

**ORDINANCE NO. 1386**

**AN ORDINANCE OF THE CITY OF KALAMA, WASHINGTON AMENDING THE KALAMA MUNICIPAL CODE CHAPTER 15.02 CRITICAL AREAS PROTECTION BY DELETING THE CURRENT CODE SECTION AND REPLACING IT IN ITS ENTIRETY.**

**WHEREAS**, the City of Kalama adopted the current Kalama Municipal Code Chapter 15.02 in 2004 and is required to update the code under State Laws;

**WHEREAS**, the Kalama Planning Commission has reviewed and made recommendations to the Kalama City Council for updating and revising the code to better address Critical Areas Protection;

**WHEREAS**, the Kalama City Council held a public hearing on June 21, 2017 to review the recommendations from the Planning Commission and take public comment on the proposed changes;

**NOW THEREFORE** the City Council of the City of Kalama do ordain:

**Section 1.** Kalama Municipal Code Chapter 15.02 Critical Area Protection is deleted and replaced with the following:

**15.02.010 - Title.**

The title of the ordinance codified in this chapter is the "City of Kalama Critical Areas Protection Ordinance."

**15.02.020 - Preamble.**

- A. The city is responding to state mandates contained in the Growth Management Act, RCW 36.70A.060, by developing and adopting this chapter which classifies, designates, regulates and protects the function and values of critical areas. The city believes it important to strike a balance between critical land protection, private property rights and economic development and diversification. Consequently, this chapter has been designed to encourage landowners to protect critical areas by offering a range of incentives intended to provide equitably for such protection. In addition, it is the intent of the city to actively and constructively assist the applicant in the preparation and processing of permits/approvals/plans/requirements or procedures. The ultimate responsibility for providing complete and accurate application material and/or required information falls on the applicant.
- B. A limited amount of scientific data is available to address all critical areas within the city. As more information becomes available, it will be incorporated.

**15.02.030 - Purpose and intent.**

- A. The state of Washington's Growth Management Act requires the city to adopt development regulations affecting certain types of land to assure the conservation of such areas. This chapter is intended to comply with the state mandate. "Critical areas" include: wetlands, aquifer recharge

areas, geologically hazardous areas, fish and wildlife habitat, and frequently flooded areas. These areas contain valuable natural resources, provide natural scenic qualities important to the character of the community, perform important ecological functions and processes, or present a hazard to life and property. Identification, management and regulation for the protection of these lands and areas are, therefore, necessary to protect the public health, safety and general welfare of Kalama's citizens. This chapter also describes the process used to determine if a critical area exists on or adjacent to a particular parcel of land. The process includes the use of maps, physical inspections and other methods of fact-finding. It is the intent of the city to use the best available science and data in making a critical area determination.

B. With respect to particular critical areas, the city finds as follows:

1. Wetlands provide numerous valuable functions, including but not limited to providing wildlife and fish habitat, water quality enhancement, flood and erosion control, aquifer recharge and discharge, shoreline stabilization, research and education opportunities, and recreation.

Geologic hazards pose a risk to public and private property and to the natural systems that make up the city's environment. These lands are susceptible to slides, erosion, seismic effects, and mining hazards. Building and development practices should consider topographical and geological features. Future development shall be directed to more geologically stable areas and restricted on unsuitable ground. Regulating these lands, and avoiding or minimizing alteration of geologic hazards, is necessary to protect the health, safety and general welfare; therefore, two categories have been established for review which are as follows: potentially geologically hazardous areas which require more extensive review because of severity of conditions and areas of geological concern, which may only require a minimal amount of geological information with recommendations for site development.

3. Aquifer recharge areas perform many important biological and physical functions that benefit the city and its residents, including but not limited to storing and conveying groundwater. Protection of aquifer recharge areas is, therefore, necessary to protect the public health, safety and general welfare.
4. Fish and wildlife habitat conservation areas perform many important physical and biological functions that benefit the city and its residents. These functions include but are not limited to: food, cover, nesting, breeding and movement for fish and wildlife; maintaining and promoting diversity of species and habitat; maintaining air and water quality; controlling erosion; recreation, education and scientific study and aesthetic appreciation; and providing neighborhood separation and visual diversity within urban areas.
5. Frequently flooded areas pose a risk to public and private property and public health. Regulation of these lands will promote efficient use of the land and water resources by allocating frequently flooded areas to the uses for which they are best suited and to discourage obstructions to flood-flows or uses which pollute or deteriorate natural waters and water courses.

C. It is the intent of this chapter to:

1. Implement the goals, objectives and policies of the environmental and land use elements of the city of Kalama's comprehensive plan;

Comply with the requirements of the Growth Management Act (RCW 36.70A) and mandate such rules and guidelines;

3. Coordinate Kalama's critical area protection activities and programs with those of other jurisdictions;
4. Assist land owners by providing incentives for critical area protection.

**15.02.040 - Authority.**

This chapter is adopted under the authority of Chapter 36.70A RCW.

**15.02.050 - Definitions.**

For the purposes of this chapter, the following definitions shall apply unless the context clearly requires otherwise.

"Adjacent to" means immediately adjoining (in contact with the boundary of the subject area) or within a distance that is less than that needed to separate activities from critical areas to ensure protection of the function and values of the critical areas. Adjacent to shall mean any activity or development located:

1. On a site immediately adjoining a critical area;  
A distance equal to or less than the required critical area buffer or setback width and building setbacks;
3. A distance equal to or less than one-half mile (two thousand six hundred forty feet) from a bald eagle's nest;
4. A distance equal to or less than three hundred feet upland from a stream, wetland or water body;
5. Bordering or within the floodway, floodplain, or channel migration zone; or
6. A distance equal to or less than two hundred feet from a critical aquifer recharge area.

"Agricultural activities (existing and ongoing)" means those activities involved in the production of crops and livestock, including but not limited to operation and maintenance of existing farm and stock ponds or drainage systems, irrigation systems, changes between agricultural activities, and maintenance or repair of existing serviceable structures and facilities, as allowed under Kalama Municipal Code Chapter 17.21, Large-Lot Estates. Activities which bring an area into agricultural use are not part of an ongoing activity. An activity ceases to be ongoing when the area on which it was conducted has been converted to a nonagricultural use, or has been unattended for five years. Forest practices are not included in this definition.

"Alluvial fan" means a low, outspread, relatively flat to gently sloping mass of loose alluvium, shaped like an open fan, deposited by a stream where it issues from a narrow valley, or where a tributary stream issues into the main stream, or wherever a constriction in a valley abruptly ceases or the gradient of the stream suddenly decreases; it is steepest near the mouth of the valley where its apex points upstream, and it slopes gently and convexly outward with gradually decreasing gradient.

"Alteration" means a human-induced action which materially affects a regulated critical area or associated buffer, such as a physical change to the existing condition of land or improvements, including but not limited to: construction, clearing, filling and grading.

"Applicant" means the person, party, firm, corporation, Indian tribe, or federal, state or local government, or any other entity that proposes any activity that could affect a critical area.

"Aquifer recharge area" means areas where water infiltrates the soil and percolates through it and surface rocks, to the groundwater.

"Best available science" means current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-195-900 through 925.

"Best management practices" means systems of practices and management measures that: (1) control soil loss and reduce water quality degradation caused by nutrients, animal waste and toxins; (2) control the movement of sediment and erosion caused by land alteration activities; (3) avoid adverse impacts to surface and ground water quality, flow and circulation patterns; and (4) avoid adverse impacts to the chemical, physical and biological characteristics of a critical area.

"Buffer" or "buffer area" means an area established to protect the integrity or functions and values of a critical area from potential adverse impacts.

"Chemical applications" means the application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances.

"Clearing" means the removal of trees, brush, grass, ground cover, or other vegetative matter from a site.

"Conservation easement" means an interest or right of use over a property, less than fee simple, to protect, preserve, maintain, improve, restore, limit the future use of, or conserve for open space purposes, any land or improvement on the land.

"Council" means the Kalama city council.

"Critical area" means and includes the following areas and ecosystems: (1) wetlands; (2) areas with a critical recharging effect on aquifers used for potable water; (3) fish and wildlife habitat conservation areas as defined in; (4) frequently flooded areas; and (5) geologically hazardous areas.

"Development" means a construction project involving property improvement or a change of physical character within the site; the act of using land for building or extractive purposes. "Development" shall include, but shall not be limited to, the activities identified in Section 15.02.060 of this chapter.

"Development intensities" for the purpose of Section 15.02.120 of this chapter, development intensities shall consist of two types:

1. High Intensity. Any use or activity with a high probability of disturbing a wetland and wetland fauna and flora, including but not limited to, construction of buildings, roads, and other improvements, land clearing and loud noises.

Low Intensity. Any use activity with a low probability of disturbing a wetland and wetland fauna and flora.

"Enhancement" means actions performed to improve the condition or functions and values of an existing viable wetland or buffer, or fish and wildlife habitat area or buffer. Enhancement actions include but are not limited to increasing plant diversity, increasing fish and wildlife habitat, installing environmentally compatible erosion controls, and removing invasive plant species such as milfoil and loosestrife.

Erosion Hazard Area. See "Geologic hazard areas."

"Excavation" means the mechanical removal of earth material.

Existing and On-going Agricultural Activities. See "Agricultural activities."

"Fill material" means a deposit of earth or other natural or man-made material placed by artificial means.

"Filling" means the act of placing fill material (on any critical area) including temporary stockpiling of fill material.

"Fish and wildlife habitat conservation areas" means those areas identified as being of critical importance to maintenance of fish and wildlife including those listed in Table 15.02.130-1.

"Floodway" means those portions of the area of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition.

"Frequently flooded areas" are lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater.

"Geologic hazard areas" means areas susceptible to erosion, landslide, seismic, volcanic, or other geologic events (see Section 15.02.150 of this chapter for classifications).

"Grading" means an excavating and/or filling of the earth's surface or combination thereof.

"Hydric soils" means soils which are wet long enough to periodically produce anaerobic (reduced oxygen) conditions, thereby influencing plant growth.

"Hydrologic unit (watershed)" means an area of land above or upstream from a specific point on a stream, which is enclosed by a topographic divide such that direct surface runoff from precipitation normally drains by gravity into the stream or the area above the specified point on a stream.

"Indigenous" means any native species of plant or wildlife that occurs naturally on a particular site or area.

"Lake" means a naturally existing or artificially created body of standing water, including reservoirs, twenty acres or greater in size, which exists on a year-round basis and occurs in a depression of land or expanded part of a stream.

"Landfill" means a disposal facility or part of a facility at which solid waste is placed in or on land.

"Landslide" means the abrupt downslope movement of a mass of soil or rock.

Landslide Hazard Area. See Section 15.02.150(D).

"Liquefaction" is a process in which soil loses strength, and behaves like a liquid.

"Mitigation" means an action designed to replace project-induced critical area losses or impacts; including, but not limited to, avoiding, minimizing, or compensating for adverse wetland impacts. Mitigation in order of preference:

1. Avoiding the impact altogether by not taking a certain action or parts of actions;  
Minimizing impacts by limiting the degree or magnitude of an action and its implementation;
3. Rectifying impacts by repairing, rehabilitating or restoring the affected environment;

4. Reducing or eliminating an impact over time by preservation and maintenance operations during the life of the action;
5. Compensating for an impact by replacing or providing substitute resources or environments;
6. "In-kind mitigation" means replacement of wetlands or surface water systems with substitute wetlands or surface water systems whose characteristics and functions and values closely approximate those destroyed or degraded by a regulated activity;
7. "Out-of-kind mitigation" means replacement of surface water systems or wetlands with substitute surface water systems or wetlands with characteristics which do not closely approximate those destroyed or degraded by a regulated activity.

"Noxious weeds" means any plant which, when established, is highly destructive, competitive or difficult to control. The county maintains a noxious weed list.

"Open space" means land classified as open space under Chapter 84.34 RCW for its current use value and placed in open space tax assessment.

"Pond" means a naturally existing or artificially created body of standing water under twenty acres, which exists on a year-round basis and occurs in a depression of land or expanded part of a stream.

"Primary association of a species" includes its breeding areas, nesting areas, primary foraging areas, and primary migration corridors.

"Priority habitat" means 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.

"Qualified professional" means a person who has received a degree from an accredited college or university in a field necessary to identify and evaluate a particular critical area, and/or a person who is professionally trained, licensed and certified in such field(s). Areas of technical expertise shall generally be as follows: wetlands biology or ecology (for wetlands); stream and/or fisheries biology or ecology (for streams); wildlife biology or ecology (for critical habitat); or a Washington State licensed geologist, hydrogeologist or engineering geologist (most frequently referred to as a geotechnical engineer). A qualified wetland professional shall be certified by the Society of Wetland Scientists as a professional wetland science or wetland professional in training. When a landscape or planting plan is required by these regulations, a qualified professional is one who has demonstrated expertise in the use of indigenous plant species, slope stabilization, and arboricultural practices. A qualified professional shall be required to demonstrate the basis for their qualifications, and submit copies of past reports that have been accepted by other jurisdictions on critical area permit applications. A demonstration of qualifications may include, but shall not be limited to submission of a copy of professional certification, such as either a graduate certificate or state license.

"Regulated activity" for the purposes of this chapter (other regulations can or may apply as well) means activities occurring in a critical area or associated buffer that are subject to the provisions of this chapter. See regulated activities in KMC Section 15.02.060.

"Restoration" means efforts performed to reestablish functional values and characteristics of a critical area that have been destroyed or degraded by past alterations (e.g., filling or grading).

"Riparian habitat" means areas adjacent to aquatic systems with flowing water that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by

providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. Widths shall be measured from the ordinary high water mark. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence the stream system. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

"Shorelands and shoreland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter 90.58 RCW.

"Site" means any parcel or combination of contiguous parcels, or right-of-way, or combination of contiguous rights-of-way under the applicant's ownership or control where the proposed regulated activity occurs.

"Slope" means an inclined earth surface, the inclination of which is expressed as the ratio of horizontal distance to vertical distance. In these regulations, slopes are generally expressed as a percentage; percentage of slope refers to a given rise in elevation over a given run in distance. Slopes fifteen to thirty percent constitute areas of geologic concerns. Slopes greater than thirty percent constitute potential areas of geological hazard.

"Snag" means any dead, partially dead, or defective (cull) tree at least ten feet tall and twelve inches in diameter at breast height.

"Snag-rich areas" means areas that are characterized by the presence of relatively high numbers of large diameter (> twenty inches dbh) snags, in varying states of decay, suitable for use by broad and diverse groups of wildlife. Snag-rich areas include naturally regenerated (un-managed) forests, riparian areas, and burned, damaged, or diseased forests. Snag-rich areas may also include individual snags or small groups of snags of exceptional value to wildlife due to their scarcity or location in particular landscapes.

"Streams" means water contained within a channel, either perennial or intermittent, and classified according to WAC 222-16-030 or WAC 222-16-031. Streams also include natural watercourses modified by man. Streams do not include irrigation ditches, waste ways, drains, outfalls, operational spillways, channels, stormwater runoff facilities or other wholly artificial watercourses, except those that directly result from the modification to a natural watercourse.

"Talus slope" means a slope formed by the accumulation of rock debris at the bottom of steep slopes or cliffs.

"Utility line" means pipe, conduit, cable, or other similar facility by which services are conveyed to the public or individual recipients. Such services shall include, but are not limited to water supply, electric power, natural gas, communications and sanitary sewer.

Volcanic Hazard Area. See "Geologic hazard areas."

"Wetland" means areas that are inundated or saturated by surface water or ground 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 generally include swamps, marshes, bogs, and similar areas. 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. This definition does include, however, those artificial wetlands intentionally created to mitigate for the conversion of existing wetlands. The three general types of wetlands are emergent, forested and scrub-shrub.

"Wetland functions" are determined by physical, chemical and biological characteristics and include but are not limited to: fish and wildlife habitat, aquifer recharge and discharge, water quality, shoreline stabilization, and flood and erosion control.

"Wetland value" means wetland processes or attributes that are valuable or beneficial to society.

#### **15.02.060 - Applicability/regulated activities.**

- A. All persons proposing development in critical areas or their buffers shall first obtain a critical areas permit pursuant to this chapter, except as exempted pursuant to Section 15.02.070 of this chapter. A critical area that extends beyond or is adjacent to the boundaries of the proposed project site shall be reviewed in its entirety and not only the portion contained within or adjacent to the site.
- B. Development activities shall include, but are not limited to the following:
  - 1. Removing, clearing, grading, excavating, disturbing, or dredging soil, sand, gravel, minerals, organic matter or materials of any kind;  
Dumping, discharging or filling with any material;
  - 3. Subdivisions, short subdivisions, planned unit developments (PUDs), manufactured housing parks and RV parks;
  - 4. Construction, reconstruction, demolition or alteration of the size of any structure or infrastructure;
  - 5. Construction of any new public or private road or driveway;
  - 6. Destroying, planting or altering vegetation through clearing, harvesting, cutting, intentional burning, shading, or planting nonnative species where these activities would alter the character of a critical area, or its buffer;
  - 7. Draining, flooding, or disturbing the water level or water table;
  - 8. Activities causing adverse changes in water temperature, physical or chemical changes of water sources to wetlands or surface water systems;
  - 9. Chemical applications that are determined by the city and/or the Department of Fish and Wildlife to be harmful to wetland habitat, riparian corridors associated with surface water systems, or wildlife or fish life.

#### **15.02.070 - Exemptions.**

Upon determination by the city, the following activities may be exempt from the provisions of this chapter:

- A. The policies, regulations, and procedures of this chapter do not apply to those activities and uses conducted pursuant to the Washington State Forest Practices Act and its rules and regulations, RCW 76.09 and WAC 222, where state law specifically limits local authority, except with regard



to developments and conversions requiring local approval, and when the city is the lead agency for environmental review;

- B. Existing and on-going agricultural activities not involving chemical applications as defined in this chapter;
- C. Development occurring within a seismic hazard area as described in Section 15.02.150(D)(3) and containing no other critical area as defined by this chapter;
- D. Development occurring within frequently flooded areas and containing no other critical area as defined by this chapter, provided, the development meets the requirements of Kalama Municipal Code Chapter 14.16, Floodplain Management;
- E. Maintenance, operation, reconstruction of existing public and private roads, streets, driveways, utility lines and facilities, and existing public buildings and facilities provided that reconstruction of any such facilities does not extend outside the previously disturbed portions of the right-of-way or building lot lines;
- F. Exterior alterations to existing single-family residential structures comprising up to twenty-five percent of the existing building's footprint, but not to exceed five hundred square feet, if such alteration or construction does not involve the excavation of materials from any adjacent slope which is greater than fifteen percent, and if such alteration does not extend further into a critical area;
- G. Construction, alteration or enlargement of decks, patios, walkways and other outside fixtures common to residential housing and commercial activities, not involving the use of industrial construction equipment such as backhoes, tractors, cranes, and does not create additional impacts on an adjacent critical area;
- H. For lands not involving wetlands, wildlife habitats, designated endangered species areas, or slopes greater than fifteen percent, excavation, grading, and filling the following would be exempted:
  - 1. If the excavation is less than two feet in depth or does not create a cut slope greater than five feet in height and steeper than one unit vertical in one and one-half units horizontal (sixty-six and seven tenths percent slope) and does not exceed fifty cubic yards,  
  
Fill is less than one foot in depth and placed on natural terrain with a slope flatter than one unit vertical in five units horizontal (twenty percent slope), or less than three feet in depth, not intended to support structures, that does not exceed fifty cubic yards on any one lot and does not obstruct a drainage course (as stated in the 1997 edition of the Uniform Building Code Appendix Chapter 33.3306.02(9));
- I. The removal or control of vegetation posing a strong likelihood of hazard to life or property and the removal or control of noxious weeds not involving broadcast chemical application, excavation, use of mechanical tools, and/or flooding, provided there are no adverse impacts to slope stability;
- J. Maintenance of ground cover or other vegetation in a critical area or buffer area that was disturbed prior to January 2000, provided that, no further disturbance is created;
- K. Minimal site investigative work required by the city, state or a federal agency, or any other applicant such as surveys, soil logs, percolation tests, and other related activities, provided that

impacts on environmentally critical areas are minimized and disturbed areas are restored to the pre-existing level of function and value within one year after tests are concluded;

- L. Passive recreational uses, sport fishing or hunting, scientific or educational review, or similar minimum impact, nondevelopment activities;
- M. Maintenance of intentionally created artificial wetlands or surface water systems including irrigation and drainage ditches, grass-lined swales and canals, detention facilities, farm ponds, and landscape or ornamental amenities. Wetlands, natural streams, natural streams that are channelized, lakes or ponds created as mitigation for approved land use activities or that provide critical habitat are not exempt and shall be regulated according to the mitigation plan;
- N. Activities occurring in nonregulated wetlands. Shoreline, state and federal regulations may apply to wetlands not regulated under this chapter;
- O. Emergency actions;
  - 1. Emergency actions which must be undertaken immediately or for which there is insufficient time for full compliance with this chapter when it is necessary to:
    - a. Prevent an imminent threat to public health or safety,
    - b. Prevent imminent danger to public or private property, or
    - c. Prevent an imminent threat of serious environmental degradation;

In the event a person or emergency agency determines that the need to take emergency action is so urgent that there is insufficient time for review by the city, such emergency action may be taken immediately, as long as the following requirements are observed:

  - a. Work is limited to the minimum work necessary to alleviate the emergency,
  - b. For emergency work within waters of the state, the person or agency undertaking such action will receive verbal hydraulic permit approval from the Washington Department of Fish and Wildlife prior to beginning any work,
  - c. The person or agency undertaking such action shall notify the city within one working day following the commencement of the emergency activity. Following such notification, the city shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the city determines that the action taken or a portion of the action taken is beyond the scope of allowed emergency actions, the city may initiate enforcement action, as set forth in KMC Section 15.20.200,
  - d. Upon completion of the emergency repair or restoration work, all damage to the critical area shall be fully restored;
- P. Projects with a footprint of less than five hundred square feet which are not placed on fill or require no excavation into slopes greater than fifteen percent;
- Q. Construction of structures on lots with slopes of greater than fifteen percent, if the city receives a report prepared in the last five years by a qualified professional who has examined the site and the report clearly states that construction on the site will not cause any geologic hazards, to the proposed building or surrounding properties.

**15.02.080 - Optional incentives for nondevelopment of critical areas.**

- A. Introduction. This section describes the alternatives available to property owners and incentives they may pursue in lieu of developing or altering their property under the terms and standards of this chapter. The incentives and options listed allow property owners to use any or all of the options that best suit their needs.
- B. Open Space. Any person who owns an identified critical area as defined by this chapter may apply for current use assessment pursuant to Cowlitz County Code Chapter 18.52, the Cowlitz County Open Space Ordinance, and RCW 84.34, Open Space, Agriculture, and Timber Lands—Current Use Assessment-Conservation Futures.
- C. Conservation Easement. Any person who owns an identified critical area as defined by this chapter shall be entitled to place a conservation easement over that portion of the property designated a critical area by naming the city or its qualified designee under RCW 64.04.130 (Interests in land for purposes of conservation, protection, preservation, etc.—Ownership by certain entities—Conveyances) as beneficiary of the conservation easement. The purpose of the conservation easement shall be to protect, preserve, maintain, restore, limit the future use of, or conserve for open space purposes the land designated as critical area(s), in accordance with RCW 64.04.130. Details governing easement restrictions shall be negotiated between the property owners and the city. See process for conservation easement or density incentives, subsection E of this section.
- D. Density Adjustments. The city shall allow transfer of density for residential uses from lands containing critical areas, as defined by this chapter, when developed pursuant to Kalama Municipal Code Chapter 16.18, Planned Unit Development. Residential density may only be transferred from a critical area to an area on the same site which is not a critical area. For development proposals on lands determined to contain critical areas as defined by this chapter, the city shall determine allowable dwelling units for residential development proposals based on the formula below.

Percentage of Site in Critical Area	Percentage of Adjustment
1—10%	100%
11—20%	90%
21—30%	80%
31—40%	70%
41—50%	60%
51—60%	50%
61—70%	40%

71—80%	30%
81—90%	20%

The density adjustment can only be applied within the development proposal site and any fractional amounts will be rounded down. The applicant may reduce lot sizes below the minimum required for that zone (residential designation) to accommodate the transfer of density by following the procedures set forth in the Kalama Municipal Code Chapter 16.10.

E. The process for conservation easement or density incentives will be as follows:

1. Contents of Application. Record owners of real property seeking relief under this section shall file with the city council an application for a conservation easement, density incentives or adjustments.

Contents of Application. The applicant is responsible for submitting a complete and accurate application. A complete application shall include:

- a. Completed master application and/or any required supplement sheets signed by the owner of the property;
- b. A map drawn to scale, showing the following information:
  - i. Name, address and telephone number of the property owners(s),
  - ii. Name, address and telephone number of the preparer of the application,
  - iii. Date of submittal,
  - iv. North arrow,
  - v. Property boundary lines,
  - vi. A legal description of the property,
  - vii. A description of the nature, size and location of each critical area located on the property, as determined by a qualified professional,
  - viii. All existing and/or public and private roads, sewer, and water lines, wells, county utilities, easements, water courses, lakes, springs, drainage facilities, on-site sewage disposal drainfield areas, on and within one hundred feet of the property boundaries,
  - ix. The boundaries of all lands reserved in the deeds for the common uses of the property owners.
3. City Staff Action. The city clerk-treasurer, public works director and city planner shall determine if the application is complete within twenty-eight days. If additional information is necessary, the application shall be returned to the property owner, together with a list identifying the deficiencies. When the application is complete, the city staff shall determine whether all or part of the property is in fact subject to any critical area regulations in this chapter. Staff shall forward written findings to the council.
4. Council Decision. Within thirty days of receipt of the staff's findings, the council shall make the final determination on whether all or part of the property is subject to this chapter. For

conservation easement applications, if the council determines that all or part of the property is subject to this chapter, the council shall consider the acceptance of a conservation easement, as beneficiary on behalf of the city or its qualified designee under RCW 64.04.130, over that portion of the property subject to this chapter to the extent requested by the record owner of the property. The grantee of a conservation easement must agree to execute the easement form approved by the city attorney. For density incentive applications, the council shall consider a requested density transfer subject to its final approval of a preliminary subdivision plat. The application for density transfer must be submitted as a part of the preliminary plat application.

- F. Land Exchange. State agencies or local government may convey, sell, lease or trade existing public lands in order to obtain public ownership of a fee interest, leasehold interest or conservation easement over all or part of a critical area. Such exchanges may occur only upon agreement between the record owner and state and local agencies authorized to exchange the subject land. The process for land exchange involving the city of Kalama will be as follows: all applications for land exchanges must be filed in accordance with the requirements of this section. For the purposes of this section, any requirements to provide information, appraisals or notice relating to the "property" or "subject property" shall apply to all properties involved in the proposed exchange.
1. Contents of Application. The applicant is responsible for submitting a complete and accurate application. A complete application shall include:
    - a. Completed master application and/or any required supplement sheets signed by the record owner of the property;
    - b. A map, drawn to scale, showing the following information:
      - i. Name, address and telephone number of the property owners(s),
      - ii. Name, address and telephone number of the preparer of the application,
      - iii. Date of submittal,
      - iv. North arrow,
      - v. Property boundary lines and dimensions,
      - vi. Legal description of the property,
      - vii. Description of the nature, size and location of each critical area located on the property, as determined by a qualified professional,
      - viii. All existing public or private roads, sewer and water lines, wells, city utilities, easements, water courses, lakes, springs, drainage facilities, on-site sewage disposal drainfield areas, on and within one hundred feet of the property boundaries,
      - ix. The boundaries of all lands reserved in the deeds for the common uses of the property owners,
      - x. A written appraisal from a licensed appraiser of the city's choice, providing the fair market value of the properties,
      - xi. An environmental assessment of the property, indicating the presence or absence of environmental contaminants. The city shall commission the assessment at the property owner's cost.

City Staff Action. The City Administrator or designee shall determine if the application is complete within twenty-eight days. If additional information is necessary, the application shall be returned to the property owner, together with a list identifying the deficiencies. Staff shall forward written findings to the council.

3. Council Action. The city council shall hold a public hearing to review all property owner requests, pursuant to this section. Notice of public hearing shall be made at least thirty days prior to the scheduled hearing date. Notice shall consist of the publication of a legal notice in the newspaper of record stating the description of the property, and the purpose, date, time and location of the hearing. Such notice shall also be mailed first class to the property owner and all persons owning property, as identified in the auditor's records, within three hundred feet of the subject property boundaries thirty days prior to the hearing. And, two or more notices shall be posted in the vicinity of the subject property ten days prior to the hearing. Procedures for land exchanges may be subject to additional notice and advertising requirements.
4. Following the public hearing, the council shall issue its written decision, with findings. There shall be no deadline for the city council's decision on land exchanges, which shall be completely discretionary.

#### **15.02.090 - Critical areas determination.**

A determination of critical areas is required for all land use or development applications. Staff will conduct an environmental review, based on existing in-house data and an on-site inspection, to determine if critical areas exist on or are adjacent to a parcel and whether the site or project is exempted as provided in Section 15.02.070 of this chapter.

- A. Complete Application for Critical Area Determination. A complete application for a critical area determination will include all of the following:
  1. A completed master application with applicable land use application, including a critical area checklist;  
A vicinity map;
  3. A site drawing showing property boundaries, and existing plus proposed development locations on-site;
  4. A critical area determination fee.
- B. Staff Determination of a Critical Area. A critical area determination is made by the city staff, without a public hearing. The determination will be based upon:
  1. Review of the critical area determination application, together with any optional critical area study submitted by the applicant;  
Review of materials and information compiled by the city of Kalama, including any consultant report the city may commission; and
  3. On-site inspection of the property.
- C. Issuance of Determination of Critical Area. The determination shall be in writing and shall be provided to the applicant and property owner of record, if different than the applicant. When a critical area exists, a critical area determination notice will be issued. A property owner may request a redetermination by the staff once in any twelve-month period, subject to fees, when

a change in physical conditions or government institutional actions warrant such redetermination. Formal appeal may be made in accordance with this section.

**15.02.100 - Critical area permit.**

If the critical area determination reveals that there is a critical area(s) on the property subject to the underlying land use or development permit, an application for a critical area permit must be submitted. No development or activity may take place on the property with critical areas except in conformance with this chapter and an issued critical areas permit.

A. Critical Area Permit Application. A complete application for a critical area permit shall consist of the following:

1. A Detailed Site Plan Drawn to Scale. The site plan should clearly show the following information:

- a. North arrow,
- b. Property boundary line and dimensions,
- c. Location and dimensions of all existing and proposed development or alternations, including public and private roads, sewer and water lines, wells, utilities, easements, water sources, lakes and springs, drainage facilities, on-site sewage disposal and drainfield areas, within the property boundary,
- d. All critical areas, buffers and the development proposal with dimensions,
- e. Limits of any areas to be cleared;

A copy of the determination of critical area issued by the city showing it having been recorded through the county auditor's office;

3. A stormwater management plan for the project with consideration of the drainage impacts based on "best management practices";

4. Critical area report(s) addressing the specific critical area(s) on the site including all information as defined in the applicable Appendix(s) B through E. This report must also include the following:

- a. The date the report was prepared, no more than five (5) years prior to the date of the critical area permit application
- b. The names, and qualifications of all person(s) preparing the report,
- c. The professional qualifications of the person(s) preparing the report,
- d. The dates and documentation of any fieldwork performed on the site,
- e. A statement verifying the accuracy of the report, as well as all assumptions relied upon in the report,
- f. An assessment of the probable cumulative impacts to critical areas resulting from development of the site,
- g. Analysis of site development alternatives and impact avoidance,
- h. Analysis of impact minimization, if applicable;

- i. Compensatory mitigation for unavoidable impacts, if applicable; and
    - h. A SEPA environmental checklist, unless the proposal is categorically exempt under KMC 15.04.110 or WAC 197-11-800, and the following critical areas are not impacted:
      - i. Geologic hazard area,
      - ii. Wetlands,
      - iii. Riparian habitat area;
  - 5. A permit fee.
- B. Area Permit Approval Criteria. An application for a critical area permit shall demonstrate compliance with all of the following criteria in order to be approved:
  - 1. The proposed alteration, activity or development proposal must satisfy all standards for alterations, activities or development in critical areas, as set forth in this chapter;
 

The proposed mitigation shall be supported by sufficient evidence to demonstrate that the mitigation will protect the critical area, and ensure no net loss of critical habitat value or functions; and
  - 3. The proposed alteration, activity or development proposal shall be consistent with all other applicable codes.
- C. Issuance of Critical Area Permit. Decisions on critical areas permits are made by the same authority as the underlying development application. The critical areas permit shall be approved, approved with conditions or denied based on the above criteria. The decision on a critical area permit shall be in writing and shall be supported by written findings of fact and conclusions. Appeals of critical area permit decisions shall follow the process set forth in Section 15.02.190 of this chapter.

**15.02.105 - Relationship to other regulations.**

Areas characterized by a particular critical area may also be subject to other regulations due to the overlap of multiple functions of critical areas. In the event of any conflict between these regulations and any other regulations of the city, the regulations which provide the greater protection for critical areas shall apply. No permit granted pursuant to this chapter shall remove applicant's obligation to comply in all respects with the applicable provision of any other federal, state or local law or regulation.

**15.02.110 - Critical area inventory maps.**

- A. The approximate location and extent of critical areas and lands within the city planning area are shown on the maps adopted as part of this chapter. These maps are based on the best available information and are intended to be used as a general guide for the assistance of property owners and as information for the public. Boundaries are generalized; field investigation and analysis by the city may be required to confirm the existence of a critical area. The city will update information and resource material when new data is available and updates are feasible.
- B. In the event of any conflict between the location, designation or classification of a critical area shown on the city maps and the criteria or standards of this section, the criteria, standards and determination of any field investigation shall prevail.



**Table 15.02.110-1**

**Summary of Map Sources**

Topic	Map/Data Sources
Geologically Hazardous Areas	<ol style="list-style-type: none"> <li>1. Washington Geologic Information Portal (<a href="http://wdfw.wa.gov/mapping/phs/">http://wdfw.wa.gov/mapping/phs/</a>), WA State Department of Natural Resources, as amended.</li> <li>2. Seismic Design Category Maps for Residential Construction in Washington, WA State Department of Natural Resources, 2007.</li> <li>3. Cowlitz County General Soils Map, USDA Natural Resource Conservation Service, 2006 or as amended.</li> <li>4. Seismic Hazard Maps, USGS, 2014 or as amended.</li> <li>5. Liquefaction Susceptibility Map of Cowlitz County, Washington, WA State Department of Natural Resources, 2004 or as amended.</li> <li>6. Other WA State Department of Natural Resource Maps—when available.</li> </ol>
Frequently Flooded Areas	<ol style="list-style-type: none"> <li>7. FEMA, National Flood Insurance Program, Flood Insurance Rate Maps.</li> </ol>
Critical Aquifer Recharge Areas (CARA's)	<ol style="list-style-type: none"> <li>8. Updated CARA Designation, Cowlitz County GIS Department, 2016.</li> </ol>
Wetlands	<ol style="list-style-type: none"> <li>7. National Wetlands Inventory – Wetlands Mapper (online), U.S. Department of Interior, Fish and Wildlife Service, as amended.</li> </ol>
Fish and Wildlife Habitat Conservation Areas	<ol style="list-style-type: none"> <li>8. Priority Habitat and Species (PHS) on the Web (online), WA State Department of Fish and Wildlife, as amended.</li> <li>9. SalmonScape (online), WA State Department of Fish and Wildlife, as amended.</li> <li>10. WSDOT Fish Passage Barriers (online), Washington State Department of Transportation (WSDOT), as amended.</li> <li>11. The National Map – Hydrography (online), USGS, as amended.</li> <li>12. Forest Practices Application Mapping Tool (online), WA State Department of Natural Resources, as amended.</li> </ol>

**15.02.120 - Critical area wetlands.**

A. Wetland physical functions include but are not limited to:

1. Flood control functions;
- Fish and wildlife habitat environments;

3. Ground and surface water aquifer recharge functions;
  4. Sediment retention and pollution control functions.
- B. Wetland Delineation. For the purposes of this section, wetland delineations shall be performed in accordance with the procedures as specified in the Washington State Wetlands Identification and Delineation Manual (Washington State Department of Ecology, March 1997), which is based on the Corps of Engineers Wetland Delineation Manual (U.S. Army Corps of Engineers, January 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Version 2.0 (U.S. Army Corps of Engineers, May 2010) will be used to delineate wetland boundaries.
- C. Wetland Classification. Wetlands shall be rated according to the Washington State Wetland Rating System for Western Washington 2014 Update (Washington State Department of Ecology, October 2014).
1. Category I. Wetlands with the highest level of functions (scoring 23 points or more) that are too difficult to replace. In addition, wetlands that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, and/or are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, including the following within the City of Kalama:
    - a. Wetlands of high conservation value (formerly known as natural heritage wetlands);
    - b. Bogs; and/or
    - c. Wetlands with mature and old-growth forests.
  2. Category II. Wetlands with high level of some functions (scoring 20-22 points) that are difficult, though not impossible, to replace.
  3. Category III. Wetlands with moderate level of functions (scoring 16-19 points) that can often be adequately replaced with well-planned mitigation.
  4. Category IV. Wetlands with the lowest level of functions (scoring less than 16 points) that are able to be replaced or improved.
- D. Development Limitations - Alterations of Wetlands. Regulated development, as described in Section 15.02.060, shall conform with and be governed by the following:
1. Alteration of Category I wetlands is prohibited unless the alteration would improve or maintain the existing wetland function and value, or the alteration would create a higher value or less common wetland type which would improve the functions or values of the wetland as indicated within the wetland technical study and the mitigation plan, developed by a qualified wetland professional.
 

Alteration of Category II and III wetlands may be allowed only when it is demonstrated, by a qualified wetland professional, through a wetlands site assessment that any of the following criteria are met:

    - a. Public benefit will accrue through the alteration;
    - b. No reasonable and practical alternative to the alteration exists through on-site design; or

- c. The alteration would improve or maintain the existing wetland function and value, or the alteration would create a higher value or less common wetland type with more functions and values as indicated within the wetland technical study and the mitigation plan.
- 3. Alteration of Category IV wetlands may be allowed if adequate alternatives cannot be identified during the site plan review process. No identification of adequate alternatives for altering isolated Category IV wetlands is required provided the wetland is:
  - a. Not greater than 4,000 square feet in area;
  - b. Not associated with riparian habitat areas or shorelines;
  - c. Not part of a wetland mosaic;
  - d. Not scored with 5 or more habitat points; and
  - e. Not a priority habitat or priority area for any priority species.
- E. Wetland Buffers. The purpose of a buffer is to provide appropriate protection to any identified wetland to maintain the structure, function, and values of the wetland system.
  - 1. Buffers are required for all wetlands (see Definitions for " wetland" definition). Wetland buffer widths are established, based on the wetland category, as follows:

**Table 15.02.120-1**

**Wetland Buffers**

Categories	Buffer Width (in feet)
I	300
II	300
III	150
IV	50

Buffer widths shall be measured perpendicular to the delineated boundaries of the regulated wetland and extend horizontally the required distance.

- 3. Buffer widths may be reduced on a case-by-case basis when it is determined to the satisfaction of the city that a smaller area is adequate to protect the wetland functions and values based on site-specific characteristics. Applicants for a "buffer width reduction request" shall submit to the city a wetland report as described in Appendix "C" of this chapter at the same time they submit all other development applications. In no case shall the standard buffer width be reduced by more than twenty-five percent, or the buffer width be less than fifty feet except for buffers for

category IV wetlands. The city shall require a two-year monitoring program to be developed to the satisfaction of the city. The monitoring program shall require that quarterly "reports" be submitted to the city for evaluation and approval. Subsequent corrective actions may be required if adverse impacts to wetlands are discovered during the monitoring period. The following information must be placed in the "wetland report" supporting the reduction of any buffer:

- a. The wetland report provides sound rationale for the reduced buffer based on the best available science. The rationale is supported by the Washington State Department of Ecology and the Department of Fish and Wildlife;
- b. The existing buffer area is well-vegetated with native species and has less than ten percent slopes; and
- c. No direct or indirect, short-term or long-term, adverse impacts to wetlands are identified by the Washington State Department of Ecology or the Department of Fish and Wildlife, resulting from the proposed reduction of the wetland buffer and the subsequent proposed development of the site in question.

F. Buffer Width Alterations - Wetland Buffer Adjustments and Width Averaging.

1. Requests for alterations to the wetland buffer widths may be applied for in accordance with procedures as set forth in Kalama Municipal Code Section 17.52.030, Application.

The City Administrator, may grant alterations to the regulated buffer widths as set forth in this section, provided, that the applicant has not applied for a wetland buffer width reduction, and where it can be shown, through a report prepared by a qualified wetlands professional that granting the variance will not negatively impact the required enhancements, functions and values of the wetland the buffer it is intended to protect.

3. One of the ways that the buffer widths may be modified or altered is by averaging (decreasing or increasing) the buffer width. For example, if the widest width in a proposed buffer is fifty feet and the narrowest width is twenty-five feet, the average width would be thirty-seven feet, six inches wide.
4. The hearings examiner can grant the buffer width averaging only if the applicant can demonstrate to the city through a report as set forth in subsection E, buffer width reductions, of this section prepared by a qualified wetlands specialist, all of the following:
  - a. The buffer width averaging will not adversely impact the function and/or values of the wetland;
  - b. Low intensity land uses will be adjacent to the reduced buffer widths;
  - c. The total area contained within the averaged buffer is equal to the required minimum within the standard buffer;
  - d. In no instance will the buffer width be reduced more than fifty percent or be less than fifty feet for any stormwater drainage way or a wetland site; and
  - e. The buffer area proposed to be designated in buffer width averaging shall be contiguous to the original buffer area and shall not include on-site septic systems, public or private roadways, structures, or aboveground utilities. Existing disturbed areas may not be approved for use as a buffer averaging area.

G. Activities Allowed in a Wetland Buffer. Activities within a buffer zone may be allowed if prior to undertaking any activity in the buffer, the applicant demonstrates that the activity has no adverse impact on the function of buffer zones as follows:

1. All Activities in the Wetland Buffer

- a. Impacts to the buffer and adjacent wetland are minimized; and
- b. Impacts to the buffer and adjacent wetland are fully mitigated to achieve no net loss in wetland functions or values as a result of the activity in the wetland buffer.

Passive Recreation Development Activity. Passive recreation facilities designed and in accordance with an approved critical area assessment, including, but not limited to:

- a. Walkways and trails; provided, that those pathways are generally parallel to the perimeter of the wetland, are located in the outer 25 percent of the buffer area, are constructed with a surface that does not interfere with the soil permeability, and the surface of which is no more than eight feet wide. The design and construction of walkways and trails shall avoid impacts to established native woody vegetation. Raised boardwalks utilizing non-treated pilings are acceptable;
- b. Wildlife viewing structures less than 200 square feet.

3. Stormwater Management Facilities. Stormwater management facilities are not allowed in buffers of Category I or II wetlands. Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands or may encroach farther into buffer at discretion of the City Administrator or designee, provided that no other location is feasible.

4. Utility Transmission Facilities. Utility facilities which carry liquid petroleum products or any other hazardous substance as defined in Chapter 173-303 WAC may be permitted within wetland buffers only when demonstrated by a qualified professional that the design, location, and monitoring of the proposed facility will not cause adverse effects to the buffer or wetland.

5. Utility Drilling. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not interrupt the groundwater 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 groundwater connection to the wetland or percolation of surface water down through the soil column is disturbed.

6. Nonconforming Uses. Repair, maintenance, or alteration of nonconforming uses or structures not otherwise exempt from the regulations of chapter per KMC 15.02.070 and where legally established within the buffer, provided they do not increase the degree of nonconformity.

7. Other Activities in the Wetland Buffer. All activities in the wetland buffer not specified by KMC 15.02.120(G)(2) through (6) shall only be allowed provide that no other location is feasible.

H. Wetland Mitigation Standards.

1. Mitigation for alterations to wetlands shall achieve equivalent or greater wetland functions. Mitigation plans shall be consistent with Wetland Mitigation in Washington State, Version 1 (Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, U.S. Environmental Protection Agency Region 10, March 2006).

Wetland mitigation actions shall not result in a net loss of wetland areas except when the following criteria are met:

- a. The lost wetland area provides minimal functions and the mitigation action(s) results in a net gain in wetland functions as determined by a site-specific function assessment; or
  - b. The loss of wetland area provides minimal functions as determined by a site-specific function assessment and other replacement habitats provide greater benefits to the functioning of the watershed, such as riparian habitat restoration and enhancement.
3. 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:
- a. The lost wetland provides minimal functions as determined by a site-specific function assessment and the proposed mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal watershed assessment plan or protocol; or
  - b. Out-of-kind replacement will best meet formally identified regional goals such as replacement of historically diminished wetland types.
4. Mitigation Types and Sequencing. Mitigation actions that require compensation shall occur in the following order of preference:
- a. Restoration. Restoring (re-establishing or rehabilitating) wetlands on upland sites that were formerly wetlands or are significantly degraded wetlands.
    - i. The goal of re-establishment is returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.
    - ii. The goal of rehabilitation is repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.
  - b. Creation. Creating wetland on disturbed upland sites such as those with vegetative cover consisting primarily of non-native species. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the approval authority may authorize creation of a wetland and buffer upon demonstration by the applicant's qualified wetland scientist that:
    - i. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that creation of a wetland at the site will not likely cause hydrologic problems elsewhere;
    - ii. No proposed mitigation site characteristic completely inhibits the success of invasive plants or noxious weed control consistent with approved mitigation plan performance standards;
    - iii. Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and

- iv. The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.
- c. Enhancement. Enhancing wetlands.
  - i. Impacts to wetlands may be mitigated by enhancement of existing significantly degraded wetlands. Applicants proposing to enhance wetlands must produce a critical area report that identifies how enhancement will increase the functions of the degraded wetland, how this increase will adequately mitigate for the loss of wetland area and function at the impact site, and how all other existing wetland functions at the mitigation site will be protected.
- d. Preservation. Preserving high-quality wetlands that are under imminent threat.
  - i. Preservation as mitigation is acceptable when done in combination with restoration, creation or enhancement, unless the preservation criteria of KMC 15.02.120.H.4.d.ii are met. A minimum of one-to-one acreage replacement shall be provided by restoration or creation and the criteria below shall be met:
    - (1). The impact area is small, and/or impacts are to a category III or IV wetland;
    - (2). Preservation of high quality system occurs in the same Water Resource Inventory Area (WRIA) or watershed basin as the wetland impact;
    - (3). Preservation sites include buffer areas adequate to protect the habitat and its functions from encroachment and degradation; and
    - (4). Mitigation ratios for preservation in combination with other forms of mitigation shall range from ten-to-one to twenty-to-one, as determined by the city, depending on the quality of the wetlands being mitigated and the quality of the wetlands being preserved.
  - ii. Preservation of at-risk, high-quality habitat may be considered as the sole means of mitigation for wetland impacts when all of the following criteria are met:
    - (1). Preservation is used as a form of mitigation only after the standard sequencing of mitigation (avoid, minimize, and then compensate) has been applied;
    - (2). Creation, restoration, and enhancement opportunities have also been considered, and preservation is the best mitigation option;
    - (3). The impact area is small and/or impacts are to a category III or IV wetland;
    - (4). Preservation of a high quality system occurs in the same Water Resource Inventory Area (WRIA) or a watershed where the wetland impact occurs;
    - (5). Preservation sites include buffer areas adequate to protect the habitat and its functions from encroachment and degradation;
    - (6). The preservation site is determined to be under imminent threat, specifically, sites with the potential to experience a high rate of undesirable ecological change due to on- or off-site activities. "Potential" includes planned, or likely actions that are not adequately protected under existing regulations (for example, logging of forested wetlands); and

(7). The area proposed for preservation is of high quality and critical for the health of the watershed or basin. Some of the following features may be indicative of high quality sites:

- Category I or II wetland rating,
- Rare wetland type (for example, bogs, mature forested wetlands, estuaries),
- Habitat for threatened or endangered species,
- Wetland type that is rare in the area,
- Provides biological and/or hydrological connectivity,
- High regional or watershed importance (for example, listed as priority site in watershed plan), and
- Large size with or with potential for supporting high species diversity (plants and/or animals) and/or high abundance.

iii. Mitigation ratios for preservation as the sole means of mitigation shall range from ten-to-one to twenty-to-one, as determined by a qualified wetlands expert, depending on the quality of wetlands being mitigated and the quality of the wetlands being preserved.

5. Mitigation Ratios.

a. The following ratios shall apply to on-site creation or re-establishment, rehabilitation, and/or enhancement, 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.

**Table 15.02.120-2**

Type of Wetland	Minimum Ratio of Mitigation to Altered Wetland		
	Creation or Re-establishment	Rehabilitation	Enhancement
Category I			
Bog or wetlands of high conservation value	Not considered possible	Case by case ratio by City Administrator or designee	Case by case ratio by City Administrator or designee



		with regulatory agency coordination	with regulatory agency coordination
Mature forested	6:1	12:1	24:1
Other	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

- b. The city may increase the ratios under the following circumstances:
  - i. Uncertainty exists as to the probable success of the proposed restoration or creation;
  - ii. A significant period of time will elapse between impact and replication of wetland functions;
  - iii. Proposed mitigation will result in a lower category wetland or reduced functions relative to the wetland being impacted; or
  - iv. The impact was an unauthorized impact.
- c. The city may decrease these ratios under the following circumstances:
  - i. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions have a very high likelihood of success;
  - ii. Documentation by a qualified wetlands specialist demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the wetland being impacted; or
  - iii. The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.
- d. Credit/Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in Table 15.02.120-2, the city may allow mitigation based on the “credit/debit” method per Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report (Washington State Department of Ecology, March 2012).
- e. Wetland Mitigation Banks. The use of credits from a state- and/or federal-certified wetland mitigation bank is permitted as an alternative to providing on-site mitigation at the ratio specified in this section, provided the criteria of KMC 15.02.120.H.6 are met. Replacement ratios for projects using bank credits shall be consistent with replacement ratios and service areas specified in the certified bank instrument.

6. Mitigation actions shall be conducted within the same sub-drainage basin and on the site as the alteration except when all of the following apply:
  - a. There are no reasonable on-site or in sub-drainage basin opportunities or on-site and in sub-drainage basin opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or on-site buffers or connectivity are inadequate;
  - b. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and
  - c. Off-site locations shall be in the same sub-drainage basin and the same Water Resource Inventory Area (WRIA) unless:
    - i. The impact is located near the boundary of a WRIA; or
    - ii. Established regional or water shed goals for water quality, flood or conveyance, habitat or other wetland functions have been established and strongly justify location or mitigation at another site.
  - d. The city may authorize a one time temporary delay, up to one hundred twenty days, in completing minor construction and landscaping when environmental and/or seasonal conditions could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the mitigation plan. The justification must be verified and approved by the city, and include a bond in the form approved by the city attorney.
7. Where feasible, mitigation projects shall be completed prior to activities that will disturb 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 wildlife and flora.
8. Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, state policy on advance mitigation, and state water quality regulations.

**15.02.130 - Fish and wildlife habitat conservation areas.**

- A. Designation of Critical Fish and Wildlife Habitat Conservation Areas. Critical fish and wildlife habitat conservation areas are designated according to the classifications in the following Table 15.02.130-1:

**Table 15.02.130-1**

Classification	Description
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<p>(1) Areas with which state or federal-designated endangered, threatened, candidate or sensitive species have a primary association.</p>	<p>Areas which, if altered, may reduce the likelihood that the species will reproduce over the long term. Habitats associated with these species are those identified by Washington Department of Fish and Wildlife's current system for mapping species of concern. These habitats are designated as critical areas, where endangered, threatened, candidate and sensitive species are verified to have a primary association.</p>
<p>(2) Species and habitats of local importance.</p>	<p>Habitat: Includes seasonal ranges or habitat elements 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 may be areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These may also include habitats that are of limited availability or high vulnerability to alteration, such as cliffs, talus and wetlands; and</p>
	<p>Species: Wildlife species which require protective measures for their continued existence due to their population status or sensitivity to habitat alterations or are highly valued by the local citizens. Species meeting the above criteria but not depending upon a habitat of local importance (as listed above) to meet criteria habitat needs are those documented, verified, and mapped in Cowlitz County. Kalama's species of local importance include the western pond turtle, blacktail deer, bobcat, raccoon, and bear.</p>
<p>(3) Commercial and recreational shell fish areas.</p>	<p>There is recreational crawfish fishery in Kalama.</p>
<p>(4) Kelp and eelgrass beds; herring and smelt spawning areas.</p>	<p>There are no kelp, eelgrass beds, or herring spawning areas known to occur in Kalama. The Washington State Hydraulic Code guidelines and information from the Washington State Department of Fish and Wildlife are used to identify smelt spawning areas.</p>
<p>(5) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat.</p>	<p>Naturally occurring ponds are waters with a surface area of less than 20 acres but greater than one acre and man-made ponds developed as mitigation as part of a permitting process or mitigation agreement. Naturally occurring ponds do not include ponds deliberately created such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary</p>

	construction ponds (of less than three years duration), and landscape amenities. Kalama has one existing stormwater detention pond of long-term existence which borders I-5.
(6) Waters of the state.	Waters of the state shall be those defined in WAC 222-16-030 and 031, Forest Practices Board, and Definitions.
(7) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.	Waters of the state which regularly have game fish introduced. Kalama borders the Columbia River and Kalama River.
(8) State natural area preserves and natural resource conservation areas.	Currently, there are no known areas in the city of Kalama.
(9) Unintentionally created ponds.	Ponds with a surface area of less than 20 acres, but greater than one acre. No known ponds of this nature are located in Kalama.

B. Development Performance Standards. Regulated development, as described in Section 15.02.060 of this chapter, shall conform and be governed by the following items in this subsection, and in subsections C through H of this section. When impacts to critical fish and wildlife habitat cannot be avoided, the performance standards contained in this section shall be used to develop plans submitted for regulated activities. Critical area permits within fish and wildlife habitat conservation areas may be approved with conditions, approved or denied based on the following performance standards.

1. Develop a mitigation site plan and design scheme showing the following:
  - a. Locate buildings and structures in a manner that preserves the habitat or minimizes adverse impacts;
  - b. Locate passive pedestrian recreation facilities, including permeable walkways, trails, and viewing platforms, in the outer 25 percent of non-riparian habitat and riparian habitat areas and avoid the removal of mature trees.
  - b. Consolidate habitat and vegetated open space in contiguous blocks, and where possible locate habitat contiguous to other habitat, open space or landscaped areas to contribute to a continuous system or corridor that provides connections to adjacent habitat areas;
  - c. Use native species in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers;
  - d. Emphasize diversity in selection of plant materials and structure of landscaping;
  - e. Remove and/or control any noxious, or undesirable species of plants as identified by the Cowlitz County weed control board;

- f. Demonstrate how existing trees will be preserved, preferably in groves;
  - g. Preserve and introduce native plant species which serve as food, shelter from climatic extremes and predators, and structure and cover for reproduction and rearing of young for critical wildlife;
  - h. Preserve the natural hydraulic and ecological functions of drainage systems;
  - i. Preserve critical fish and wildlife habitat areas through maintenance of stable channels, adequate low flows, management of stormwater runoff, erosion and sedimentation;
  - j. Manage access to critical fish and wildlife habitat areas to protect species which are sensitive to human disturbance;
  - k. Maintain or enhance water quality through control of runoff and use of best management practices.
- C. Habitat Protection for Classification 1. A habitat management plan (Appendix D) will be required if the regulated activity is within a classification 1 habitat area, or identified within one thousand three hundred feet from an endangered, threatened, candidate or sensitive species point or habitat locations in classification 1 habitat area.
- 1. Habitat Management Plan Requirements.
    - a. The habitat management plan will be prepared by a qualified professional in coordination with the Washington State Department of Fish and Wildlife. (See Appendix D at the end of this chapter).
    - b. Habitat management plans will be sent to the Washington State Department of Fish and Wildlife and other appropriate state and federal agencies for comment with the SEPA checklist.
- D. Habitat Protection for Classification 2. (Table 15.02.130-1) Protection for these habitat areas shall be through the development performance standards in this section in coordination with the Washington State Department of Fish and Wildlife.
- E. Habitat Protection for Classifications 3 and 4. (Table 15.02.130-1) Protection of these areas shall be coordinated with the Washington State Department of Fish and Wildlife.
- F. Habitat Protection for Classifications 5, 6, 7 and 9. (Table 15.02.130-1) These classifications shall require riparian habitat areas as shown on Table 15.02.130-2 unless bordered by a riparian wetland, in which case the riparian habitat area shall consist of the wetland and buffer required by Table 15.02.120-2 of this chapter. Activities within these areas and buffers will require a critical areas permit. Within classification 6—types S, F, Np, and Ns waters shall also be protected as defined in WACs 222-16-030 and 031, Forest Practices Board, Definitions.
- G. Habitat Protection for Classification 8. Protection for state natural area preserves and natural resource
- H. Riparian Habitat Areas. Unless permitted under subsection B of this section or otherwise allowed in this title, all structures and activities shall be located outside of the riparian habitat areas.
- 1. Establishment of Riparian Habitat Areas. Riparian habitat areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other, and that are located adjacent to rivers, perennial or intermittent streams, drainage ways, seeps, and springs.

2. Riparian Habitat Area Widths. Riparian habitat area widths are shown in the table in KMC Table 15.02.120-2. A riparian habitat area shall have the width specified unless a greater width is required pursuant in subsection I or a lesser width is allowed pursuant to subsection J or K. Widths shall be measured outward in each direction, on the horizontal plane, from the ordinary high water mark. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

**Table 15.02.130-2**

**Riparian Habitat Areas**

Water Types	Minimum RHA Widths
Type S	Per City of Kalama Shoreline Master Program (SMP) adopted under Chapter 15.08 KMC
Type F (channel >20 feet wide, as measured per WAC 222-16-030(5)(f))	150 feet
Type F (channel ≤ 20 feet wide, as measured per WAC 222-16-030(5)(f))	100 feet
Type Np	100 feet
Type Ns	50 feet
Any stream type that is culverted or buried is not subject to limits at that site	0 feet

- I. Increased Riparian Habitat Area Widths. The recommended riparian habitat area widths shall be increased, as follows:
  1. When the environmental review determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;
 

When the frequently flooded area exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the frequently flooded area;
  3. When the channel migration zone exceeds the recommended riparian habitat area width, the riparian habitat area shall extend to the outer edge of the channel migration zone;

4. When the habitat area is in an area of high blowdown potential, the riparian habitat area shall be expanded an additional fifty feet on the windward side; and
  5. When the habitat area is with an erosion or landslide hazard area, or buffer, the riparian habitat area shall be the recommended distance, or the erosion or landslide hazard area or buffer, whichever is greater.
- J. Riparian Habitat Area Width Averaging and Reduction. The city may allow the recommended riparian habitat area width to be averaged and/or reduced in accordance with critical area report prepared by a qualified professional only if:
1. The width reduction will not reduce stream or habitat functions, including those of nonfish habitat;  
The width reduction will not degrade the habitat, including habitat for anadromous fish;
  3. The proposal will provide additional habitat protection;
  4. The total area contained in the riparian habitat area of each stream on the development proposal site is not decreased;
  5. The minimum riparian habitat area width is not reduced by more than fifty percent in any one location;
  6. The width reduction will not be located within another critical area or associated buffer; and
  7. The reduced riparian habitat area width is supported by best available science.
- K. Isolated Riparian Habitat Areas. The city may exclude isolated riparian habitat areas from the riparian habitat area provisions of KMC 15.02.130.H and L provided:
1. Impervious surfaces from previous development, roadways, or flood control structures isolate the riparian habitat area from providing habitat, water quality, or other functions to rivers, perennial or intermittent streams, drainage ways, seeps, and springs; and  
Riparian habitat area is provided between the ordinary high water mark to the impervious surfaces or toe of the flood control structures;
  3. Stream and habitat functions, including those of nonfish habitat, is not reduced;
  4. Additional habitat protection is provided over existing conditions;
  5. The isolated riparian habitat area is not located within another critical area or associated buffer; and
  6. Exclusion of the isolated riparian habitat areas is supported by best available science.
- L. Riparian Habitat Mitigation. Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same sub-drainage basin as the habitat impacted.

**15.02.140 - Frequently flooded critical areas.**

- A. Frequently Flooded Area Classifications and Designation. All lands identified in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, as amended, and approved by the city, as within the one hundred-year floodplain are designated as frequently flooded areas. These maps are based on the following:

1. Flood Insurance Study—City of Kalama.
- B. Development Limitations. All development within designated frequently flooded areas shall comply with the city of Kalama's floodplain management ordinance, Chapter 14.16, as now or hereafter amended.

**15.02.150 - Geologic hazard areas.**

- A. Geologically hazardous areas are those areas susceptible to erosion, sliding, earthquake, or other geological events that pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:
  1. Erosion hazard;
  - Landslide hazard;
  3. Seismic hazard;
  4. Mine hazard;
  5. Other geological events.
- B. Classifications of Geologically Hazard Areas. Geologic hazard areas fall within two classifications:
  1. Areas of Geological Concern. Slopes between fifteen percent to thirty percent or areas where there is documentation that geological hazard exists.  
  
    Areas of Potential Geological Hazard. Slopes greater than thirty percent, or areas where no documentation exists as to the presence or absence of a geological hazard.
- C. Additional Requirements for Geologically Hazardous Areas.
  1. A critical areas report for a geologically hazardous area shall be prepared by a qualified engineer or geologist, licensed in the state of Washington, with experience analyzing geologic, hydrologic, and ground water flow and has experience preparing reports for the relevant type of hazard.
- D. Designations of Specific Hazard Areas.
  1. Landslide Hazard Areas.
    - a. Areas of historic failure, such as areas designated as quaternary slumps, earthflows, mudflows or landslides; or
    - b. Area with any of the following:
      - i. Slope greater than fifteen percent;
      - ii. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
      - iii. Springs or ground water seepage.
    - c. Slopes that are parallel or sub-parallel to planes of weakness; such as bedding planes, joint systems, and fault planes.
    - d. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action;



- e. Areas located in a canyon, on an active alluvial fan, or that are presently subject to inundation by debris flows or catastrophic flooding;
- f.
- g. Slopes that are greater than thirty percent and higher than ten feet, unless slopes are previously engineered;
- h. Areas that include soil creep which is a gradual movement of soil in response to gravity and weather. Severe soil creep can be an indicator of future landslide activity.

Erosion Hazard. Erosion hazard areas are those areas identified by the presence of soils which are recognized as having a severe erosion hazard by the U.S. Department of Agriculture Soil Conservation Service, Cowlitz Area, Washington.

- 3. Seismic Hazard Areas. For the purposes of this classification, a seismic hazard area is any area indicated by a zone 2B or higher rating as defined by the Seismic Risk Map of the United States, adopted by the Washington State Legislature and defined in the Uniform Building Code (UBC).
- 4. Mine Hazard Areas. For the purposes of this classification, mine hazard areas are:
  - a. Abandoned mines, shafts, tunnels and/or workings where locations are known;
  - b. Abandoned mines, shafts, tunnels and/or workings where exact locations are unknown, but based upon the best available information that there is good cause to believe it is within an area which may be reasonably delineated;
  - c. Abandoned powder magazines or bunkers.
- 5. Volcanic Hazard Areas. For the purposes of this classification, volcanic hazard areas are areas subject to pyroclastic flows, lava flows, and inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

E. Development Standards.

- 1. Development Standards for Landslide Hazard and Erosion Hazard Designations. Any area identified as potential geological hazard for landslides and erosion will require further studies and methods of mitigation prior to any consideration of development in the area. Any allowed or regulated activity on areas identified as landslide or erosion hazards or their buffers shall conform to the following standards:
  - a. Grading. The city has adopted Chapter 33 of the Appendix to the 1997 Uniform Building Code, Excavation and Grading. The applicable section in the latest version of the Building Code adopted by the city applies unless the activity is exempted, an excavation and grading permit is required.
    - i. Clearing, grading and other construction activities shall not aggravate or result in slope instability or surface sloughing.
    - ii. Slope disturbance shall be minimized. Clearing, grading or filling of landslide or erosion hazard areas shall be limited to the period between April 1st and October 1st, unless the applicant provides an erosion control plan (approved by the city) that specifically identifies methods of erosion control for wet-weather conditions.
    - iii. All authorized clearing for roads and utilities shall be limited to the minimum necessary to construct the engineered design.

- iv. Undergrowth and vegetation shall be retained to the maximum extent feasible.
  - v. No dead vegetation or other foreign material shall be placed within landslide or erosion hazard areas, other than approved for bank stabilization or if such grading is consistent with authorized activities specified in a geological report.
- b. Landslide Hazard Area Buffers. Landslide hazard areas shall require minimum buffers from the top, toe, and sides of slopes, as set forth below:
- i. Slopes that are greater than thirty percent and higher than ten feet and all other landslide hazard areas: twenty-five feet, unless the buffer is reduced or alterations of the slope are approved based on the City's review and concurrence with a geotechnical report demonstrating that no adverse impact will result from the buffer reduction or slope alteration.
- c. Alterations of Erosion Hazard Areas. Compliance with Kalama Municipal Code Chapter 14.18, Erosion Control, is required and includes the use of best management practices (BMP).
- i. Disturbance of trees and vegetation shall be minimized to reduce erosion and maintain existing stability of hazard areas.
  - ii. Vegetation removal on the slopes of waterways between the ordinary high-water mark and the top of the banks shall be minimized because of the potential for erosion.
  - iii. Vegetation and organic soil material shall be removed from fill sites prior to the placement of fill.
  - iv. Thinning of limbs of individual trees is preferred over tree removal as a means to provide view corridors.
  - v. Vegetative cover or engineered ground covers shall be placed on any disturbed surface to the extent feasible, unless other stabilization measures including, but not limited to armoring, are used.
  - vi. Drainage. Surface drainage, including downspouts, shall not be directed across the face of a hazard area. If drainage must be discharged from the top of a hazard area to its toe, it shall be collected above the top and directed to the toe by tight line drain. An energy-dissipating device at the toe for discharge to a swale or other acceptable natural drainage areas.
  - vii. Stormwater retention and detention systems, including percolation systems utilizing buried pipe, are prohibited unless a geological report determines slope stability shall not be affected. The systems shall be designed by a qualified professional. The qualified professional shall also certify that the systems are installed as designed.
  - viii. The proposed project will not increase the rate of surface water discharge or sedimentation and will not decrease the adjacent property slope stability.
  - ix. Setbacks. A hazardous area setback is required from the top, toe and along all sides of any existing landslide or erosion hazard areas, as determined in the geological report.
    - (A) Based on the results of the geological report, the city may increase or decrease the setback as indicated.
    - (B) The setback shall be clearly staked before and during any construction or clearing.

- x. Sanitary Sewage Lines. For the purpose of landslide or erosion control, the sanitary sewage lines shall be located outside of the hazard area buffer, unless otherwise justified by a qualified professional and approved by the city. The placement of all sanitary sewage lines must be in compliance with all local government health regulations.
- xi. Design Guidelines.
  - (A) Structures should be clustered where possible to reduce disturbance and removal of vegetation.
  - (B) Foundations shall be stepped to the contours of the slope to the extent possible.
  - (C) Roads, walkways and parking areas should be designed to parallel the natural contours of the site.
  - (D) Development proposals shall be designed to minimize the impacts of the project resulting in the least disturbance to the adjacent affected areas.

Development Standards—Seismic Hazard Areas. All development within areas that meet the classification for seismic hazard areas shall comply with the latest version of the building code adopted by the city.

- 3. Development Standards—Mine Hazard Areas. Development adjacent to a mine hazard is prohibited unless the applicant can demonstrate the development will be safe. If a proposal is located adjacent to a mine hazard area, a geological report may be required.
- 4. Development Standards—Volcanic Hazard Areas. Development within a Volcanic Hazard Area must provide an evacuation and emergency management plan approved by the City Administrator or their designee. At a minimum, the evacuation and emergency plan must demonstrate that the evacuation route has been determined to not contain any other potential natural hazards, such as landslide or flood hazards, that could cause a blockage or destruction of the evacuation route during an event (i.e., seismic event triggers a landslide that results in the evacuation route becoming impassible).

**15.02.160 - Critical aquifer recharge areas.**

- A. Critical Aquifer Recharge Areas (CARA's) - Location. Critical aquifer recharge areas are determined by the combined effects of soil types and hydrogeology and are those areas located within Group A and Group B 10-Year Time of Travel Wellhead Protection Areas (WHPA's) per the Cowlitz County CARA's Map (2016).
  - 1. Classification - Adoption by Reference. Critical aquifer recharge areas shall be classified per Cowlitz County Code (CCC) Section 19.15.160 Subsection A through Subsection B, which is hereby adopted by reference.
- B. Regulated Activities - Adoption by Reference. Activities in critical aquifer recharge areas shall be regulated by Cowlitz County Code (CCC) Section 19.15.160 Subsection D through Subsection F, which is hereby adopted by reference.
- C. Hydrogeologic Testing and Site Evaluation - Adoption by Reference. Critical area assessments shall be consistent with Cowlitz County Code (CCC) Section 19.15.160 Subsection C, which is hereby adopted by reference.

**15.02.170 - Mitigation plan performance standards.**

- A. Mitigation Planning Requirements. All critical areas mitigation projects required pursuant to this chapter either as a permit condition or as the result of an enforcement action shall follow a mitigation plan prepared by or on behalf of the applicant and approved by the city council
- B. When a mitigation plan is required, the planning commission shall hold a public hearing. Prior to the public hearing, resource agencies shall be notified of the mitigation plan and any comments shall be considered by the planning commission during the public hearing. The city council shall make the final decision on the mitigation plan, which shall be based on satisfaction of the following standards:
  - 1. The mitigation plan shall be prepared by an applicant or qualified professional.  
The mitigation plan shall include:
    - a. An assessment of the existing function and values of the critical area;
    - b. The functions and values that will be lost;
    - c. The critical area's expected functions and values after mitigation.
  - 3. Objectives shall be stated in measurable terms, if feasible.
  - 4. The mitigation plan shall specify and describe how functions and values will be replaced.
  - 5. The mitigation plan shall include provisions for monitoring the mitigation area as reasonably necessary to determine whether stated objectives have been accomplished. A contingency plan shall be included in the event the stated objectives are not accomplished.
  - 6. Mitigation shall be provided on-site, except where on-site mitigation is not scientifically feasible, economical or practical due to physical features of the property. The burden of proof shall be on the applicant to demonstrate that mitigation cannot be provided on-site.
  - 7. When mitigation cannot be provided on-site, mitigation shall be provided in the immediate vicinity of the permitted activity on property owned or controlled by the applicant where such mitigation is practical and beneficial to the critical area and associated resources. Where possible, this means within the same hydrologic unit as the location of the proposed project.
- C. Restoration shall be required when a critical area has been altered by the landowner after the adoption of the critical areas ordinance and prior to project approval or when a critical area is temporarily affected by construction or any other temporary phase of a project.

**15.02.180 - Reasonable use exception.**

If an applicant asserts that the application of this chapter would deny him reasonable use of his property, the applicant may apply for a reasonable use exception. A reasonable use exception is intended to address those cases in which the application of this chapter unreasonably restricts all economic use of parcel of land and the restriction cannot be remedied by other authorized techniques or conditions.

- A. Only the city council is authorized to issue reasonable use exceptions under this code. A request for a reasonable use exception shall be made on forms provided by the city clerk-treasurer and shall contain the following information:
  - 1. That the application of this chapter to the subject property will deny all reasonable economically viable use of the subject property otherwise allowed by applicable law;

That because of special circumstances applicable to the subject property including size, shape, topography and location, the application of this chapter would result in unwarranted hardship;

3. That a strict application of this chapter will deprive the land owner of rights commonly enjoyed by other properties in similar areas with the critical area or buffer;
  4. That the granting of a reasonable use exception will not confer upon a land owner a special privilege that would be denied by the terms of this chapter to other lands or structures with a critical area or buffer that are of a similar nature or circumstance;
  5. That as a result of the proposed development varying from the terms of this chapter there will be no threat to the public health, safety or welfare on or off the subject property;
  6. That the request is not based upon conditions or circumstances which are the result of actions by the current or previous land owners or that the request arises from any condition related to land or building use, either permitted or nonconforming, on any neighboring property. Such conditions or circumstances include:
    - a. Prior subdivision or segregation of the subject property, or changes to the boundaries of the subject property through a boundary line adjustment or otherwise,
    - b. Prior actions taken in violation of this chapter or any local, state or federal law or regulation, or
    - c. Natural constraints of the subject property that would otherwise preclude the proposed development activities;
  7. Before an application for a reasonable use exception is acted upon, a review of the application, for completeness and clarity shall be conducted by the city planner and the finding shall be forwarded to the city council;
- B. Any reasonable use exception granted shall be for the least intrusion into the critical area or buffer necessary to allow an economically viable use of the subject property;
  - C. That any authorized alteration of a critical area or buffer under this section shall be subject to conditions established by the city council in accordance with this chapter, and may require mitigation under an approved mitigation plan; and
  - D. A reasonable use exception application may accompany an application for development permit, along with any applicable fees.

#### **15.02.190 - Appeals.**

An appeal of an administrative critical area determination or the administrative decision on a critical area permit may be made before the Planning Commission of the city per KMC Chapter 2.44. An appeal of any city council decision on a critical area permit, mitigation plan or reasonable use exception may be made to the Superior Court of Cowlitz County pursuant to state law.

#### **15.02.200 - Enforcement.**

This chapter will be enforced as set forth in KMC Chapter 17.10.

**15.02.210 - Fees.**

Fees for administering the provisions of this chapter shall be as set by resolution of the city council. These fees are in addition to any other applicable application fees. Actual costs include but are not limited to, copies, postage, publication costs, city planner fees, and any outside consultant fees.

**15.02.220 - Liability for damages.**

This chapter shall not be construed to hold the Kalama city council, or any officer or employee thereof, responsible for any damages to persons or property by reason of the certification, inspection or noninspection of any building, equipment or property as herein authorized. The purpose of this code is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this code.

**15.02.230 - Review.**

The effects and operations of this chapter shall be reviewed by the Kalama planning commission twelve months after the date of adoption. Subsequent reviews will be completed as necessary by the planning commission. The planning commission shall make recommendations for changes and amendments it deems necessary to the Kalama city council.

**15.02.240 - Adoption by reference.**

Pursuant to RCW 35A.12.140, one copy of RCW 64.04.130; RCW 84.34.020(2); and RCW 76.09; and one copy of WAC 173.303; WAC 173.360; WAC 222; WAC 232-12-011; and WAC 365-195-900 are hereby adopted by reference, these statutes are on file with the Kalama city clerk-treasurer for use and examination by the public.

**APPENDIX A**

**Critical Area Permits.** If the critical area determination reveals that there is a critical area(s) on or adjacent to the property subject to the underlying land use or development permit, an application for a critical area permit must be submitted. No development or activity may take place on the property within or adjacent to the critical areas except in conformance with this chapter and an issued critical areas permit.

A complete application for a critical area permit shall consist of the following:

1. A Detailed Site Plan Drawn to Scale. The site plan should clearly show the following information:
  - a. North arrow,
  - b. Property boundary line and dimensions,
  - c. Location and dimensions of all existing and proposed development or alternations, including public and private roads, sewer and water lines, wells, utilities, easements, water sources, lakes and springs, drainage facilities, on-site sewage disposal and drainfield areas, within the property boundary,
  - d. All critical areas, buffers and the development proposal with dimensions,
  - e. Limits of any areas to be cleared;

A copy of the determination of critical area issued by the city showing it having been recorded through the county auditor's office;

3. A stormwater management plan for the project with consideration of the drainage impacts based on "best management practices";
4. Critical area report(s) addressing the specific critical area(s) on the site including all information as defined in the applicable Appendix(s) B through E. This report must also include the following:
  - a. The date the report was prepared,
  - b. The names, and qualifications of all person(s) preparing the report,
  - c. The professional qualifications of the person(s) preparing the report,
  - d. The dates and documentation of any fieldwork performed on the site,
  - e. A statement verifying the accuracy of the report, as well as all assumptions relied upon in the report,
  - f. An assessment of the probable cumulative impacts to critical areas resulting from development of the site,
  - g. Analysis of site development alternatives,
  - h. A SEPA environmental checklist if the site is located within any of the following:
    - i. Geologic hazard area,
    - ii. Wetlands,
    - iii. Riparian habitat area;
5. A permit fee.

## **APPENDIX B**

**Geological Hazard Area Reports.** All areas found to contain or adjoin a geologically hazardous area as set forth in Section 15.02.150 of this chapter shall submit a critical areas report prepared by a qualified professional that contains an assessment of the geological hazards. All items requested must be addressed in the report. If an item is not applicable to an application then indicate NA and why it is not applicable. The reports shall include all of the following:

Part 1—For all applications.

1. The applicant must submit all information required by KMC 15.02.090 (Appendix A);  
A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas within two hundred feet of the project sited shall be addressed in the report;
3. Erosion vulnerability of site;
4. A site plan of the area delineating the following:
  - a. The type and extent of the geologic hazard areas, and any other critical areas and buffers on, adjacent to, within two hundred 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,
  - c. Clearing limits,
  - d. An overview of the existing channel or drainage way characteristics and stream hydraulics at the subject property;
5. An assessment of the probability for storm-induced erosion to occur along the drainage way on the subject property and the estimated extent of the property that would be affected;
  6. A recommendation for the minimum no-disturbance buffer and minimum building setback from any geological hazard based upon the geological analysis.

Part 2—For all applications involving large multiple lot developments such as subdivisions, small lot developments, planned unit developments, manufactured home parks, apartments or condominiums, or large commercial or industrial developments as well as any application for property located within or adjacent to a known geological hazard area. Additional information required:

1. Topographic data—contour map of proposed site at a scale of 1":200', that clearly delineates the slopes between fifteen and twenty-nine percent and thirty percent and greater, including figures for area coverage of each slope category on the site;  
Subsurface data—boring logs and exploratory methods, soil and rock stratigraphy, ground water levels including seasonal changes;
3. Site history—description of any prior grading, soil instability or slope failure;
4. Seismic hazard—data concerning the vulnerability of the site to seismic events;
5. Slope stability studies and opinion of slope stability;
6. Proposed angles of cut and fill slopes and site grading requirements;
7. Structural foundation requirements and estimated foundation settlements;
8. Soil compaction criteria;
9. Proposed surface and subsurface drainage;
10. A cross-section map, drawn to scale and at five-foot contour intervals, from the edge of the stream or drainage way or river's surface to the furthest landward boundary of the property, and including the proposed development;
11. Lateral earth pressures;
12. Suitability for fill;
13. Laboratory data and soil index properties for soil samples;
14. Building limitations; and
15. Site evaluation: evaluation of the ability of the site to accommodate the proposed activity. Where a valid geological report has been prepared within the last five years for a specific



site, and where the proposed activity and surrounding site conditions are unchanged, such report may be referenced in a new report.

## APPENDIX C

**Wetland Report.** All areas found to contain or adjoin a wetland as set forth in Section 15.02.120 of this chapter shall submit a critical areas report prepared by a qualified professional. All items required by the report must be addressed in the report. If an item is not applicable to an application then indicate NA and why it is not applicable. The report shall include all of the following:

1. The applicant must submit all information required by KMC 15.02.090 (Appendix A);  
An on-site wetland delineation performed by a qualified professional as defined in Section 15.02.050. The wetland boundaries shall be staked and flagged. The recommended wetland buffer shall be staked and flagged with different colored flags than those used for the wetland delineation;
3. In addition to the requirements of Appendix A the site plan shall include the following:
  - a. Wetland boundaries based upon a wetland professional's delineation and depicting sample points and differing wetland types if any,
  - b. Recommended wetland buffer boundary,
  - c. Internal property lines such as rights-of-way, easements, etc.,
  - d. Topographical variations;
4. The final report must include each of the following:
  - a. Site characteristics including topography, total acreage, delineated wetland acreage, other water bodies, vegetation, soil types, etc., and distances to and sizes of other off-site wetlands and water bodies within one-quarter mile of the subject wetland,
  - b. Identification of the wetland's classification as defined in this Chapter 15.02, including the rationale for selecting the wetland category,
  - c. Analysis of functional values of existing wetlands, including flood control, water quality, aquifer recharge, fish and wildlife habitat, and hydrologic characteristics,
  - d. A complete description of the proposed project and its potential impacts to the wetland and, if applicable, adjacent off-site wetlands, including construction impacts,
  - e. Discussion of project alternatives including total avoidance of impacts to wetland areas,
  - f. If mitigation for wetland impacts is proposed, a description and analysis of that mitigation,
  - g. A wetland buffer recommendation and rationale for the buffer size determination and activities that could be and should not be allowed within the buffer zone.

## APPENDIX D

**Habitat Management Report Requirements.** All areas found to contain or adjoin a habitat conservation area as set forth in Section 15.02.130 of this chapter shall submit a critical areas report prepared by a qualified professional. All items required by the report must be addressed in the report. If

an item is not applicable to an application then indicate NA and why it is not applicable. The report shall include all of the following:

1. The applicant must submit all information required by KMC 15.02.090 (Appendix A);  
A description of state or federally designated endangered, threatened or sensitive fish or wildlife species, or species of local importance, on-site or adjacent to the subject property within a distance typical of the normal range of the species;
3. A description of the critical wildlife habitat for the identified species known or expected to be located on-site or immediately adjacent to the subject property;
4. The site plan as required in Appendix A shall clearly identify and delineate critical fish and wildlife habitats;
5. An evaluation of the project's effects on critical fish and wildlife habitat both on and adjacent to the subject property;
6. A summary of any federal, state or local management recommendations which have been developed for the critical fish or wildlife species or habitats located at the site;
7. A statement of measures proposed to preserve existing habitats and restore area degraded as a result of proposed activities;
8. A description of proposed measures that mitigate the impacts of the project;
9. An evaluation of on-going management practices which will protect critical fish and wildlife habitat after the project site has been fully developed, including proposed monitoring and maintenance programs of the subject property.

## APPENDIX E

**Aquifer Recharge Areas (15.02.160) Hydrogeologic Testing and Site Evaluation.** If hydrogeologic testing and site evaluation are required, they shall be conducted by a qualified professional and include the following. All items required by the report must be addressed in the report. If an item is not applicable to an application then indicate NA and why it is not applicable.

1. A characterization of the site and its relationship to the aquifer and evaluation of the ability of the site to accommodate the proposed activity;  
A discussion of the effects of the proposed project on ground water quality and quantity;
3. Recommendations on appropriate mitigation, if any, to assure that there shall be no degradation of ground water quality or quantity.

In addition, the testing and evaluation must include, but not be limited to, an analysis of:

1. Geologic setting and soils information of site and surrounding area;  
Water quality data, including pH, temperature, conductivity, nitrates and bacteria;
3. Location and depth to perched water tables;
4. Recharge potential of facility site (permeability/transmissivity);

5. Local ground water flow, direction and gradient;
6. Surface water locations within one thousand feet of the site.

**Section 2.** Severability. If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance is declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining parts of this ordinance.

**Section 3.** This ordinance shall become effective five days after passage, approval, and publication as provided by law.

Passed by the City Council of the City of Kalama at a regular meeting held on the 21st day of June, 2017.

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Mayor Pete Poulsen

Attest:

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Coni McMaster, Clerk/Treasurer

Published: 6/29/2017

Approved as to form:

Effective: 7/5/2017

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City Attorney