

# **Critical Areas Comprehensive Plan Updates**

# Supplemental Changes to Attachment A to Proposed Ordinance 2023-0440

# 2024 King County Comprehensive Plan

March 2024

# **Orientation:**

Page numbers and black text reflects the transmitted version of the proposed 2024 King County Comprehensive Plan Update, which was sent to Council in December 2023.

<u>Underlined</u> text is proposed text to be added. Text with ((strikethroughs)) is existing text that is proposed to be removed.

Red text shows new proposed Best Available Science-driven and critical areas-related changes, including updates to the proposed 2024 KCCP Update changes.

Text that is both <u>underlined and stricken</u> was originally proposed to be added in the 2024 KCCP Proposed Ordinance and is now proposed to be not added by the new critical areas changes.

# In Chapter 1 Regional Growth Management Planning, on page 1-25, amend as follows:

# <u>Climate Change</u>

Climate change is a paramount challenge with fundamental and far-reaching consequences, a threat multiplier exacerbating inequities and intensifying natural hazards – flooding, landslides, wildfires, and extreme heat – that put the County's people, economy, and environment at risk. The County's approach to climate action has three core elements: (1) reducing greenhouse gas emissions, both from government operations and at the countywide scale; (2) advancing climate equity and community-driven climate policy, especially for frontline communities; and (3) preparing for the impacts of climate change while increasing climate resilience. The following guiding principles for climate action formalize the County's commitment to lead on climate action, while also integrating and highlighting principles that guide County climate action.

# In Chapter 3 Rural Areas and Natural Resource Lands, on page 3-5, amend as follows:

The glacial soils and terrain that give King County its natural beauty also create significant environmentally critical areas, such as steep, erodible slopes(( $_{7}$ )); wetlands; landslide hazard areas; alluvial fans; and groundwater recharge areas. ((Maintenance)) Retention of tree cover, natural vegetation, and wetlands are critical to the continued functioning of the ecosystem and preservation of rural character. The interplay of forest cover, soils, and water are essential to watershed health, ensuring adequate unpolluted groundwater recharge, stormwater runoff flow control and pollution reduction, carbon sequestration, and habitat functions.

# In Chapter 3 Rural Areas and Natural Resource Lands, starting on page 3-19, amend as follows:

R-306 A residential density of one home per 10 acres shall be applied in the Rural Area where:

a. The lands are adjacent to or within one-quarter mile of designated ((Agricultural Production Districts, the Forest Production District or legally

approved long-term mineral resource extraction sites)) Natural Resource Lands; ((or)) b. The lands contain significant environmentally constrained areas as defined by county ((ordinance, policy or federal or)), state, or federal law((, or regionally significant resource areas or substantial critical habitat as determined by legislatively approved ((basin plans or)) Watershed Resource Inventory Area Plans); ((and)) or C. ((The predominant lot size is greater than or equal to 10 acres in size)) A residential density of one home per five acres would harm or diminish the surrounding area, burden infrastructure, increase development pressure, or be inconsistent with the development patterns promoted by the Comprehensive Plan. R-308 A residential density of one home per five acres shall be applied in the Rural Area where: The lands are more than one-quarter mile away from designated Natural a. Resource Lands; The lands ((is)) are physically suitable for development with minimal: b. environmentally sensitive features as defined by county, state, or federal law((; regionally significant resource areas; or critical habitat as determined by legislatively ((adopted watershed based)) approved Watershed Resource Inventory Area plans)); and Development can be supported by rural services; ((<del>b.</del>\_\_\_\_ The land does not meet the criteria in this plan for lower density designations; and The predominant lot size is less than 10 acres.)) **d**.\_\_\_ This residential density would not harm or diminish the surrounding area, C. burden infrastructure, increase development pressure, and be inconsistent with the development patterns promoted by the Comprehensive Plan.

#### In Chapter 3 Rural Areas and Natural Resource Lands, on page 3-28, amend as follows:

 R-325
 Golf facilities shall be permitted as a conditional use in the RA-2.5 and RA-5 zones

 and when located outside of Rural Forest Focus Areas((, Regionally Significant

 Resource Areas and Locally Significant Resource Areas((, as a conditional use, in the RA-2.5 and RA-5 zones)).

# In Chapter 3 Rural Areas and Natural Resource Lands, starting on page 3-43, amend as follows:

King County's Natural Resource Lands contribute to the economic prosperity of the region. They are the lands with

long-term commercial significance for farming, forestry, and mineral extraction. Businesses that rely on resource lands provide jobs and products, such as food, wood, and gravel. They also are an important part of the cultural heritage. Conservation and responsible stewardship of working farm and forest lands also produces multiple environmental benefits, such as:

- Stream and salmon protection;
- Clean air and water;
- Wildlife habitat;
- Landslide hazard reduction;
- Flood risk reduction;
- Groundwater recharge and protection; and
- Carbon sequestration and reduced greenhouse gas emissions.

# In Chapter 3 Rural Areas and Natural Resource Lands, starting on page 3-56, amend as follows:

<u>King County's extensive forest lands provide a wide range of economic and ecological benefits</u>. <u>Under the right</u> <u>conditions</u>, however, these same forests are also vulnerable to wildfire and post-wildfire debris flows and floods, creating potentially significant risks for communities in the wildland-urban interface.

Climate change is increasing the potential for wildfire in western Washington. Warmer seasonal temperatures and drier summers create conditions more favorable for wildfire for longer periods of time. Climate change may also lead to changes in insect and pathogens that can leave forests more vulnerable to drought and fire. The potential for large, fast-moving fires is greatest when these conditions coincide with strong east wind events. The potential for fast-moving debris flows and floods is high after a wildfire has occurred, reducing soil infiltration, and increasing risks for more overland surface water flow during a rainfall event. Population growth and development in areas within and in proximity to forested areas (the wildland-urban interface) are also important factors increasing the potential for wildfire in western Washington, as well as the human and economic costs of wildfire.

Planning for wildfire can help reduce wildfire risks to residents, communities, and infrastructure. King County has three strategic priorities for wildfire risk reduction in King County: (1) increasing forest resilience to wildfire; (2) reducing risks to communities and infrastructure in the wildland-urban interface; and (3) strengthening emergency response.

# In Chapter 3 Rural Areas and Natural Resource Lands, on page 3-62, amend as follows:

Even farmland in the Farmland Preservation Program is challenged by pressures from adjacent development, the need to maintain drainage and irrigation systems, nonfarmer ownership, <u>alluvial fan hazards</u>, and high real estate costs. To protect the farmland for the long term, investments in improving the farmability and managing the easements to ensure compliance are necessary.

# In Chapter 3 Rural Areas and Natural Resource Lands, starting on page 3-63, amend as follows:

The river valleys in King County are ((critical locations)) important natural resource areas for agriculture, salmon habitat and natural floodplain processes. In compliance with the ((g))Growth ((m))Management Act, portions of several of these valleys were designated as Agricultural Production Districts to protect ((the diminishing farmland))) land for longterm commercial ((agriculture)) agricultural uses, ((thereby preventing their conversion to other uses that are often incompatible with habitat protection or that would require expensive flood risk reduction projects)) including the highest quality soils for food production, and to limit conversion of the land uses to those that would be incompatible with viable, long-term, commercial agriculture. Because mMany areas of farmland within Agricultural Production Districts are: located on a geologically active landscapes; below upland creeks and streams; on or adjacent to an alluvial fan; and/or within floodplains, floodways, or other low-lying areas. Because of this, the ability to manage drainage and infrastructure to support farming is an important aspect of retaining farmable land and supporting continued agricultural uses within the Agricultural Production Districts. Management in these areas requires consideration of not only current, but future impacts to agricultural use, geological processes, and stream function and values essential to fish passage and spawning.

#### In Chapter 3 Rural Areas and Natural Resource Lands, on page 3-64, amend as follows:

((The farmers in the county support fish protection and fish recovery through many regulated and voluntary actions. King County recognizes that fish, flood management, and farm interests must work together in a collaborative manner. It is essential that farmers and other property owners in each watershed be directly included in planning and in the review of integrated, watershed wide strategies that support the needs of agriculture, fish recovery, and flood risk reduction and floodplain management. Specific habitat protection rules should not jeopardize the agricultural productivity within the Agricultural Production Districts.)) Some of King County's Agricultural Production Districts have vast areas of designated and mapped floodways and 100-year floodplains. King County is committed to restoring floodplain processes and mitigating flood risks to ensure human health and protect public safety, reduce reducing the risk of property damage, maintain maintaining critical infrastructure supporting residents and businesses, restoring salmon habitat, and to reduce reducing public and private economic impacts of flood events. As climate change results in more frequent and more damaging floods, agriculture businesses and homes will need increased support for home and agricultural building elevations. Maintaining land use rules that prevent conversions of agricultural land to other uses other than habitat restoration or flood protection will have a co-benefit of limiting new development that may be at increased risk of damage from floods and alluvial fan hazards.

# In Chapter 3 Rural Areas and Natural Resource Lands, starting on page 3-77, amend as follows:

An alluvial fan is a ((depositional landform along a watercourse)) is a fan shaped deposit of sediment transported by flowing water, called alluvium, where there is an abrupt decrease in stream gradient ((and a resulting area of active sediment deposition)) is a fan shaped deposit if sediment and organic debris formed where a stream flows or has

flowed out of an upland area onto a level plain or valley floor or into a body of water because of a sudden change in sediment transport capacity (e.g. significant change in slope or confinement). ((Most a))<u>Alluvial fans in King</u> County ((form)) <u>occur</u> where steep tributary streams ((discharge)) transition at the base of hillsides onto ((nearly)) the level river floodplains <u>on a valley floor</u>.)) ((Since m))<u>M</u>uch of the county's farmland is located in valley floors, ((some)) <u>and</u> agricultural landowners <u>frequently</u> have properties on ((<del>or containing</del>))<u>active</u> alluvial fans ((that are significantly affected by t)). The episodic deposits of ((upslope)) sediment and debris that ((accumulate on their land)) typically naturally occur on alluvial fans can fill reduce the capacity of stream channels and wetlands, and debris flows may cover fertile farmland, disrupting agricultural operations. ((These events result in obstructed stream channels, filled wetlands, covered farmland, and disruptions in operations. Water is redirected into unexpected places. Permits, regulations, and the lack of approved management practices make it difficult to remedy the situation to regain operations and farm viability.)) Sudden shifts in the location of streams on alluvial fans can also flood agricultural buildings and farm residences. Obtaining permits allowing active management to remove the accumulated sediments and reestablish stream channels can be difficult given the regulations that apply to critical areas, such as for alluvial fan hazards, aquatic areas, and floodplains.

King County <u>regulations</u> should ((<u>use pilot or demonstration projects and</u> <u>multi-agency collaboration to develop a new suite of practices that will</u>)) provide ((<u>options</u>)) <u>to manage alluvial fans</u> regulatory pathways</u> for landowners ((<del>whose</del> <u>existing operations, residences, or infrastructure</u> are affected</del>)) to protect existing <u>residences and agricultural operations that are threatened</u> by alluvial fan ((<del>deposits</del>))) <u>hazards</u>. These <u>pathways</u> should provide timely ((<del>and cost effective</del>)) <u>emergency</u> relief from debris and ((the associated changes to the)) watercourse ((<del>along with</del>))) changes, as well as long-term multi-benefit solutions that consider: reduction of <u>alluvial fan hazard risks</u>; protection of ((<del>intact</del>)) <u>functional</u> fish habitat; and restoration of degraded fish habitat within these areas.

#### In Chapter 5 Environment, on page 5-2, amend as follows:

R-671

One of the central tenets of the Growth Management Act, the Countywide Planning Policies, and King County's Comprehensive Plan is that new growth be focused within designated urban areas with the aim of protecting ((resource lands ())forestry, agriculture, and mining(()) lands and reducing development pressure on the Rural Area and Natural Resource Lands. ((At the same time, t))The Growth Management Act also requires that each city and county in Washington State identify, designate and protect critical areas found in their local environment. Critical areas, as defined by the Growth Management Act, include wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas. Achieving development goals must be integrated with protecting critical area functions and values. ((Individual s))Solutions can be tailored by following the guidance of comprehensive plan policies that recognize both critical area protection and the need to reduce urban sprawl.))

# In Chapter 5 Environment, on page 5-6, amend as follows:

As part of the ((2004)) <u>10-year</u> Comprehensive Plan update <u>process</u>, King County ((<del>updated</del>)) <u>updates</u> its critical areas, stormwater runoff management, and clearing and grading regulations consistent with Growth Management Act requirements to ((include)) <u>use-include</u> best available science <u>and address</u>, <u>ensure no net loss of the functions and values of critical areas, and demonstrate "special consideration" given to conservation and protection of anadromous fish species</u>. These regulations are functionally interrelated, with the standards for protection of wetlands, aquatic areas, and wildlife areas also working in tandem with ((landscape level)) standards for stormwater management, water quality, and clearing and grading, as well as programs for land conservation.

#### In Chapter 5 Environment, on page 5-9, amend as follows:

(( <del>E-107</del>	Regulations to prevent unmitigated significant adverse environmental impacts
	should be based on the importance and sensitivity of the resource.))
E-108	King County may exercise its substantive authority under the State Environmental
	Policy Act to condition or deny proposed actions (( <del>in order</del> )) to mitigate associated
	individual or cumulative impacts, such as significant habitat modification or
	degradation <u>,</u> that may (( <del>actually kill, injure<u>,</u> or harm</del> )) <u>significantly impact federally or</u>
	<u>state</u> listed <u>endangered,</u> threatened (( <del>or endangered</del> )) <u>, sensitive, or candidate</u>
	species or King County Species of Local Importance and Habitats of Local
	Importance by significantly impairing essential behavioral patterns, including
	breeding, feeding, spawning, rearing, migrating, or sheltering.
E-109	King County should promote efficient provision of utilities and public services by
	exempting minor activities from its critical areas regulations, if:
	<u>a. ((t))T</u> he agency (( <del>has an approved</del> )) <u>develops a</u> best management practice
	plan <u>that is based on best available science, accounts for no net loss of</u>
	<u>ecological functions and values, and is</u> approved by King County((,)); and
	<u>b. ((t))T</u> he plan ensures that proposed projects that may affect habitat of
	federally or state listed endangered, threatened, sensitive, or candidate
	species <u>or King County Species of Local Importance</u> be carried out in a
	manner that protects the resource or mitigates adverse impacts <u>to ensure</u>
	no net loss of ecological functions and values.

# In Chapter 5 Environment, starting on page 5-12, amend as follows:

- E-112a The protection of lands where development would pose hazards to health <u>and</u> <u>safety</u>, property, important ecological functions or environmental quality shall be achieved through acquisition, enhancement, incentive programs, and appropriate regulations. The following critical areas are particularly susceptible and shall be protected in King County, <u>including</u>, <u>but not limited to</u>, <u>through designation of</u> <u>specific critical area buffers</u>:
  - a. ((Floodways of 100-year floodplains;

- Slopes with a grade of 40((%)) percent or more or landslide hazards that cannot be mitigated;
- c. Wetlands and their protective buffers;
- d. Aquatic areas, including streams, lakes, marine shorelines and their protective buffers:
- e. Channel migration hazard areas;
- f. Critical Aquifer Recharge Areas;
- g. Fish and Wildlife Habitat Conservation Areas; and
- h. Volcanic hazard areas)) Critical aquifer recharge areas;
- b. Fish and wildlife habitat conservation areas;
- c. Flood hazard areas;
- d Geologically hazardous areas; and
- e. Wetlands.

# In Chapter 5 Environment, on page 5-28, amend as follows:

((E-215bb)) E-223 King County ((should)) shall develop and implement regulations that help mitigate and build ((resiliency)) resilience to the anticipated impacts of climate change, based on best available information. Such impacts could include: sea level rise((r)); changes in rainfall patterns and flood volumes and frequencies((r)); changes in average and extreme temperatures and weather((r)); impacts to slope stability, including increasing and more intense landslides and alluvial fan hazards; impacts to forests, including increased wildfires((r)); droughts ((and pest infiltrations)); disease; and insect attacks. Methods could include mitigating greenhouse gas emissions, establishing sea level rise regulations, managing existing and limiting new development in floodplains, and/or strengthening forests ability to withstand impacts.

# In Chapter 5 Environment, on page 5-29, amend as follows:

((E-215c)) E-229 King County should collaborate with the scientific community, state and federal agencies, and other jurisdictions to develop detailed, science-based estimates of the magnitude and timing of climate change, including impacts on air temperatures and heat waves, rainfall patterns and severe weather, forest health and wildfire, public health, ((river)) flooding, landslides and debris flows, channel migration, sea level rise, biodiversity (including fish and wildlife), and ocean acidification ((in King County)).

#### In Chapter 5 Environment, on page 5-45, amend as follows:

E-418

King County should assess the:

a. ((r))Relative scarcity and sensitivity of different land types, habitats, and resources, the role of these land types, habitats, and resources in

supporting <u>federally or state listed endangered, threatened,</u> sensitive<u>, or</u> <u>candidate</u> species <u>and King County Species of Local Importance and</u> <u>Habitats of Local Importance((,));</u> and

b. ((the I))Level of threat to these land types, habitats, and resources in terms of habitat modifications that would likely reduce populations of ((sensitive)) these species.

# In Chapter 5 Environment, on page 5-46, amend as follows:

E-423 New development, erosion control projects, and critical area mitigation and restoration of stream banks, lakes, shorelines, and wetlands should, where possible, incorporate native plant communities into the site plan, both through preservation of existing native plants and addition of new native plants. Introductions of non-native invasive plant, vertebrate, and invertebrate species should be avoided in terrestrial, freshwater, and marine environs.

#### In Chapter 5 Environment, on page 5-46, amend as follows:

E-425 To protect or improve adjacent wetlands and aquatic habitats, ((stream and)) riparian area, wetland buffer, and setback requirements may be increased to protect King County ((s))Species of Local Importance and their habitats, as appropriate. Whenever possible, density transfers, clustering, and buffer averaging should be allowed.

#### In Chapter 5 Environment, on page 5-48, amend as follows:

King County offers technical assistance with identification and removal of non-native plants ((through programs, including Forest Stewardship and Naturescaping)). The ((e))<u>C</u>ounty also partners with volunteer groups to remove invasive plants from open space and natural areas. Some non-native species are classified as "noxious" weeds. The King County Noxious Weed Control Program provides many services to county residents, including: educational materials and workshops, current information on control and eradication of noxious weeds, support to volunteer and land((-))owner groups, and annual road-side surveys. In addition, the Noxious Weed Control Program implements the State Weed Law (((Revised Code of Washington e))Chapter 17.10 Revised Code of Washington) in the county, which requires all landowners to eradicate Class A noxious weeds and control designated Class B and ((e))County-selected Class C noxious weeds on their properties.

The King Conservation District and the County offer guidance and assistance on use of native plants. These plants are more resistant to pests and able to withstand the wet winters and dry summers. They can be used for nature-scaping (low-water requirement landscapes), wildlife enhancement, erosion control, and beautification. The County also establishes a list of "climate-smart plants," which are native plant species currently or prehistorically found within the surrounding ecoregion that are predicted to maintain their abundance under climate change.

#### In Chapter 5 Environment, on page 5-48, amend as follows:

E-429 King County should provide incentives, such as providing technical assistance or access to appropriate plants, for private landowners who are seeking to remove invasive plants and noxious weeds and replace them with native <u>and/or climate-</u> <u>smart plants((, such as providing technical assistance or access to appropriate</u> <u>native plants</u>)).

#### In Chapter 5 Environment, on page 5-50, amend as follows:

E-432

King County shall designate the following areas as Fish and Wildlife Habitat Conservation Areas:

- a. Areas with which federal or state listed endangered, threatened ((<del>or</del>)), sensitive, or candidate species have a primary association;
- b. Habitats of Local Importance and ((H))<u>h</u>abitats for Species of Local Importance, <u>including Wildlife Habitat Conservation Areas</u>;
- c. Wildlife habitat networks designated by the ((c))<u>C</u>ounty;
- d. <u>Aquatic areas;</u>
- e. Commercial and recreational shellfish areas;
- ((e-)) <u>f.</u> Kelp and eelgrass beds;
- ((f.)) g. Herring, smelt, and sand lance spawning areas;
- ((g-)) h. Riparian ((corridors)) areas; and
- ((h-)) <u>i.</u> State aquatic reserves.

#### In Chapter 5 Environment, starting on page 5-51, amend as follows:

E-435

King County designates the following to be Species of Local Importance:

- a. Salmonids and other anadromous fish Kokanee salmon, Sockeye/red salmon, Chum salmon, Coho/silver salmon, Pink salmon, Coastal resident/searun cutthroat trout, Rainbow trout, Dolly Varden, <u>Western river</u> <u>lamprey</u>, and Pacific lamprey;
- b. Native Freshwater Mussels Western pearlshell mussel, Oregon ((and western)) floater, and western ridge mussel;
- c. Shellfish Dungeness crab, Pandalid shrimp, ((<del>Geoduck</del>)) <u>Butter</u> clam, <u>Littleneck clam</u>, and ((<del>Pacific</del>)) <u>Olympia</u> oyster;
- Marine Fish White sturgeon((,)); Pacific herring((,)); Longfin smelt((,)); Surfsmelt((,)); Lingcod((,)); <u>Pacific cod;</u> Pacific sand lance((,)); <u>Yelloweye</u>, <u>Brown, Copper, Bocaccio, Canary, and Quillback Rockfish;</u> English sole((,)); and <u>Southern ((R))rock</u> sole;
- e. Birds <u>Marbled Murrelet</u>, Western grebe, <u>Caspian Tern, Pigeon Guillemot</u>, <u>Pelagic Cormorant</u>, American bittern, Great blue heron, <u>Common Loon</u>, <u>Western High Arctic</u> Brant, Harlequin duck, <u>Bufflehead</u>, Wood duck, Hooded merganser, Barrow's goldeneye, Common goldeneye, Cinnamon teal, Tundra swan, Trumpeter swan, Surf scoter, White-winged scoter, Black

scoter, <u>Bald Eagle, Golden Eagle, Peregrine Falcon, Northern Goshawk,</u> Osprey, <u>Spotted Owl</u>, Western screech-owl, Sooty grouse, <u>Pacific coast</u> ((B))<u>b</u>Band-tailed pigeon, Belted kingfisher, ((Hairy woodpecker,)) Olive-sided flycatcher, Western meadowlark, Cassin's finch, <u>Oregon Vesper</u> <u>Sparrow, Red-eyed Vireo, Purple Martin, Vaux's Swift, ((and))</u> Purple finch, <u>Yellow-billed Cuckoo, Black-backed Woodpecker, American three-toed</u> woodpecker, Hairy woodpecker, Pileated woodpecker, and the following <u>bird concentrations:</u>

- 1. Waterfowl Concentrations (Anatidae excluding Canada Geese in urban areas); and
- 2. Western Washington nonbreeding concentrations of plovers (Charadriidae), sandpipers (Scolopacidae), and phalaropes (Phalaropodidae);
- f. Mammals American marten, ((mink,)) <u>Wolverine, Fisher, Gray wolf,</u> <u>Cascade red fox, Douglas squirrel, Northern flying squirrel, Townsend's</u> <u>chipmunk, Hoary marmot,</u> ((<del>Columbian black-tailed deer,</del>)) <u>Roosevelt</u> ((E))<u>e</u>lk ((<del>in their historic range</del>)), mountain goat, Pika, <u>Townsend's big-eared bat,</u> roosting concentrations of Big-brown bat<u>s, Pallid bats</u>, ((<del>and</del>)) Myotis bats<u>.</u> <u>Killer whale (Orca), Gray whale, Dall's and Harbor porpoise, Harbor seal,</u> <u>Stellar sea lions, and concentrations of California sea lions</u>;
- g. Amphibians Red-legged frog, Larch Mountain salamander, Oregon spotted frog, and Western toad;
- h. Reptiles Western fence lizard and Northwestern pond turtle;
- i. Rare Plants ((bristly sedge; Canadian St. John's-wort; clubmoss cassiope; Oregon goldenaster; toothed wood fern; Vancouver ground-cone; and white-top aster)) <u>Tall bugbane, Triangular-lobed moonwort, Western</u> moonwort, Stalked moonwort, Harvest brodiaea Alaska harebell, Fewflowered sedge, Long-styled sedge, Clubmoss mountain-heather, Golden paintbrush, Weak thistle, Spleenwort-leaved goldthread, Tree clubmoss, Spotted Joe-pye weed, Kamchatka fritillary, Swamp gentian, Oregon goldenweed, Large St. Johns'-wort, Pacific peavine, Water lobelia, Northern bog clubmoss, One-cone clubmoss, White meconella, Branched montia, Old field blue toadflax, Brewer's cliffbrake, Whitebark pine, Choriso's bogorchid, Columbia white-topped aster, and Flat-leaved bladderwort; and
- j. ((High-quality ecological communities Douglas-fir Pacific Madrone / Salal; Douglas-fir - Western Hemlock / Swordfern; Forested Sphagnum Bog PTN, Low Elevation Freshwater Wetland PTN, North Pacific Herbaceous Bald and Bluff, Red Alder Forest; Western Hemlock - (Western Redcedar) / Bog Labrador-tea / Sphagnum Spp.; Western Hemlock - (Western Redcedar) / Devil's-club / Swordfern; Western Hemlock - (Western Redcedar) / Sphagnum Spp.; Western Hemlock / Swordfern – Foamflower; Western Redcedar-Western Hemlock / Skunkcabbage; and Willow Spp. Shrubland

[Provisional]])) Other invertebrates – Blue gray taildropper, Hatch's click beetle, Beller's ground beetle, Pacific clubtail, Western bumblebee. Johnson's hairstreak, and Valley silverspot.

#### In Chapter 5 Environment, on page 5-53, amend as follows:

E-437

King County shall designate the following to be Habitats of Local Importance:

- a. Caves; b. Cliffs:
- c. ((Talus)) Herbaceous balds;
- d. Old-growth forest;
- e. ((Sphagnum-dominated peat bogs)) Oregon white oak woodlands; ((and))
- f. Snag-rich areas;
- g. Sphagnum-dominated peat bogs;
- h. Talus; and
- i. Westside prairie.

# In Chapter 5 Environment, on page 5-65, amend as follows:

King County contains a number of wetlands, <u>floodplains</u>, lakes, and river and stream reaches that are important to the viability of fish and wildlife populations and are therefore considered biological, social, and economic resources. Some ((resource)) areas((, including Regionally Significant Resource Areas and Locally Significant Resource Areas, were previously)) <u>have been</u> identified ((through ((basin plans)) watershed planning efforts and other resource inventory efforts. Additional)) as high-priority habitat areas ((have been identified)) through Water Resource Inventory Area-salmon recovery plans, (("Waterways 2000," Cedar River Legacy Program, acquisition plans)), <u>the Land Conservation Initiative</u>, and through the Critical Areas Ordinance basin conditions map((s)) used to establish protective buffers along wetlands and streams under the ((Critical Areas Ordinance)) King County Code. Protection and restoration of connections between rivers and their floodplains is increasingly recognized as a priority element of salmon recovery and climate resiliency efforts. The Clean Water Healthy Habitat strategic plan includes a 30-year goal for restoring connected floodplains with native vegetation. Additionally, criteria for the County's primary local land conservation funding sources, Conservation Futures Tax, and King County Parks Levy, have been updated to help focus investment in areas of the county that have historically been underserved with access to quality green space.

# In Chapter 5 Environment, on page 5-68, amend as follows:

((E-474 Development adjacent to wetlands shall be sited such that wetland functions and values are protected, an adequate buffer around the wetlands is provided, and significant adverse impacts to wetlands are prevented.))

#### In Chapter 5 Environment, on page 5-68, amend as follows:

E-475 To improve adjacent wetlands, riparian areas, and aquatic habitat, areas of native

vegetation that connect wetland complexes should be protected. ((Whenever effective)) Where appropriate, incentive programs such as buffer averaging, density credit transfers, or appropriate non-regulatory mechanisms shall be used for this purpose.

# In Chapter 5 Environment, on page 5-69, amend as follows:

E-478

Public access to <u>King County-owned</u> wetlands for scientific, recreational, and traditional cultural use ((is desirable, providing that)) should be encouraged if:

 a. ((p))Public access trails are carefully sited((;));
 b. Protection is provided for critical areas; federally and state listed endangered, threatened, sensitive, and candidate ((habitats and)) species and their habitats; and King County Species of Local Importance and Habitats of Local Importance ((are protected,)); and
 c. ((h))Hydrologic continuity is maintained.

#### In Chapter 5 Environment, on page 5-70, amend as follows:

((E-482 A small Category IV wetland that is less than 2,500 square feet and that is not part of a wetland complex may be altered to move functions to another wetland as part of an approved mitigation plan that is consistent with E-483 and E-484.))

#### In Chapter 5 Environment, starting on page 5-77, amend as follows:

E-498a The existing flood storage and conveyance functions and ecological values of floodplains, wetlands, and riparian ((<del>corridors</del>)) <u>areas</u> shall be protected, and should((<del>, where possible,</del>)) be <u>restored and</u> enhanced ((<del>or restored</del>)) <u>through</u> integrated actions that provide multiple benefits, such as preservation of open space and adjacent low-density development.

#### In Chapter 5 Environment, on page 5-78, amend as follows:

E-499b River and stream channels, stream outlets, headwater areas, riparian ((corridors)) areas, and areas where dynamic ecological processes are present should be preserved, protected, and enhanced for their hydraulic, hydrologic, ecologic, and aesthetic functions, including their functions in providing large wood to salmonid bearing streams. ((Management of)) Actions taken along river and stream channels should ((consider other beneficial uses of these water bodies, including recreation)) provide multiple benefits, resiliency to climate change, and ensure flood risk reduction actions benefit all communities, especially frontline communities, consistent with equity and racial and social justice goals and the policies of the King County Flood Hazard Management Plan or successor plans.

In Chapter 5 Environment, starting on page 5-79, amend as follows:

Alluvial fans share many of the ecological attributes and land use risks associated with channel migration hazard areas and landslide hazards, though they are unique in many respects. In a natural environment, alluvial fans often provide some of the best available spawning habitat in a tributary stream, while also providing a source of gravel for areas downstream. In some heavily altered streams, the alluvial fan may represent the only remaining areas that are suitable for spawning. Alluvial fans can also form the highest ground available in the floodplain, and have historically been used for construction of buildings (including farm buildings), roads and other structures. Unfortunately, they are inherently unstable environments in which to build. During high flows coupled with sediment deposition, a stream may jump its bank in the area of the alluvial fan, in some cases damaging private property, disrupting agricultural activities, destroying culverts and road crossings, stranding fish, and creating risks to public safety. Protecting buildings, roads, <u>bridges</u>, and crops on and ((along)) adjacent to alluvial fans often requires extensive((7)) <u>and costly</u> ongoing maintenance activities. Maintenance activities can have adverse effects on habitat, <u>and in some circumstances may not be permittable under state regulations, nor feasible as a management strategy</u>.

((The Rural Areas and Natural Resource Lands chapter calls for alluvial fan pilot projects to test best management practices and innovative solutions for reducing hazards to agricultural landowners and protecting and restoring habitat.))

- E-499f King County should improve the management of alluvial fans by ((developing and clarifying definitions of alluvial fans,)) mapping the locations of existing alluvial fans((,)) and areas at risk of alluvial fan hazards and developing appropriate management strategies, such as development standards and mitigation requirements. Strategies should:

   Address potential conflicting interests between landowners and natural
  - a. Address potential conflicting interests between landowners and natura alluvial fan activities;
  - b. Consider climate change;
  - <u>c. ((p))P</u>rotect intact habitat ((and));
  - d. ((r))Restore degraded habitat((,)); and
  - e. ((+))Reduce threats to public safety((<del>, and accommodate</del>)) <u>in the context of</u> existing land uses. ((<del>Best Available Science and</del> ((F))) <u>findings from Alluvial</u> Fan Management Pilot Projects <u>Reports</u> should inform management strategies for alluvial fans, including potential regulatory changes.))

#### In Chapter 5 Environment, on page 5-82, amend as follows:

E-499i King County should work with landowners, other jurisdictions, the state Department of Health, sewer districts, and the Puget Sound Partnership to proactively address failing septic systems with a priority in ((environmentally)) environmental health sensitive areas, ((including)) critical areas and their buffers, and constrained shoreline environments.

#### In Chapter 5 Environment, on page 5-83, amend as follows:

E-499ii King County <u>should</u> support((s)) the coexistence of beavers and people in rural King County. ((<del>King County should prepare a beaver management strategy to guide a</del> program on issues such as where and how beavers and humans can co-exist with or without engineered solutions and where beavers should be excluded or removed.))

#### In Chapter 5 Environment, on page 5-85, amend as follows:

E-499I

King County should seek to support Water Resource Inventory Area salmon recovery plan goals of maintaining intact natural landscapes through:

- a. Retaining low density land use designations such as Agriculture, Forestry and Rural Area designations;
- b. Promoting Current Use Taxation and other incentives;
- c. Promoting stewardship programs including development and implementation of Forest Plans((,)) and Farm Plans((, and Rural Stewardship Plans));
- d. Promoting the use of ((L))low ((I))impact ((D))development methods; and
- e. Acquiring property or conservation easements in areas of high ecological importance with unique or otherwise significant habitat values.

#### In Chapter 5 Environment, on page 5-86, amend as follows:

((E 499p King County shall, in cooperation with the cities, ensure a no net loss of housing capacity that preserves the ability to accommodate adopted growth targets, while pursuing compliance with Endangered Species Act requirements. To achieve this goal, densities shall be increased on buildable lands, consistent with H 110.))

#### In Chapter 5 Environment, on page 5-89, amend as follows:

King County is located at a tectonically active convergent plate margin, which is characterized by dynamic geologic processes including active mountain building, abundant seismic activity, and volcanism. In addition, the relatively recent glacial history has resulted in the creation of numerous steep and unstable hillsides throughout the county, many of which are prone to naturally occurring landslides. Snow avalanches are also a common occurrence in the Cascade Mountains in (( $\pm$ ))eastern King County. The hazardous impacts from these processes can be worsened with climate change, and increases in extreme wet weather increase risks from geologic hazards.

Often ((times)), the result of these naturally occurring events can be beneficial to the environment, by providing gravel and woody debris in streams and rivers, and continuing the process of natural regeneration. Salmon need gravel for spawning and in-stream debris for cover and to provide shade and regulate temperature. While the relatively flat Puget Lowlands made it historically ideal for development and agriculture, the natural processes of erosion and deposition will continue. King County must balance the positive benefits of these natural occurrences

with any adverse impacts that pose a threat to public health and safety. The ((e))<u>C</u>ounty must also strike a balance between allowing naturally occurring landslides and erosion, and the need to prevent the unnatural acceleration of landslides and erosion due to development activities.

#### In Chapter 5 Environment, on page 5-99, amend as follows:

E-708

- King County should implement a <u>monitoring and adaptive management</u> framework ((<del>for</del>)) <u>to:</u> a. Evaluate the effectiveness ((<del>monitoring of its critical areas</del>)) of County
  - regulations, <u>policies, and programs in achieving no net loss of critical areas</u> <u>functions and values;</u> and
  - b. ((use monitoring data to i))Inform ((the)) future ((review and updates of its critical areas policies and regulations)) regulatory updates.

# In Chapter 6 Shorelines, on page 6-43, amend as follows:

((S-607 King County should provide options for property-specific technical assistance and tailored applications of shoreline management regulations through Rural Stewardship Plans for single ((family)) <u>detached</u> residential uses in the upland areas of the Rural, Conservancy and Natural Shoreline Environments. Rural Stewardship Plans must be consistent with the goals of the Shoreline Management Act and King County Shoreline Protection and Restoration Plan, and ensure no net loss of shoreline ecological processes and functions.))

# In Chapter 12 Implementation, Amendments and Evaluation, on page 12-11, amend as follows:

#### I-301

#### King County shall:

- <u>a.</u> Monitor ((<del>and benchmark</del>)), measure, assess, and report on</del> the progress of the ((<del>Countywide Planning Policies and King County</del>)) Comprehensive Plan toward achieving ((<del>their</del>)) <u>its</u> objectives, inclusive of those relating to <u>growth</u> <u>targets</u>, the environment, development patterns, housing <u>needs</u>, the economy, transportation, ((<del>and</del>)) the provision of public services, <u>and health</u> <u>and social equity outcomes of residents((-));-and</u>
- <u>b.</u> Use results of such monitoring<u>, measurement, assessment, and reporting</u> to ((encourage)) <u>identify</u> implementation actions and inform policy revisions<u></u> as appropriate<u></u> to achieve the planning objectives found within the <u>Growth</u> <u>Management Act</u>, Countywide Planning Policies<u></u> and ((<del>King County</del>)) Comprehensive Plan<u>;</u>
- c.
   Use the most current critical areas data available in measurement,

   assessment, and reporting to promote environmental protection, while

   maintaining developable capacity to accommodate growth targets and

   housing needs.

# In Chapter 12 Implementation, Amendments and Evaluation, on page 12-15, amend as

# <mark>follows:</mark>

((I-505 King County shall develop, as a part of the ((buildable lands)) <u>Urban Growth</u> <u>Capacity</u> analysis, a zoning yield and housing production monitoring program to determine whether housing capacity is being lost in the context of compliance with the Endangered Species Act, and shall propose revisions to the Countywide Planning Policies to implement such a program.))

# In the Glossary, starting on page G-4, amend as follows:

#### ((Channel migration hazard area, moderate

A portion of the channel migration zone, as shown on King County's Channel Migration Zone maps, which lies between the severe channel migration hazard area and the outer boundaries of the channel migration zone.

#### Channel migration hazard area, severe

A portion of the channel migration zone, as shown on King County's Channel Migration Zone maps, which includes the present channel. The total width of the severe channel migration hazard area equals one hundred years times the average annual channel migration rate, plus the present channel width. The average annual channel migration rate as determined in the technical report is the basis for each Channel Migration Zone map.))

#### **Channel Migration Zone**

Channel migration zones are those areas along a river channel within which the channel(s) can be reasonably predicted, based on best available science, to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

#### In the Glossary, on page G-8 after line 274, amend as follows:

#### **Debris flow**

Debris flow means a moving mass of rock fragments, soil, and mud, with more than half of the particles being larger than sand size.

#### In the Glossary, on page G-11, amend as follows:

#### ((Enhance)) Enhancement

((Enhance)) For the purposes of critical area regulation, enhancement means ((to increase or)) an action that improves ((one or more of the functions, attributes, or values that an ecosystem or environmental feature possesses)) the processes, structure, and functions of ecosystems and habitats associated with critical areas or their buffers. (See Chapter 5((÷)), Environment).

#### In the Glossary, starting on page G-14, amend as follows:

Geotechnical report or geotechnical analysis

Geotechnical report or geotechnical analysis means a scientific study or evaluation ((conducted by a qualified expert)) that includes: a description of the ground and surface hydrology and geology; the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes; conclusions and recommendations regarding the effect of the proposed development on geologic conditions; the adequacy of the site to be developed; the impacts of the proposed development; alternative approaches to the proposed development; and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports ((shall)) <u>must</u> conform to accepted technical standards and must be prepared by ((qualified professional engineers or geologists)) a geological professional who ((have)) is a geotechnical engineer or geologist licensed in the State of Washington with professional expertise about the regional and local shoreline geology and processes.

#### In the Glossary, on page G-19, amend as follows:

#### ((Locally Significant Resource Areas (((LSRAs)))

((LSRAs)) Locally Significant Resource Areas contribute to the aquatic resources within a specific basin, when compared to aquatic and terrestrial systems of similar size and structure elsewhere in the basin. They also provide wetland and stream habitat that is important for wildlife and salmonid diversity and abundance within the basin. (See Chapter 5((:)), Environment)))

#### In the Glossary, on page G-27, amend as follows:

#### ((Regionally Significant Resource Area (((RSRA)))

((RSRAs)) <u>Regionally Significant Resource Areas</u> are those portions of watersheds that contribute to the resource base of the entire Puget Sound region by virtue of exceptional species and habitat diversity and abundance when compared to aquatic and terrestrial systems of similar size and structure elsewhere in the region. <u>Regionally</u> <u>Significant Resource Areas</u> may also support rare, threatened or endangered species or communities. (See Chapter 5((:)), Environment)))