chapters 18.30 and 19.10 ECDC as applicable. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area. Geotechnical report(s) submitted for the purpose of critical areas review are required as necessary in addition to reports, data and other information mandated per ECDC Titles 18 and 19.

A. Preparation by a Qualified Professional. A critical areas report for a geologically hazardous area shall be prepared by an engineer or geologist licensed in the state of Washington, with experience analyzing geologic, hydrologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard. Critical areas studies and reports on geologically hazardous areas shall be subject to independent review pursuant to ECDC 23.40.090(B).

B. Area Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for geologically hazardous areas:

1. The project area of the proposed activity; and
2. All geologically hazardous areas within 200 feet of the project area or that have the potential to be affected by the proposal.

C. Geological Hazards Assessment. A critical areas report for a geologically hazardous area shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:

1. Site and Construction Plans. The report shall include a copy of the site plans for the proposal showing:
 - a. The type and extent of geologic hazard areas, any other critical areas, and buffers on, adjacent to, within 200 feet of, or that are likely to impact the proposal;
 - b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;

- c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and
 - d. Clearing limits;
2. Assessment of Geological Characteristics. The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:
- a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;
 - b. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site-specific measurements, tests, investigations, or studies that support the identification of geologically hazardous areas; and
 - c. A description of the vulnerability of the site to seismic and other geologic events;
3. Analysis of Proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties; and
4. Minimum Buffer and Building Setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.

D. Incorporation of Previous Study. Where a valid critical areas report has been prepared within the last five years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical areas report. The applicant shall submit a hazards assessment detailing any changed environmental conditions associated with the site.

E. Mitigation of Long-Term Impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the preexisting level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the preexisting conditions following abandonment of the activity.

F. Additional Technical Information Requirements for Erosion and Landslide Hazard Areas. In addition to the basic critical areas report requirements for geologically hazardous areas provided in subsections A through E of this section, technical information for erosion and landslide hazard areas shall meet the requirements of Chapter 19.10 ECDC and include the following information at a minimum:

1. Site Plan. The critical areas report shall include a copy of the site plan for the proposal showing:
 - a. The height of slope, slope gradient, and cross-section of the project area;
 - b. The location of springs, seeps, or other surface expressions of ground water on or within 200 feet of the project area or that have the potential to be affected by the proposal; and
 - c. The location and description of surface water runoff features;
2. Hazards Analysis. The hazards analysis component of the critical areas report shall specifically include:
 - a. A description of the extent and type of vegetative cover;
 - b. A description of subsurface conditions based on data from site-specific explorations;

- c. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;
- d. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
- e. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a 100-year storm event;
- f. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down-slope properties;
- g. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
- h. Recommendations for building siting limitations; and
- i. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;

3. Geotechnical Engineering Report. The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:

- a. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;
- b. Recommendations for drainage and subdrainage improvements;
- c. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
- d. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate;

4. Erosion and Sediment Control Plan. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in Chapter 18.30 ECDC.

G. Limited Report Requirements for Stable Erosion Hazard Areas. At the director's discretion, detailed critical areas report requirements may be waived for erosion hazard areas with suitable slope stability. Report requirements for stable erosion hazard areas may be met through construction documents that shall include at a minimum an erosion and sediment control plan prepared in compliance with requirements set forth in Chapter 18.30 ECDC.

H. Seismic Hazard Areas. In addition to the basic critical areas report requirements for geologically hazardous areas provided in subsections A through E of this section, a critical areas report for a seismic hazard area shall also meet the following requirements:

1. The site map shall show all known and mapped active faults within 200 feet of the project area or that have the potential to be affected by the proposal.
2. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement).
3. A geotechnical engineering report shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented. [Ord. 3527 § 2, 2004].

Part IV. Development Standards – Geologically Hazardous Areas

23.80.060 Development standards – General requirements.

A. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:

1. Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions;
2. Will not adversely impact other critical areas;
3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and
4. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.

B. Critical Facilities Prohibited. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative. [Ord. 3527 § 2, 2004].

23.80.070 Development standards – Specific hazards.

A. Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the requirements of ECDC 23.80.060, Development Standards – General Requirements, and the specific following requirements:

1. Buffer Requirement. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the director consistent with recommendations provided in the geotechnical report to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of and concurrence with a critical areas report prepared by a qualified professional.

a. Minimum Buffer. The minimum buffer shall be equal to the height of the slope existing within the project area or 50 feet, whichever is greater;

b. **SHORELINE VARIANCE REQUIRED** Buffer Reduction. The buffer may be reduced to a minimum of 10 feet when a qualified professional demonstrates to the satisfaction of the director that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area;

c. Increased Buffer. The buffer may be increased where the director determines that a larger buffer is necessary to prevent risk of damage to proposed and existing development;

2. **SHORELINE VARIANCE REQUIRED** Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a hazards analysis is submitted and certifies that:

a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;

b. The development will not decrease slope stability on adjacent properties; and

c. Such alterations will not adversely impact other critical areas;

3. Design Standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this title. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:

a. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. If stability at the proposed development

site is below these limits, the proposed development shall provide practicable approaches to reduce risk to human safety and improve the factor of safety for landsliding. In no case shall the existing factor of safety be reduced for the subject property or adjacent properties;

b. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

c. Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;

d. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

e. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;

f. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and

g. Development shall be designed to minimize impervious lot coverage;

4. **Vegetation Retention.** Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited;

5. **Seasonal Restriction.** Clearing shall be allowed only from May 1st to October 1st of each year; provided, that the director may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the city of Edmonds or the Washington State Department of Natural Resources;

6. **Point Discharges.** Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:

a. Conveyed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge;

b. Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed storm water runoff in the predeveloped state; or

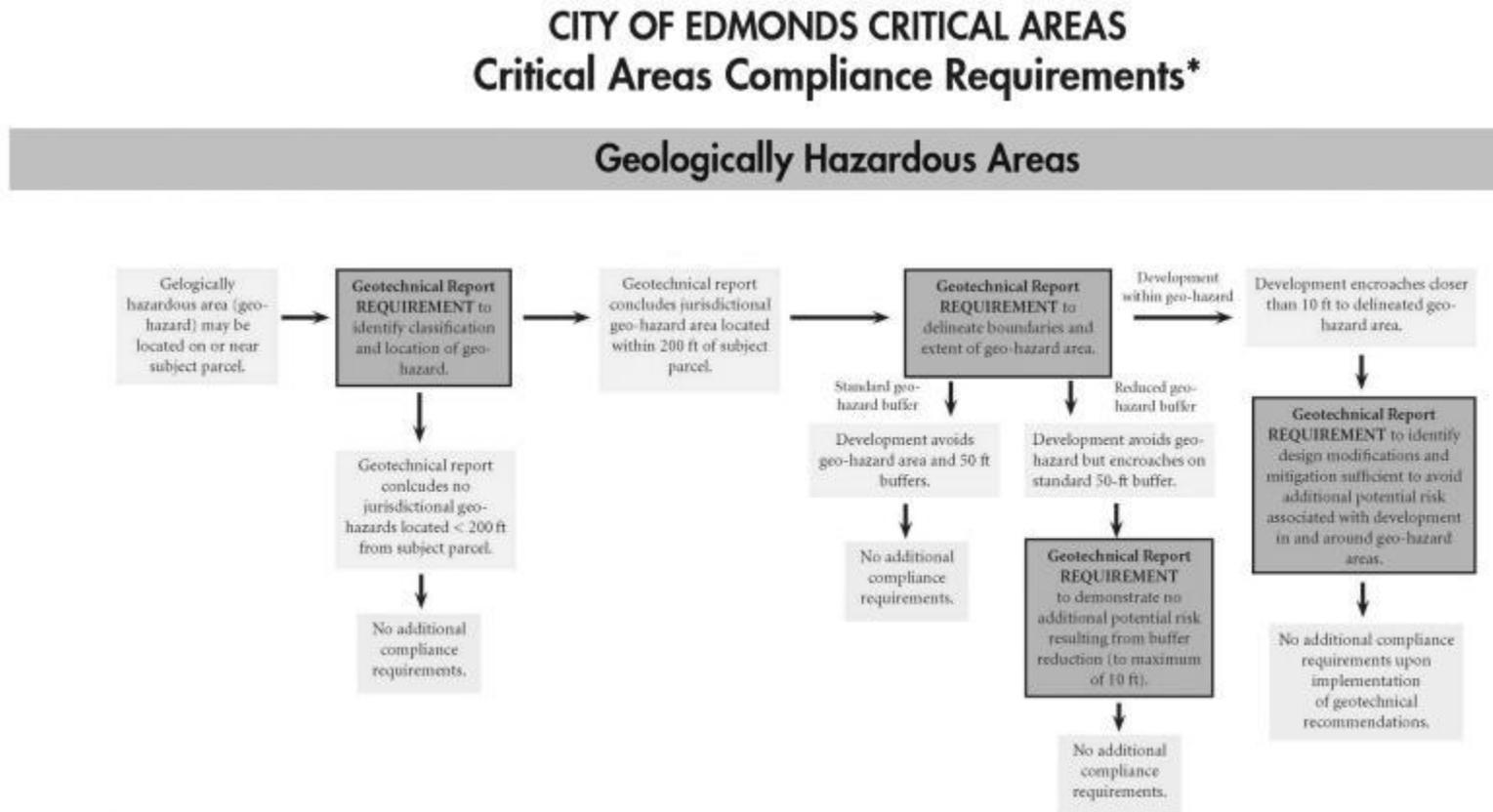
c. Dispersed discharge upslope of the steep slope onto a low-gradient, undisturbed buffer demonstrated to be adequate to infiltrate all surface and storm water runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope; and

7. **Prohibited Development.** On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.

B. Earth Subsidence and Landslide Hazard Area. In addition to the requirements of this chapter, development proposals for lands located within the earth subsidence and landslide hazard area as indicated on the critical areas inventory shall be subject to the provisions of Chapter 19.10 ECDC.

C. Seismic Hazard Areas. Activities proposed to be located in seismic hazard areas shall meet the standards of ECDC 23.80.060, Development Standards – General Requirements. [Ord. 3527 § 2, 2004].

Figure 23.80.000



*Report requirements may be met through submission of a single critical area report or multiple reports in combination.

Chapter 23.90

FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Sections:

Part I. Designation, Rating and Mapping

23.90.000 Fish and wildlife habitat conservation areas compliance requirements flowchart.

23.90.010 Designation, rating and mapping – Fish and wildlife habitat conservation areas.

Part II. Additional Report Requirements – Fish and Wildlife Habitat Conservation Areas

23.90.020 Special study and report requirements – Fish and wildlife habitat conservation areas.

Part III. Development Standards – Fish and Wildlife Habitat Conservation Areas

23.90.030 Development standards – General requirements.

23.90.040 Development standards – Specific habitats.

Part I. Designation, Rating and Mapping

23.90.000 Fish and wildlife habitat conservation areas compliance requirements flowchart.

See Figure 23.90.000 at the end of this chapter. [Ord. 3527 § 2, 2004].

23.90.010 Designation, rating and mapping – Fish and wildlife habitat conservation areas.

A. Fish and wildlife habitat conservation areas in the city of Edmonds include:

1. Streams. Within the city of Edmonds streams shall include those areas where surface waters produce a defined channel or bed which demonstrates clear evidence, such as the sorting of sediments, of the passage of water. The channel or bed need not contain water year-round. Streams shall be classified in accordance with the Washington Department of Natural Resources water typing system (WAC 222-16-030) hereby adopted in its entirety by reference and summarized as follows:

- a. Type S: streams inventoried as “shorelines of the state” under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW;
- b. Type F: streams which contain fish habitat;
- c. Type Np: perennial nonfish habitat streams; and
- d. Type Ns: seasonal nonfish habitat streams.

All streams included on the inventory that are known to exist within the city of Edmonds do not meet criteria for “shorelines of the state” but contain fish habitat and, thus, meet designation criteria for Type F waters pursuant to WAC 222-16-030. However, not all Edmonds streams support anadromous fish populations or have the potential for anadromous fish occurrence because of obstructions, blockages or access restrictions resulting from existing conditions. Therefore, in order to provide special consideration of and increased protection for anadromous fish in the application of development standards, Edmonds streams shall be further classified as follows:

Anadromous fishbearing streams: streams existing in whole or in part within the city of Edmonds in which anadromous fish are known to occur. As of 2004, Edmonds fishbearing streams are known to include Willow Creek, Shellabarger Creek, Shell Creek, Hindley Creek, Perrinville Creek, and Lunds Creek; and

Nonanadromous fishbearing streams: streams existing in whole or in part within the city of Edmonds which do not support fish populations and do not have the potential for fish occurrence because of barriers to fish passage or lack of suitable habitat.

Streams with anadromous fish occurrence were identified in the Edmonds Stream Inventory and Assessment, a 2002 report of Pentec Environmental which is incorporated by this reference as if herein set forth. The city of Edmonds advocates and encourages the removal of barriers to anadromous fish passage consistent with the

purposes and objectives of this title. The director may provide updated information on the occurrence of anadromous fish in Edmonds streams consistent with changes in existing environmental conditions.

2. Areas with Which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.

a. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the NOAA Fisheries that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status.

b. State-designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State-designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status.

3. State Priority Habitats and Areas Associated with State Priority Species. Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the state Department of Fish and Wildlife.

4. Habitats and Species of Local Importance. Habitats and species of local importance are those identified by the city of Edmonds, including but not limited to those habitats and species that, due to their population status or sensitivity to habitat manipulation, warrant protection. Habitats may include a seasonal range or habitat element with which a species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

5. Commercial and Recreational Shellfish Areas. These areas include all public and private tidelands or bedlands suitable for shellfish harvest, including shellfish protection districts established pursuant to Chapter 90.72 RCW.

6. Kelp and eelgrass beds and herring and smelt spawning areas.

7. Naturally Occurring Ponds Under 20 Acres. Naturally occurring ponds are those ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

8. Waters of the State. Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031 (or WAC 222-16-030, depending on classification used).

9. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.

10. Urban open space and land useful or essential for preserving connections between habitat.

11. Areas of Rare Plant Species and High-Quality Ecosystems. Areas of rare plant species and high-quality ecosystems are identified by the Washington State Department of Natural Resources through the Natural Heritage Program.

B. All areas within the city of Edmonds meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this title and shall be managed consistent with the best available science, such as the Washington Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species.

C. Mapping. The approximate location and extent of fish and wildlife habitat conservation areas are shown on the city of Edmonds critical areas inventory. Resources providing information on the location and extent of fish and wildlife habitat conservation areas incorporated into the inventory include:

1. Washington Department of Fish and Wildlife priority habitat and species maps;
2. Washington State Department of Natural Resources official water type reference maps, as amended;
3. Washington State Department of Natural Resources Puget Sound intertidal habitat inventory maps;
4. Washington State Department of Natural Resources shorezone inventory;
5. Washington State Department of Natural Resources Natural Heritage Program mapping data;
6. Washington State Department of Health annual inventory of shellfish harvest areas;
7. Anadromous and resident salmonid distribution maps contained in the habitat limiting factors reports published by the Washington Conservation Commission; and
8. Washington State Department of Natural Resources state natural area preserves and natural resource conservation area maps.

The critical areas inventory and the resources cited above are to be used as a guide for the city of Edmonds development services department, project applicants, and/or property owners and should be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical areas designation. [Ord. 3527 § 2, 2004].

Part II. Additional Report Requirements – Fish and Wildlife Habitat Conservation Areas

23.90.020 Special study and report requirements – Fish and wildlife habitat conservation areas.

In addition to the general critical areas report requirements of ECDC 23.40.090, critical area reports for fish and wildlife habitat conservation areas must meet the requirements of this section. Critical areas reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Preparation by a Qualified Professional. A critical areas report for a fish and wildlife habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat. Pursuant to ECDC 23.40.090(A), applicants may choose one of the qualified technical consultants on the city's approved list in preparing critical areas reports for fish and wildlife habitat conservation areas, or may utilize an alternative consultant. Critical areas studies and reports developed by an alternative consultant shall be subject to independent review pursuant to ECDC 23.40.090(B).

B. Areas Addressed in Critical Areas Report. The following areas shall be addressed in a critical areas report for fish and wildlife habitat conservation areas:

1. The project area of the proposed activity;
2. All fish and wildlife habitat conservation areas and recommended buffers within 200 feet of the project area; and
3. All shoreline areas, floodplains, other critical areas, and related buffers within 200 feet of the project area.

C. Habitat Assessment. A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical areas report for a fish and wildlife habitat

conservation area shall contain an assessment of habitats, including the following site- and proposal-related information at a minimum:

1. Detailed description of vegetation on and adjacent to the project area and its associated buffer;
2. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
3. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area.

D. Additional Technical Information Requirements for Streams. Consistent with specific development standards for Edmonds streams (ECDC 23.90.040(D)), critical areas report requirements for streams may be met, at the discretion of the director, through submission of one or more specific report types. If stream buffer enhancement is proposed to reduce a standard stream buffer width or as part of project mitigation required by the director, a stream buffer enhancement plan may be submitted to fulfill the requirements of this section. If no project impacts are anticipated and standard stream buffer widths are retained, a stream survey report, general critical areas report or other reports alone or in combination may be submitted as consistent with the specific requirements of this section. In addition to the basic critical areas report requirements for fish and wildlife habitat conservation areas provided in subsections (A) through (C) of this section, technical information on streams shall include the following information at a minimum:

1. A written assessment and accompanying maps of the stream and associated hydrologic features within 200 feet of the project area, including the following information at a minimum:
 - a. Stream survey showing the ordinary high water mark(s);
 - b. Standard stream buffer boundary;
 - c. Boundary for proposed reduced stream buffers;
 - d. Vegetative, faunal, and hydrologic characteristics;
 - e. Soil and substrate conditions; and
 - f. Topographic elevations, at two-foot contours;
2. A detailed description and functional assessment of the stream buffer under existing conditions pertaining to the protection of stream functions, fish habitat and, in particular, potential anadromous fisheries;
3. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and stream functions;
4. Proposed buffer enhancement, if needed, including a written assessment and accompanying maps and planting plans for buffer areas to be enhanced, including the following information at a minimum:
 - a. A description of existing buffer conditions;
 - b. A description of proposed buffer conditions and how proposed conditions will increase buffer functioning in terms of stream and fish habitat protection;
 - c. Performance standards for measuring enhancement success through a monitoring period of at least three years; and
 - d. Provisions for monitoring and submission of monitoring reports documenting buffer conditions as compared to performance standards for enhancement success;

5. A discussion of ongoing management practices that will protect stream functions and habitat value through maintenance of vegetation density within the stream buffer. [Ord. 3527 § 2, 2004].

Part III. Development Standards – Fish and Wildlife Habitat Conservation Areas

23.90.030 Development standards – General requirements.

A. Alterations. A fish and wildlife habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. There are no specific development standards for upland habitats of local importance unless these areas include another critical area (streams, heron rookeries, steep slopes, etc.). City staff will review the critical areas report (ECDC 23.90.020) and work with the applicant to minimize effects or improve conditions to upland habitat.

B. Approvals of Activities. The director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffer zones;
2. Preservation of critically important vegetation and/or habitat features such as snags and downed wood;
3. Limitation of access to the habitat area, including fencing to deter unauthorized access;
4. Seasonal restriction of construction activities;
5. Establishment of a duration and timetable for periodic review of mitigation activities; and
6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

C. Mitigation and Equivalent or Greater Biological Functions. Mitigation of alterations to fish and wildlife habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis. Mitigation shall be detailed in a fish and wildlife habitat conservation area mitigation plan, which may include the following as necessary:

1. A native vegetation planting plan;
2. Plans for retention, enhancement or restoration of specific habitat features;
3. Plans for control of nonnative invasive plant or wildlife species; and
4. Stipulations for use of innovative, sustainable building practices.

D. Approvals and the Best Available Science. Any approval of alterations or impacts to a fish and wildlife habitat conservation area shall be supported by the best available science.

E. Buffers.

1. Establishment of Buffers. The director shall require the establishment of temporary or permanent buffer areas for permitted activities adjacent to fish and wildlife habitat conservation areas which may result in fish or wildlife disturbance (e.g., construction, grading, etc.) when needed to protect fish and wildlife habitat conservation areas. Establishment of buffers shall follow recommendations set forth by a qualified biologist in the project critical areas report. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife.

2. Seasonal and Daily Timing Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year or day, seasonal restrictions on permitted activities within or adjacent to fish and wildlife habitat conservation areas may be required at the discretion of the director pursuant to recommendations set forth in a critical areas report.

F. Signs and Fencing of Fish and Wildlife Habitat Conservation Areas.

1. Temporary Markers. The outer perimeter of the fish and wildlife habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field as required by the director in such a way as to ensure that no unauthorized intrusion will occur. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

2. Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the director may require the applicant to install permanent signs along the boundary of a fish and wildlife habitat conservation area or buffer.

a. Permanent signs shall be made of a metal face and attached to a metal post or another material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the director:

Fish and Wildlife Habitat
Conservation Area
Do Not Disturb
Contact the City of Edmonds
Regarding Uses and Restriction

b. The provisions of subsection (F)(2)(a) of this section may be modified by the director as necessary to assure protection of sensitive features or wildlife.

3. Fencing.

a. The director shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the director shall condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the fish and wildlife habitat conservation area or buffer, when fencing will prevent future impacts to the fish and wildlife habitat conservation area.

b. The applicant shall be required to install a permanent fence around the fish and wildlife habitat conservation area or buffer when domestic grazing animals are present or may be introduced on-site.

c. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes habitat impacts. [Ord. 3527 § 2, 2004].

23.90.040 Development standards – Specific habitats.

A. Endangered, Threatened, and Sensitive Species.

1. No development shall be allowed within a fish and wildlife habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a management plan established by the Washington Department of Fish and Wildlife or applicable state or federal agency.

2. Whenever activities are proposed adjacent to a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical areas report prepared by a qualified professional and approved by the director. Approval for alteration of land adjacent to the fish and wildlife habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.

3. Bald eagle habitat shall be protected pursuant to the Washington State bald eagle protection rules (WAC 232-12-292). Whenever activities are proposed within 800 feet of a verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional. The director shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the habitat management plan by the Washington Department of Fish and Wildlife.

B. Anadromous Fish.

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

- a. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;
- b. An alternative alignment or location for the activity is not feasible;
- c. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;
- d. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical areas report; and
- e. Any impacts to the functions or values of the fish and wildlife habitat conservation area are mitigated in accordance with an approved critical areas report.

2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

C. Retention of Vegetation on Subdividable, Undeveloped Parcels. As a provision of this title, the director shall require retention of a minimum of 30 percent of native vegetation on undeveloped (or redeveloped), subdividable lands zoned as RS-12 or RS-20 per Chapter 16.10 ECDC. This standard for development shall apply to all undeveloped (or redeveloped), subdividable lands zoned RS-12 or RS-20 regardless of the potential for designation as a fish and wildlife habitat conservation area or other critical area. The goal of 30 percent native vegetation can be met through maintaining existing native vegetation, establishing native vegetation, or a combination of both. A vegetation management plan, subject to the approval of the director, is required for approval of the proposed development. This provision for native vegetation retention will provide increased protection of fish and wildlife habitat throughout the Edmonds jurisdiction.

D. Streams. No alteration to a stream or stream buffer shall be permitted unless consistent with the provisions of this title and the specific standards for development outlined below.

1. Standard Stream Buffer Widths. Buffers for streams shall be measured on each side of the stream, from the ordinary high water mark. The following shall be the standard buffer widths for streams based upon the

Washington State Department of Natural Resources water typing system and further classification based upon fish presence (fishbearing vs. nonfishbearing) for the Type F streams existing in the city of Edmonds:

- a. Type S: 150 feet;
- b. Type F anadromous fishbearing stream adjacent to reaches with anadromous fish access: 100 feet;
- c. Type F anadromous fishbearing stream adjacent to reaches without anadromous fish access: 75 feet;
- d. Type F nonanadromous fishbearing stream: 75 feet;
- e. Type Np: 50 feet;
- f. Type Ns: 25 feet.

General areas and stream reaches with access for anadromous fish are indicated on the city of Edmonds critical areas inventory. The potential for anadromous fish access shall be confirmed in the field by a qualified biologist as part of critical areas review and determination of standard stream buffer widths.

2. SHORELINE VARIANCE REQUIRED Reduced Stream Buffer Widths. Standard stream buffer widths may be reduced by no more than 50 percent of the standard stream buffer width concomitant to development and implementation of a stream buffer enhancement plan approved by the director. Reduced stream buffer widths shall only be approved by the director if a stream buffer enhancement plan conclusively demonstrates that enhancement of the reduced buffer area will not degrade the quantitative and qualitative functions and values of the buffer area in terms of fish and stream protection and the provision of wildlife habitat. Stream buffer enhancement plans must meet the specific requirements of ECDC 23.40.110, 23.40.120 and 23.40.130 and:

- a. Provide evidence that the reduced buffer, through enhancement, will provide functions and values in terms of stream and wildlife protections equivalent to or greater than a standard buffer without enhancement;
- b. The plan documents existing native plant densities and provides for increases in buffer native plant densities to no less than three feet on center for shrubs and eight feet on center for trees;
- c. The plan requires monitoring and maintenance to ensure success for a minimum of three years in accordance with ECDC 23.40.130(D) and (E); and
- d. The plan specifically documents methodology and provides performance standards for assessing increases in stream buffer functioning as related to:
 - i. Water quality protection;
 - ii. Provision of wildlife habitat;
 - iii. Protection of anadromous fisheries;
 - iv. Enhancement of fish habitat; and
 - v. Restricting intrusion and disturbance.

3. Stream Buffer Width Averaging. The director may allow modification of a standard or reduced stream buffer width in accordance with an approved critical areas report and the best available science on a case-by-case basis by averaging buffer widths. Only those portions of a stream buffer existing within the project area or subject parcel shall be considered in the total buffer area for buffer averaging. Averaging of buffer widths may only be allowed where a qualified professional demonstrates that:

- a. The total area contained in the buffer area, or the total buffer area existing on a subject parcel for a stream extending off-site, after averaging is no less than that which would be contained within the standard buffer;

- b. The buffer width at any single location is not reduced to less than 50 percent of the reduced or standard width; and
- c. The functions and values of the stream and associated buffer will not be diminished through the use of buffer averaging.

4. **SHORELINE VARIANCE REQUIRED** Additions to Structures Existing within Stream Buffers. Additions to legally constructed structures existing within stream buffers that increase the footprint of development or impervious surfacing shall be permitted consistent with the development standards of this chapter (ECDC 23.90.030 and this section). Provisions for standard stream buffers, buffer reductions through enhancement, and stream buffer averaging require applicants to locate such additions in accordance with the following sequencing:

- a. Outside of the standard stream buffer;
- b. Outside of a stream buffer reduced through enhancement per subsection (D)(2) of this section;
- c. Outside of a stream buffer reduced through buffer averaging per subsection (D)(3) of this section; or
- d. Outside of the inner 25 percent of the standard stream buffer width through the use of both buffer reduction and buffer averaging.

Additions to legally constructed structures existing within stream buffers that cannot be accommodated in accordance with the above sequencing (i.e., additions proposed within the inner 25 percent of a standard buffer width) may be permitted at the director's discretion as a variance subject to review by the city hearing examiner and the provisions of ECDC 23.40.210.

5. Stream Crossings. Stream crossings may be allowed only if all reasonable construction techniques and best management practices are used to avoid disturbance to the stream bed or bank. Upon completion of construction, the area affected shall be restored to an appropriate grade, replanted with native species and/or otherwise protected according to a stream mitigation and buffer enhancement plan approved by the director, and maintained and monitored per the requirements of ECDC 23.40.110, 23.40.120 and 23.40.130 and providing for buffer enhancement in accordance with the requirements of subsection (D)(2) of this section. In addition, the applicant must demonstrate that best management practices will be used during construction to provide the following:

- a. Fisheries protection, including no interference with fish migration or spawning;
- b. All crossings shall be constructed during summer low flow periods and shall be timed to avoid stream disturbance during periods when stream use is critical to salmonids;
- c. Crossings shall not occur over salmonid spawning areas unless no other possible crossing site exists;
- d. Crossings and culverted portions of the stream shall be minimized to the extent feasible and serve multiple purposes and multiple lots whenever possible;
- e. Roads may cross streams only on previously approved rights-of-way, provided no practical alternative exists and adequate provision is made to protect and/or enhance the stream through appropriate mitigation. Roads shall be designed and located to conform to topography, and maintained to prevent erosion and restriction of the natural movement of ground water as it affects the stream;
- f. Roads and utilities shall be designed in conjunction to minimize the area of disturbance to the stream; and
- g. Roads shall be constructed so as to minimize adverse impacts on the hydrologic quality of the stream or associated habitat to a degree acceptable to the city.

6. Trails. After reviewing the proposed development and technical reports, the director may determine that a pedestrian-only trail may be allowed in a stream buffer; provided, nonimpervious surface materials are used, all appropriate provision is made to protect water quality, and all applicable permit requirements have been met. No motorized vehicles shall be allowed within a stream or its buffer except as required for necessary maintenance or

security. Vegetative edges, structural barriers, signs or other measures must be provided wherever necessary to protect streams by limiting vehicular access to designated public use or interpretive areas.

7. Storm Water Management Facilities. Storm water management facilities, limited to outfalls, pipes and conveyance systems, storm water dispersion outfalls and bioswales, may be allowed within stream buffers; provided, that:

- a. No other location is feasible; and
- b. The location and function of such facilities will not degrade the functions or values of the stream or stream buffer.

8. City Discretion in Protection, Enhancement and Preservation of Streams. The city of Edmonds is unique within the state of Washington as a built-out community with streams that have been incorporated within, and often located immediately adjacent to, residential development. This title allows the director full discretion to condition proposals for development on parcels containing, adjacent to, or potentially impacting streams to enhance conditions consistent with ECDC 23.40.050 and the purposes and objectives of this title. Conditions on development shall be required to enhance streams and stream buffers as fish and wildlife habitat conservation areas to provide increased protection of anadromous fisheries and potential fish habitat in accordance with best available science and the recommendations of an approved critical areas report and may include:

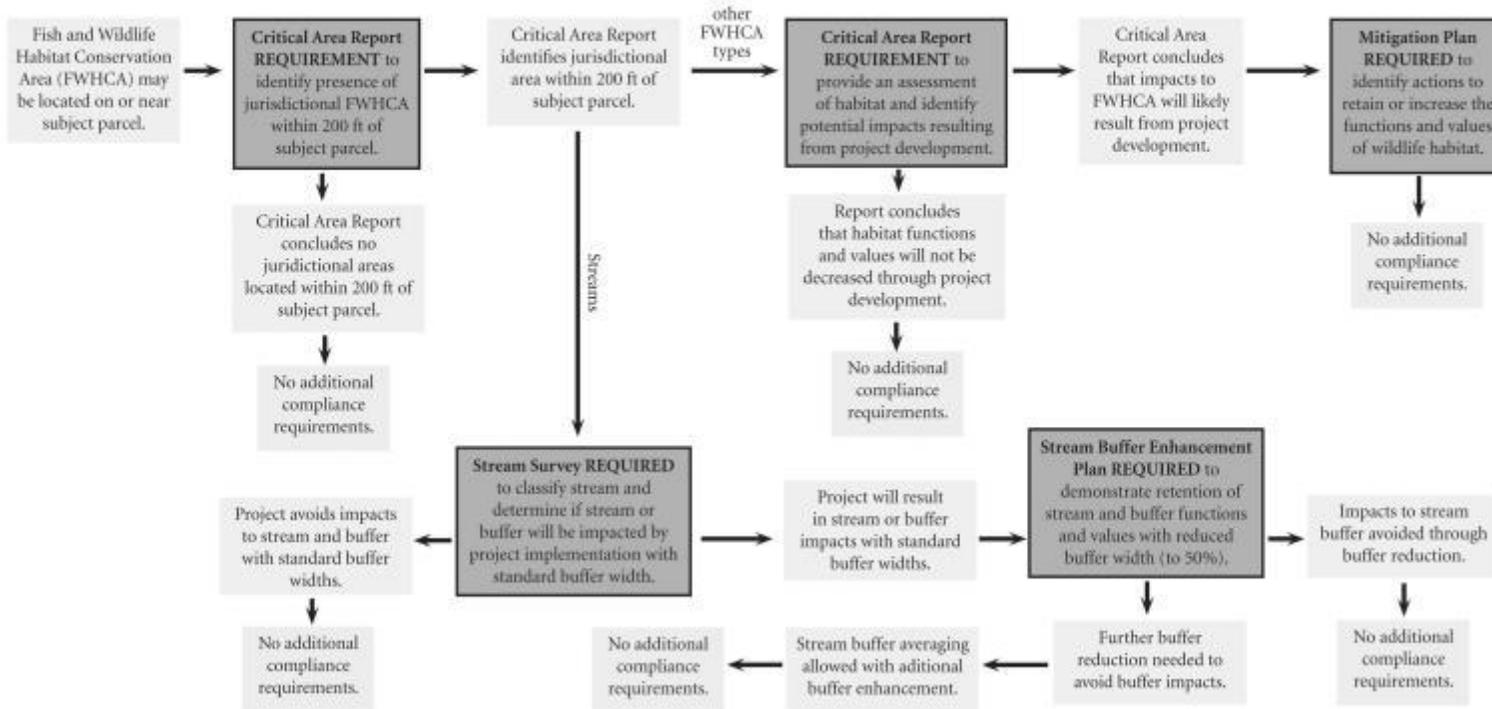
- a. Removal of stream bank armoring;
- b. In-stream habitat modification;
- c. Native planting;
- d. Relocation of stream channel portions to create contiguous riparian corridors or wildlife habitat;
- e. Planting of stream bank native vegetation to increase stream shading;
- f. Removal and control of nonnative, invasive weed species;
- g. Requiring additional building setbacks or modified buffers; and
- h. Limiting or reducing the types or densities of particular uses.

The right of discretion in provisioning development in regard to streams is maintained in order to provide for the creation of enhanced conditions over those currently existing around streams in the city of Edmonds. In all instances where an applicant cannot demonstrate that standard stream buffer widths as provided in subsection (D)(1) of this section can be accommodated by project development, the applicant shall be required to submit a stream buffer enhancement plan or a stream mitigation and buffer enhancement plan as part of a critical areas report indicating that postproject site conditions will provide equivalent or greater protection of stream functions and fish habitat over a standard stream buffer and existing site conditions. [Ord. 3527 § 2, 2004].

Figure 23.90.000

CITY OF EDMONDS CRITICAL AREAS Critical Areas Compliance Requirements*

Fish and Wildlife Habitat Conservation Areas



*Report requirements may be met through submission of a single critical area report or multiple reports in combination.