

SEPA¹ Environmental Checklist

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use “not applicable” or “does not apply” only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in “Part B: Environmental Elements” that do not contribute meaningfully to the analysis of the proposal.

¹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance>

A. Background

[Find help answering background questions](#)²

1. Name of proposed project, if applicable:

King County Building, Fire, and Energy Code Update, that would amend King County Code (KCC) Title 16 Building and Construction Standards and KCC Title 17 Fire Code. This proposed regulation is referred to throughout this document as the “proposed ordinance.”

2. Name of applicant:

The proposal was initiated by King County.

3. Address and phone number of applicant and contact person:

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4. Date checklist prepared:

January 22, 2025.

5. Agency requesting checklist:

King County.

6. Proposed timing of schedule (including phasing, if applicable):

The King County Council anticipates possible action on the proposed ordinance in quarter 2 of 2025.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no known plans to add to or expand the proposed ordinance. Building and fire codes are updated on a three-year cycle. In 2026 a new ordinance will be proposed to adopt the building codes that will be in effect for Washington state in July 2026, namely the 2024 Washington state building codes. The ordinance reviewed in this SEPA checklist proposes to adopt the building codes currently in effect for Washington state, or the 2021 Washington state building codes.

If adopted, King County anticipates permit applications for individual developments that will be subject to the proposed regulations.

² <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background>

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- SEPA checklist for this proposal
- GHG Emissions in King County: 2019 Inventory
- 2020 King County Strategic Climate Action Plan
- 2021 WSEC-C – Third Party Cost Benefit Analysis
- Cost-Benefit Analysis of the 2021 Washington State Energy Code – Commercial Provisions
- Cost-Benefit Analysis of the 2021 Washington State Energy Code – Commercial Provisions
- Final Cost Benefit Analysis for Possible EPCA Preemption Issues in the 2021 Washington State Energy Code, Commercial Provisions
- Final Cost Benefit Analysis for the 2021 Washington State Energy Code Residential Provisions

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no other applications for government approvals or permits pending directly related to the proposed ordinance. There may currently be other applications pending for government approvals of proposals for King County and private projects; however, those proposals would be subject to the existing King County regulations under King County Code (KCC) Chapters 16 and 17.

10. List any government approvals or permits that will be needed for your proposal, if known.

Approval by the King County Council is the only government approval required for adoption of the proposed ordinance. Individual development projects that would be subject to the proposed ordinance would also be subject to all applicable federal, state and local permitting and licensing requirements.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The proposed ordinance would amend the King County Code (KCC) regulations to achieve multiple objectives:

- Update the KCC to reflect the current building codes adopted by Washington state, which are updated regularly on a 3-year cycle.
- Improve identification of, and access to, structures for fire responder personnel.
- Clarify plumbing review oversight, fee application, and plan submittal requirements.
- Improve energy efficiency of, and reduce onsite fossil fuel combustion within buildings to reduce building owner energy cost burden and reduce emission of air pollutants; specifically the release of climate-altering greenhouse gas emissions.

To accomplish these objectives, the proposed ordinance would do the following:

- Adopt the 2021 International Property Maintenance Code; Washington state's adopted 2021 versions of the International Building, Residential, Energy Conservation, Mechanical, Existing Building, and Fire codes; and Washington state's adopted 2021 version of the Uniform Plumbing

Code. The proposed ordinance also includes amendments for clarity and technical corrections related to the current adopted state codes.

- Adopt and provide reference to the applicable codes for LPG installations including the NFPA 58 and the ANSI Z223.1/NFPA 54.
- Update KCC language to reflect model code changes.
- Clarification added that work exempted from building permits still must comply with the code, consistent with model code language.
- Amend the types of work exempt from requiring a building permit, namely:
 - Clarify that detached buildings must be unconditioned to be exempt from building permit.
 - Clarify that swimming pool barriers require a building permit even if less than six feet in height
 - Addition of “agricultural wildlife exclusion fencing” up to eight feet tall to list of work exempt from permit.
- Revise expiration of building permits section for readability.
- Clarified allowance for Pre-issuance construction authorization (PICA) may not include site development or alterations subject to KCC Title 9.
- Aligned Certificate of Occupancy requirements with the model code; removed “shell completion letters” from KCC.
- Amend IBC Section 429 to require additional electric vehicle charging infrastructure, consistent with County SCAP goals.
- Aligned pathway requirements for emergency escape and rescues openings which are located under decks with the model code; retained local amendment to permit unlimited travel distance when pathway height is 6’ 8” or greater.
- Provide updated regulations for drainage including parking garage drainage systems and pretreatment methods, and guidance for connecting elevator hoistway drainage to in-premise plumbing systems.
- Revise and provide new regulations for domestic water piping including an increase in required minimum pressure at the inlet of listed temperature regulating valves, and a reference to follow the applicable Energy Code for minimum pipe insulation.
- Provide new criteria for determining when a plumbing permit application is complete, conditions under which a plumbing permit can be issued, and when a reinspection fee may be assessed.
- Provide more comprehensive guidance regarding information to be shown on a set of plumbing design documents submitted for jurisdictional review.
- Remove fire requirements from the IBC and instead references the International Fire code (IFC) to remove duplicative language in the IBC.
- Amend state codes for emergency responder radio coverage, prescribing which buildings require systems; removing some exceptions; establishing a 99 percent floor area radio coverage requirement; and establishing signal strength and system activation requirements.
- Amend Title 17 by removal of several sections or conduct minor tweaks concerning emergency responder radio coverage to properly align with state adopted IFC 2021 code.
- Re-adopt the IRC Optional Appendix T [RE]: Solar-Ready Provisions for Detached One- and Two-Family Dwellings and Townhouses, which requires new townhouses and detached single-family houses with 600 square feet or more of roof area oriented between 110 degrees and 270 degrees of true north to provide an area ready to install future solar photovoltaic (PV) solar panels.

The proposed ordinance includes the following amendments to the State-adopted Washington State Energy Code (WSEC), which is based on the ICC published International Energy Conservation Code

(IECC). These amendments apply to the commercial provisions of the WSEC only, as state law prohibits amendments to the residential provisions of the WSEC. These amendments include:

- Increase insulation standards for some building materials and features, including mass walls, and metal building walls. Higher insulation improves energy efficiency by reducing heating and cooling loss from buildings.
- Increase vertical fenestration thermal performance requirements, including requiring 20% of glazing meet “high performance” standards.
- Define allowable vertical glazing percentages by occupancy and building area type, rather than a blanket allowable percentage of glazing for all building types.
- Provide readability improvements to occupancy classifications required to calculate HVAC Total System Performance Ratio (TSPR) by modifying code text into a table.
- Increase HVAC and water heating efficiency requirements, including increased standards for HVAC demand responsive and occupied standby controls: increased standards for energy recovery ventilation; limiting gravity (nonmotorized) dampers in relief systems; increasing minimum fan efficacy; adding standards for clean water pumps; minimum piping and tank insulation standards; and adding requirement for heat recovery for indoor swimming pools, spas, or hot tubs over 200 square feet.
- Require that commercial kitchen fryers, hot food holding cabinets, steam cookers and dishwashers meet U.S. Environmental Protection Agency's (EPA) Energy Star program energy and water efficiency criteria.
- Reduce the allowed maximum lighting power density (LPD) in building areas, or the amount of power providing illumination, necessitating the installation of more energy-efficient lighting.
- Require that natural gas cooking appliances in commercial kitchens be provided with an electrical panel sized to serve future electric appliances, so that an electric version of the appliances can be more easily installed at that location at a future date.
- Change the energy efficiency credit system to increase the number of required credits for most projects and disallow or modify use of credits that would become standard requirements if the proposed ordinance were adopted. Further, remove potential incentives to install fossil fuel-based heating systems by stating that such systems are not eligible to receive credits.
- Clarifications to the commissioning section C408 to reflect Permitting Division standard policies and procedures. Added an allowance for post-occupancy commissioning completion.
- Reduce threshold for new buildings and additions to provide energy metering and energy consumption management from 25,000 square feet to 20,000 square feet of gross conditioned floor area.
- Reduce threshold for new buildings and additions to provide a renewable energy generation system from 10,000 square feet to 5,000 square feet of gross conditioned floor area.
- Added energy metering requirements for parking garage fan energy, parking garage lighting energy, and plug load system energy use.
- Added requirement for addition or replacement of the majority of HVAC equipment in a building to trigger energy source and end use metering. Added requirement for addition or replacement of the majority of service water heating equipment in a building to trigger energy source and end use metering. Added requirement for tenant space sub-metering when a permit is issued for tenant improvements where a single tenant will occupy a full floor or multiple floors of a building. Added requirement for complete electrical system replacement in a building to trigger energy source and end use metering.

Compliance with existing federal, state, and local regulations is presumed for purposes of this SEPA checklist, including compliance with the regulations in the proposed ordinance itself, as well as others such

as those related to drinking water, stormwater, wastewater treatment, septic systems, critical areas, and zoning requirements. Any noncompliant uses or structures would be subject to code enforcement and would not be considered an impact related to the proposed ordinance.

The King County Council could modify the proposed ordinance and still accomplish the proposal's objective. Depending on the modification, the likelihood, scale, or scope of potential impacts to various elements of the environment could be the same, greater, or less.

As would be the case for any nonproject or project action that undergoes changes after the publication of a SEPA threshold determination, the King County Executive branch, which pursuant to KCC 20.44.020 is the Lead Agency for SEPA for King County, would evaluate any modifications that are proposed to be made to the proposed ordinance and would update this environmental review in the case that changes would result in greater or different impacts than those identified in this checklist. The timing of additional environmental review process may vary depending on other variables, including future public processes.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The proposed ordinance is a nonproject action that would apply to all of unincorporated King County, which totals 1,095,680 acres.

In general, King County is located in western Washington and includes 39 incorporated cities, including Seattle, Federal Way, Kirkland, and Bellevue. Approximately three-quarters of the County is unincorporated and includes areas primarily to the east of the County urban growth area boundary and the urban Puget Sound region, with the exception of Vashon-Maury Island located to the west and some isolated blocks of unincorporated area within the urban growth area.

Nearly 75 percent of unincorporated King County is zoned as Forest (F), particularly the eastern portion of the County. To the west, near the more urban incorporated areas of the County, the predominant zoning category is RA, with some areas zoned A, particularly in the area northeast of Sammamish Valley and the area northwest of Enumclaw. Smaller areas of residential, business, office, and industrial zoning are also located throughout unincorporated King County.

The proposed ordinance is a nonproject action that would apply to all King County projects and, therefore, the properties and land associated with those projects. This includes areas throughout King County, within its unincorporated areas and its 39 incorporated cities.

B.Environmental Elements

1. Earth

[Find help answering earth questions](#)³

a. General description of the site:

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

Although the proposed ordinance is a nonproject action with no identifiable “site,” the ordinance applies to all of unincorporated King County, which includes areas that are flat, rolling, hilly, and steep slope. King County landforms include saltwater coastline, river floodplains, plateaus, slopes, and mountains, punctuated with lakes and streams. The proposed ordinance would apply to King County projects on lands with these features.

b. What is the steepest slope on the site (approximate percent slope)?

Although the proposed ordinance is a nonproject action with no specific site or location, unincorporated King County includes 16,596 acres of steep slope critical areas. It is possible there may be steep slopes on properties to which the proposed ordinance would apply, however any such new development projects would be subject to existing regulations, including critical areas regulations, that would be addressed during permit review.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Although the proposed ordinance is a nonproject action with no specific site or location, soil in unincorporated King County generally reflects geologically recent glacial and alluvial (river and stream) activity, as well as human activity. River valleys are generally occupied by poorly drained, silty loams that commonly have a substantial organic content. Soils on upland areas between valleys typically are coarser-grained sandy and gravelly sandy loams, but soils with high organic content do occur locally in these upland areas and along water bodies. Some areas of unincorporated King County are classified as farmland of statewide importance, prime farmland, and prime farmland with conditions (which means that it is prime farmland if drained, irrigated, protected from flooding, or not frequently flooded). King County’s Farmland Preservation Program restricts use on participating properties to agriculture or open space use and restricts activities that would impair the agricultural capability of the property.

In accordance with the State Growth Management Act (RCW 36.70A.170 and 36.70A.050), King County designated “agricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other products.” The lands that meet these criteria are designated as an Agricultural Production District, of which there are five in King County (Enumclaw, Snoqualmie, Upper Green River, Lower Green River, and Sammamish).

³ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth>

Development projects within an Agricultural Production District that are subject to the proposed ordinance may result in the removal of some of these soils. However, existing regulations regarding those soils, and limitations on square footage and impervious surfaces required by Title 21A would limit such removal.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Although the proposed ordinance is a nonproject action with no specific site or location, geologically hazardous areas, including landslide and erosion-prone areas, some abandoned mining areas, and seismic risk areas, exist within unincorporated King County. Landslide and erosion-prone areas are associated primarily with steep slopes. Hazardous mining areas that may be subject to surface subsidence are associated primarily with past coal mining that occurred in the area from Newcastle through Renton south to Black Diamond. Any development subject to the proposed ordinance that is located on a parcel where landslide or erosion-prone areas exist would be subject to existing regulations and, for new uses, would be identified and addressed under existing regulations during permit review.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Although the proposed ordinance is a nonproject action that would not directly authorize any fill, excavation, or grading, individual projects subject to the proposed ordinance could include fill, excavation, or grading. All such development projects would continue to be subject to existing development regulations related to stormwater management, impervious surfaces, critical areas, clearing and grading, and/or landscaping. Unless exempt under state and county requirements, filling, excavation and grading is also subject to SEPA review.

Some sections in the proposed ordinance will amend filling, grading and excavation regulations or may indirectly affect filling, grading and excavation. These include the following:

- A proposed amendment modifying K.C.C. 16.82.130, would add new language that clarifies clearing and grading regulations, and provides that director with flexibility needed for abatement of clearing and grading violations while also strengthening the county's enforcement capabilities.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Although the proposed ordinance would not direct any development activities, potential erosion can result from clearing, construction or use of land for development that is subject to the proposed ordinance. The proposed ordinance does not amend existing regulations on clearing, grading, or construction that could cause erosion. For example, the King County Surface Water Design Manual and shorelines and critical areas regulations, would be unchanged by the proposed ordinance, and would continue to apply to development projects subject to the proposed ordinance.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The proposed ordinance would not have any direct impacts to impervious surface percentages. King County projects subject to the ordinance could alter the percentage of impervious surfaces on their respective sites. All such development projects would continue to be subject to existing regulations concerning new and replaced impervious surfaces and evaluated during project-level environmental and permit reviews.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The proposed ordinance is a nonproject action that would not have any direct impacts on clearing or grading. A section of the clearing and grading code proposes a revision that would clarify the director's authority over reviewing permit applications where unauthorized clearing and grading activity has occurred. This proposed text strengthens the county's ability to enforce clearing and grading violations, while at the same time provides flexibility that can help applicants achieve compliance with code. No other measures to control erosion or other impacts to the earth are proposed. King County's existing regulations related to erosion and soils would apply to any development to which the proposed ordinance would apply.

2. Air

[Find help answering air questions](#)⁴

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

The proposed ordinance is a nonproject action that would not result in any direct emissions to the air. Projects subject to the proposed ordinance may result in air emissions from construction and operation activities, but would be subject to existing federal, state, and local regulations for these types of emissions. The proposed ordinance would not modify any federal, state, or local codes that provide standards or controls for these types of emissions. Air emissions are discussed in more detail in Part D of this checklist.

Development projects subject to the proposed ordinance may experience slightly reduced air emissions from reduced onsite combustion of fossil fuels associated with building space and water heating, depending on the type of building being developed.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

The proposed ordinance is a nonproject action that would not be affected by off-site sources of emissions or odor, and no known off-site sources of emissions or odor are likely to impact implementation of the proposed ordinance.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The proposed ordinance is a nonproject action and would not have any direct impacts to air emissions, and the development projects to which it would apply would be subject to existing regulations regarding emissions and reporting requirements. Additional federal, state, and local codes may provide standards and controls for these types of emissions and would not be modified by the proposed ordinance. As a result, no measures to reduce or control emissions or other potential impacts to air are proposed.

⁴ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air>

The County is proposing strengthening amendments to the Washington State Energy Code (WSEC). These amendments are expected to reduce impacts to air emissions by requiring greater energy savings standards and reducing the use of fossil fuels.

3. Water

[Find help answering water questions⁵](#)

a. Surface:

[Find help answering surface water questions⁶](#)

- 1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Although the proposed ordinance is a nonproject action with no specific site or location, numerous streams, lakes, ponds, and wetlands and the Puget Sound are located within unincorporated King County. King County maintains an inventory of water bodies within unincorporated King County, which would be considered during development review.

- 2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

The proposed ordinance is a nonproject action that would not directly require any work over, in, or adjacent to the described waters. State and local shoreline regulations would apply to any development subject to the proposed ordinance that is within 200 feet of waters within unincorporated King County's shoreline jurisdiction (60,451 acres in total countywide). Other development regulations, including critical areas regulations, concerning the protection of waterbodies may also apply depending on the proximity of any development to these waters.

- 3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

The proposed ordinance is a nonproject action that would not authorize filling or dredging from surface water or wetlands. Individual development projects subject to the proposed ordinance would also be subject to all state, local, and federal regulations, including mitigation requirements, concerning fill or dredge material placed in or removed from surface water or wetlands.

- 4. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

The proposed ordinance is a nonproject action that would not require any surface water withdrawals or diversions. Individual development projects subject to the proposed ordinance would also be subject to

⁵ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water>

⁶ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water>

existing regulations concerning surface water diversions and withdrawals, including those regarding in-stream flows, if applicable.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Although the proposed ordinance is a nonproject action with no specific site or location, several areas of unincorporated King County lie within a 100-year floodplain. Development projects subject to the proposed ordinance would also be subject to King County rules and limitations pertaining to floodplain development and fill.

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The proposed ordinance is a nonproject action that would not directly involve any discharges of waste materials to surface waters. Development projects subject to the proposed ordinance would also be subject to existing state, local, and federal regulations concerning the protection of and discharge of waste materials to surface waters, including state regulations on water usage, wastewater disposal, and state antidegradation standards. Discharges to surface waters are discussed in more detail in Part D of this checklist.

The proposed ordinance may disincentivize the development of fossil fuel and nonhydroelectric generation facilities in some instances; in such cases, this may result in reduced discharges to surface waters.

b. Ground:

[Find help answering ground water questions⁷](#)

1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.

The proposed ordinance is a nonproject action and would not directly involve any withdrawals of groundwater or discharge to groundwater. Development projects subject to the proposed ordinance that use groundwater or discharge to groundwater would be subject to all existing state, local, and federal regulations concerning groundwater removal and protection. These existing regulations would remain unchanged under the proposed ordinance.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The proposed ordinance is a nonproject action that would not result in any discharge of waste material into the ground. Development projects subject to the proposed ordinance may discharge waste material from

⁷ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater>

septic tanks or other sources, and would be required to treat and dispose of any waste in a manner compatible with state and local regulations.

c. Water Runoff (including stormwater):

- 1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

The proposed ordinance is a nonproject action that would not directly generate or affect water runoff. Individual development projects subject to the proposed ordinance may generate some water runoff. As with any development in unincorporated King County, on-site stormwater management would need to comply with the King County Surface Water Design Manual, including applicable Best Management Practices (BMPs) for treatment and flow prior to discharge, and existing maximum impervious surface regulations.

- 2. Could waste materials enter ground or surface waters? If so, generally describe.**

The proposed ordinance is a nonproject action that would not directly result in any waste material entering ground or surface waters. Development projects subject to the proposed ordinance may result in waste matter that could enter ground or surface waters, but such projects would be subject to existing state, local, and federal regulations concerning the protection of surface and ground water.

- 3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

The proposed ordinance is a nonproject action with no specific site or location, and would not alter or otherwise affect drainage patterns. Development projects subject to the proposed ordinance would also be subject to existing drainage regulations, which are unchanged by the subject ordinance.

Additionally, proposed ordinance section 170, a new section, would require fire access roads in development projects to be at least 20 feet wide to accommodate modern fire suppression vehicles, which could also theoretically affect the individual site drainage patterns. However, development projects subject to the proposed ordinance would also be subject to existing drainage regulations, which are unchanged by the subject ordinance.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The proposed ordinance is a nonproject action that would not have any direct impacts to surface or ground water, runoff water, or drainage patterns. Existing federal, state, and local regulations related to surface water discharge and withdrawal, groundwater discharge and withdrawal, runoff water (stormwater), and drainage would apply to any development project that would be subject to the proposed ordinance. No additional measures to reduce or control any potential surface, ground, and runoff water and drainage pattern impacts are proposed under this ordinance. Individual development proposals may be required to provide these measures.

4. Plants

[Find help answering plants questions](#)

a. Check the types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

Orchards, vineyards or other permanent crops.

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

Although the proposed ordinance is a nonproject action with no specific site or location, unincorporated King County includes a variety of vegetation types on the various lands that development projects subject to the proposed ordinance would apply to, including those listed above. Lands within King County include three ecoregions: the Puget Lowland Ecoregion in the western half of the County, which is now largely urbanized, but which contains forest plantations, farms, and cottonwood; and the North Cascades Ecoregion in the northeastern and east central area and the Cascades Ecoregion in the southeastern portion of the County, which both contain Pacific Silver Fir, Alaskan cedar, Mountain hemlock, Subalpine fir, black sedge, mountain heliotrope, and Alaskan spirea.

b. What kind and amount of vegetation will be removed or altered?

Although the proposed ordinance is a nonproject action that would not directly remove any vegetation, the development of individual development projects subject to the proposed ordinance could include the removal or alteration of vegetation (potentially of the types identified in question 4.a). Such development projects would be subject to existing state and local regulations that regulate vegetation removal or alteration, in the same manner as other uses.

c. List threatened and endangered species known to be on or near the site.

The United States Fish and Wildlife Service lists the following endangered or threatened plant species in Washington state: Kincaid's Lupine, Marsh Sandwort, Showy stickseed, Spalding's Catchfly, Umtanum desert buckwheat, Ute ladies'-tresses, Wenatchee Mountains checkermallow, White Bluffs bladderpod, and Whitebark pine. The Wenatchee Mountains checkermallow is known to be in eastern King County; none of these other plant species are known to be located in King County.

The proposed ordinance is a nonproject action with no specific site or location. Development projects subject to the proposed ordinance will be required to meet all federal, state, and local laws regarding endangered or threatened plant species.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

Although, the proposed ordinance is a nonproject action with no specific site or location, landscaping, use of native plants, or other measures to preserve or enhance vegetation could be proposed for individual developments. As with any development in unincorporated King County, development projects subject to the proposed ordinance would be subject to existing regulations governing landscaping, use of native plants, and vegetation preservation on their respective sites.

e. List all noxious weeds and invasive species known to be on or near the site.

The King County Noxious Weed Program regulates invasive plant species, and requires eradication or control, or recommends control, for over 150 plant species. Class A noxious weeds, adopted in accordance with RCW 17.10 and WAC 16-750, that are known to or have been located in King County, and require eradication by property owners, include Common Crupina, Common Cordgrass, Eggleaf Spurge, False Brome, Floating Primrose-Willow, French Broom, Garlic Mustard, Giant Hogweed, Goastrue, Hydrilla, Bighead Knapweed, Reed Sweetgrass, Ricefield Bulrush, Rush Broom, Clary Sage, Small-Flowered Jewelweed, Smooth Frogbit, and Milk Thistle. Class B noxious weeds, that are known to have been located in King County, and require control by property owners, include Viper's Bugloss, Blueweed, Annual Bugloss, Common Bugloss, Camelthorn, Common Reed, Dalmation Toadflax, Egeria, European Coltsfoot, Gorse, Hairy Willowherb, Hawkweeds (Non-native species and hybrids of meadow subgenus), European Hawkweed, Orange Hawkweed, Houndstongue, Black Knapweed, Brown Knapweed, Diffuse Knapweed, Meadow Knapweed, Spotted Knapweed, Kochia, Garden Loosestrife, Purple Loosestrife, Parrotfeather, Perennial Pepperweed, Policeman's Helmet, Rush Skeltonweed, Saltcedar, Leafy Spurge, Yellow Starthistle, Sulfur Cinquefoil, Tansy Ragwort, Musk Thistle, Plumeless Thistle, Malta Starthistle (Tacalote), Velvetleaf, Water Primrose, White Bryony, Wild Basil, Wild Chervil, Yellow Floating Heart, and Yellow Nutsedge.

Although the proposed ordinance is a nonproject action with no specific site or location, a variety of noxious weeds and invasive species exist in unincorporated King County. The proposed ordinance does not change any obligations to control noxious weeds identified by the King County Noxious Weed Control Board.

5. Animals

[Find help answering animal questions](#)⁸

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site.

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other:**
- **Mammals: deer, bear, elk, beaver, other:**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

Although the proposed ordinance is a nonproject action with no specific site or location, a variety of birds, mammals, and fish have been observed in unincorporated King County. There are 221 bird species that are

⁸ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals>

common, uncommon or usually seen on an annual basis in King County. Bird species include hawks, herons, eagles, owls, woodpeckers, songbirds, waterfowl, and shorebirds. There are 70 mammal species that can be found in King County, including shrews, bats, beavers, elk, deer, bears, rabbits, wolves, seals, and whales. There are 50 species of freshwater fish in King County, including 20 introduced species. More information on birds and animals found in King County can be found at <https://kingcounty.gov/services/environment/animals-and-plants/biodiversity/defining-biodiversity/species-of-interest.aspx>.

b. List any threatened and endangered species known to be on or near the site.

Although the proposed ordinance is a nonproject action with no specific site or location, there are a number of federally threatened and endangered species in King County according to the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration. These species include the Hawaiian petrel, Marbled murrelet, Mt. Rainier white-tailed ptarmigan, Northern spotted owl, Streaked horned lark, Western snowy plover, Yellow-billed cuckoo, Bull Trout, Island marble butterfly, Taylor's Checkerspot, Canada lynx, Columbian white-tailed deer, Gray wolf, Grizzly bear, Olympia pocket gopher, Pygmy Rabbit, Roy Prairie pocket gopher, Southern Mountain Caribou DPS, Tenino pocket gopher, Yelm pocket gopher, Blue whale, Fin whale, Humpback whale, Southern resident killer whale, Sei whale, Oregon spotted frog.

The Washington State Department of Fish and Wildlife lists the following salmonid species as those federally threatened that are known to occur in King County. Skykomish Bull Trout, White River (Puyallup) Bull Trout, Cedar Chinook, Green River (Duwamish) Chinook, Sammamish Chinook, Snoqualmie Chinook, White River Chinook, Cedar River Winter Steelhead, Green River (Duwamish) Winter Steelhead, North Lake Washington and Lake Sammamish Winter Steelhead, Snoqualmie Winter Steelhead, Tolt Summer Steelhead, and White River (Puyallup) Winter Steelhead.

In addition to the federally listed species above, the Washington State Department of Fish and Wildlife lists additional threatened and endangered species not included with the federally listed species include the Blue-gray tailed dropper, Western gray squirrel, Northwestern pond turtle, and Oregon vesper sparrow. One additional species, fisher, was historically in King County but is thought to now be extinct in this area.

As with any development in unincorporated King County, development projects subject to the proposed ordinance would have to comply with existing state, local, and federal regulations that protect these species.

c. Is the site part of a migration route? If so, explain.

Although the proposed ordinance is a nonproject action with no identifiable "site," King County is within the Pacific Flyway migratory pathway for birds, and migratory birds use water bodies, shorelines, mud flats, and grassy areas/meadows throughout King County. There are numerous streams and water bodies within the County that serve as migration routes for anadromous fish. These water bodies could potentially be near or cross through sites where development projects are proposed that could be subject to the proposed ordinance. Elk, other mammals, and bird species migrate seasonally. Daily movements include animal species moving around to get their daily needs met, and this movement can be impacted by fences, roads, culverts, and land use cover and change. Mammals, amphibians, and reptiles are most affected by barriers to movement.

d. Proposed measures to preserve or enhance wildlife, if any.

The proposed ordinance is a nonproject action and would not have any direct impacts to wildlife, so no measures to preserve or enhance wildlife are proposed. Any development projects that would be subject to proposed ordinance would also be subject to existing federal, state, and local wildlife regulations.

e. List any invasive animal species known to be on or near the site.

The Washington Invasive Species Council, established by the Washington State Legislature, has identified 16 animal species and 13 insect species that are considered invasive in Washington State. King County is known or suspected to have the following invasive animal and insect species: African Clawed Frog, Bullfrog, Golden Trout, Largemouth Bass, New Zealand Mud Snail, Nutria, Red Swamp Crayfish, and Tunicate.

Although the proposed ordinance is a nonproject action with no specific site or location, numerous invasive animal species are known to exist in unincorporated King County. Invasive species may be located on a development project site that could be subject to the proposed ordinance.

6. Energy and natural resources

[Find help answering energy and natural resource questions](#)⁹

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Although the proposed ordinance is a nonproject action that would not have direct energy needs, any development project subject to the proposed ordinance would likely require electricity for a wide range of structural uses; some exceptions in the code also use natural gas for certain uses including space heating, water heating, cooking, or manufacturing.

The proposed ordinance includes provisions that would increase the use of solar photovoltaic (PV) renewable energy generation, and the readiness for future solar PV installations. This is done in two parts: 1) by adoption of International Residential Code (IRC) appendix T [RE]: Solar-Ready Provisions for Detached One- and Two-Family Dwellings and Townhouses and 2) by reduction in the threshold for new commercial buildings and additions to provide a renewable energy generation system from 10,000 square feet to 5,000 square feet of gross conditioned floor area.

The proposed ordinance includes provisions that would decrease energy use by increasing insulation standards and window thermal performance, increasing HVAC and water heating efficiency requirements and requiring increased standards for HVAC demand responsive and occupied standby controls, increased standards for energy recovery, requiring commercial kitchen equipment to comply with Energy Star program, reducing lighting power allowance, and increasing the energy efficiency package options required for projects. Further, a reduced threshold for new buildings and additions to provide energy metering and energy consumption management from 25,000 square feet to 20,000 square feet of gross conditioned floor area and added energy metering requirements for parking garage fan energy, parking garage lighting energy, and plug load system energy use will promote energy use awareness and energy conservation.

⁹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou>

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The proposed ordinance is a nonproject action that would not have any direct impacts to the use of solar energy. Implementation of the proposed ordinance in individual development projects is unlikely to affect the potential use of solar energy by adjacent properties, as maximum building envelopes, i.e., height and setbacks, are dictated by zoning and not design standards. New structures would have to be significantly higher than existing structures to result shading that would impede roof- or ground-mounted solar photovoltaic energy generation on adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

The proposed ordinance is a nonproject action that includes adoption of the Washington State Energy Code and the county's strengthening amendments. Development projects subject to the proposed ordinance will be required to comply with the WSEC and proposed strengthening amendments to the WSEC, which will mean they must include energy conservation features.

7. Environmental health

[Health Find help with answering environmental health questions](#)¹⁰

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

Although the proposed ordinance is a nonproject action that would not directly cause any environmental health hazards, it is possible that development projects subject to the proposed ordinance could result in exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste. To the extent any such development created such exposure or risk, those hazards would be regulated by existing state and local regulations. This topic is discussed in more detail in Part D of this checklist.

1. Describe any known or possible contamination at the site from present or past uses.

The proposed ordinance is a nonproject action with no specific site or location. Sites with contamination exist within unincorporated King County where development projects could be proposed that are subject to the proposed ordinance. These sites would be required to meet any remediation requirements prior to grading.

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The proposed ordinance is a nonproject action with no specific site or location. Sites with hazardous chemicals/conditions exist within unincorporated King County and development could be proposed on them

¹⁰ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health>

that is subject to the proposed ordinance. Such development would be subject to existing federal, state, and local regulations regarding chemical hazards and liquid and gas transmission pipelines.

3. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Although the proposed ordinance is a nonproject action that would not include the storage, use, or production of any toxic or hazardous chemicals, development projects subject to the proposed ordinance could require the use of toxic or hazardous chemicals, such as gasoline or diesel fuel, to operate construction equipment. Individual development projects would be required to store, use, and produce any toxic or hazardous chemicals, such as cleaning supplies, in accordance with applicable laws and regulations. This topic is discussed in more detail in Part D of this checklist.

4. Describe special emergency services that might be required.

The proposed ordinance is a nonproject action that would not have any direct impacts, and implementation of the proposed ordinance is not anticipated to generate any additional special emergency services for the development projects to which it would apply.

5. Proposed measures to reduce or control environmental health hazards, if any.

The proposed ordinance is a nonproject action that would not have any direct impact on the environment nor create environmental health hazards. No measures to reduce or control environmental health hazards are proposed.

b. Noise

1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The proposed ordinance is a nonproject action with no specific site or location that can be evaluated for existing noise levels. Various types of noise exist in the areas where the proposed ordinance could apply, including noise from traffic, operation of equipment, and more. These noise sources are not anticipated to affect implementation of the proposed ordinance.

2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?

The proposed ordinance is a nonproject action that would not have any direct noise impacts. Future development projects including installation of mechanical equipment subject to the proposed ordinance may produce noise impacts, which will continue to be regulated and mitigated by existing K.C.C. 12.86.

3. Proposed measures to reduce or control noise impacts, if any:

The proposed ordinance is a nonproject action that would not have any direct noise impacts. As such, no measures to reduce or control potential noise impacts are proposed.

8. Land and shoreline use

[Find help answering land and shoreline use questions](#)¹¹

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

The proposed ordinance is a nonproject action with no specific site or location and would not have any direct impacts on the current land uses on nearby or adjacent properties. As a whole, unincorporated King County is predominantly forestland to the east and predominantly rural to the west, adjacent to more urban incorporated areas of the county, with agricultural areas between. The proposed ordinance would not change or impact current land use designations or zoning classifications in unincorporated King County. The proposed ordinance does not change the uses allowed on properties in the King County Code land use tables.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

The proposed ordinance is a nonproject action with no specific site or location and would not have any direct impacts to working farmlands or forestlands. Some sites where a development project is proposed that would be subject to the proposed ordinance could have been or may currently be used as working farmland or forestlands. However, existing regulatory limitations on properties enrolled in the Farmland Preservation Program, within the Agricultural Production District or Forest Production District, or in Agricultural (A) or Forestry (F) zones would continue to apply to development projects that would be subject to the proposed ordinance.

- 1. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

The proposed ordinance is a nonproject action that would not directly affect or be affected by the normal business operations of working farmland or forestland.

- c. Describe any structures on the site.**

Although the proposed ordinance is a nonproject action with no specific site or location, various structures are located on parcels within unincorporated King County, where the proposed ordinance would apply.

- d. Will any structures be demolished? If so, what?**

Although the proposed ordinance is a nonproject action that would not directly result in any demolition, existing structures could be demolished as part of a development project that would be subject to the proposed ordinance. The nature of and extent to which those structures could be demolished is unknown at this time and would be subject to all existing applicable regulations.

¹¹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use>

e. What is the current zoning classification of the site?

The proposed ordinance is a nonproject action with no specific site or location; development projects subject to the proposed ordinance could occur in any zoning classification that allows the construction of buildings.

f. What is the current comprehensive plan designation of the site?

The proposed ordinance is a nonproject action with no specific site or location; development projects subject to the proposed ordinance would occur in any land use designation that allows the construction of buildings.

g. If applicable, what is the current shoreline master program designation of the site?

Although the proposed ordinance is a nonproject action with no specific site or location, unincorporated King County includes a variety of shoreline master program designations. Individual development projects subject to the proposed ordinance that occurs within or proximate to the County's shoreline jurisdiction would need to comply with the County's shoreline master program.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Although the proposed ordinance is a nonproject action with no specific site or location, portions of unincorporated King County are classified as critical areas where a development project could be proposed that would be subject to the proposed ordinance. Specifically, King County Code designates the following as critical areas: coal mine hazard areas, erosion hazard areas, flood hazard areas, coastal high hazard areas, channel migration zones, landslide hazard areas, seismic hazard areas, volcanic hazard areas, steep slope hazard areas, critical aquifer recharge areas, wetlands and wetland buffers, aquatic areas, and wildlife habitat networks and conservation areas.

i. Approximately how many people would reside or work in the completed project?

The proposed ordinance is a nonproject action that would not directly result in a completed project where people would reside or work. Individual development projects that are subject to the proposed ordinance would have employees or residents, or both. The number of persons living or working in the subject buildings would depend on the individual land uses, square footages, and regulations affecting those individual development projects.

j. Approximately how many people would the completed project displace?

Although the proposed ordinance is a nonproject action and would not directly result in any displacement, it is possible that development projects subject to the proposed ordinance could result in displacement. However, implementation of the proposed ordinance is not anticipated to affect the likelihood of displacement under current King County Code.

k. Proposed measures to avoid or reduce displacement impacts, if any.

Because the proposal is not anticipated to affect the likelihood of displacement under KCC, no measures to avoid or reduce displacement impacts are proposed. King County projects would be subject to existing policies and regulations governing displacements and relocations and would be evaluated during project-level environmental and permit reviews.

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

All development will occur in compliance with the zoning code and adopted plans. This will ensure that all proposals will be in compliance with existing and projected land uses and plans.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

The proposed ordinance is a nonproject action and would not directly impact agricultural and forest lands of long-term commercial significance; as such, no measures to reduce or control impacts to such lands are proposed. King County projects subject to the proposed ordinance may occur on lands used as working farmland or forest lands. Existing development limits on properties enrolled in the Farmland Preservation Program, within the Agricultural Production District or Forest Production District, or in Agricultural (A) or Forestry (F) zones would continue to apply to development projects under the proposed ordinance.

9. Housing

[Find help answering housing questions](#)¹²

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Although the proposed ordinance is a nonproject action that will not have direct impacts to housing, the development of a project that would be subject to the proposed ordinance would not result in any additional units of housing above what might occur under existing code.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Neither the proposed ordinance itself nor the development allowed under the ordinance would result in any greater elimination of housing than what might occur if the ordinance were not adopted.

c. Proposed measures to reduce or control housing impacts, if any:

Although no significant adverse impacts are anticipated, the proposed ordinance includes exceptions for affordable housing projects to alleviate some of the energy code requirements from those projects. This includes an exception to requiring on-site renewable energy generation systems on affordable housing projects. This exception would result in more cost-effective housing, which in turn would provide more affordable housing options. However, the residents of those homes would not benefit from the reduction of exposure to fossil fuel emissions as those who would live in housing that uses on-site renewable energy systems. The exposure to emissions would be the same as currently occurs. Further, affordable housing is permitted to replace heating equipment with the same fuel type as existing equipment. By repealing the King County Building Security Code chapter (KCC 16.10), unnecessary redundant security requirements for rental properties were removed. This also eliminated the need for additional inspections by King County inspectors, reducing cost and increasing ease with which property owners could make units available to rent.

¹² <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing>

10. Aesthetics

[Find help answering aesthetics questions](#)¹³

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

The proposed ordinance is a nonproject action that does not directly involve the construction of any structures, and does not regulate or change the height requirements of any structures or principal exterior building materials. The height and any exterior building material of any development project subject to the proposed ordinance will be subject to existing regulations.

- b. What views in the immediate vicinity would be altered or obstructed?**

The proposed ordinance is a nonproject action that would not have any direct impacts to views. Any development projects subject to the proposed ordinance would not result in the alteration or obstruction of any views to a greater degree than any other development allowed under existing regulations.

- c. Proposed measures to reduce or control aesthetic impacts, if any:**

The proposed ordinance is a nonproject action that would not have any direct impacts to views or aesthetics, and as such, no measures are proposed to reduce or control aesthetic impacts.

11. Light and glare

[Find help answering light and glare questions](#)¹⁴

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

The proposed ordinance is a nonproject action that would not directly cause any light or glare and any development allowed under the ordinance would not produce any light or glare beyond other development allowed under existing regulations. One provision of the ordinance includes the requirement for submetering of site lighting, which may improve user awareness of electrical energy consumption associated with site lighting and therefore translate to reduction in unnecessary lighting and glare.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

The proposed ordinance is a nonproject action that would not have any direct impacts. Development projects subject to the proposed ordinance would not result in a greater increase in light or glare than any other development allowed under existing regulations. Any development projects subject to the proposed ordinance would have to comply with existing development regulations, including any related to light and glare.

- c. What existing off-site sources of light or glare may affect your proposal?**

¹³ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics>

¹⁴ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare>

The proposed ordinance is a nonproject action with no specific site or location. Various off-site sources of light or glare exist throughout unincorporated King County. It is unlikely that any development projects subject to the proposed ordinance would be impacted by any off-site sources.

d. Proposed measures to reduce or control light and glare impacts, if any:

The proposed ordinance is a nonproject action that would not have any direct light and glare impacts. No additional measures to reduce or control light and glare impacts are proposed beyond existing development regulations.

12. Recreation

[Find help answering recreation questions](#)

a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed ordinance is a nonproject action with no specific site or location. A variety of designated and informal recreational opportunities exist in unincorporated King County where the proposed ordinance would apply.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The proposed ordinance is a nonproject action that would not directly displace any existing recreational uses. The ordinance would not result in a greater displacement of recreational uses than what may otherwise occur under current code.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

The proposed ordinance is a nonproject action that would not have any direct impacts to recreation; no measures to reduce or control impacts on recreation are proposed.

13. Historic and cultural preservation

[Find help answering historic and cultural preservation questions](#)¹⁵

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

The proposed ordinance is a nonproject action with no specific site or location. A variety of buildings, structures and sites within unincorporated King County are listed or eligible for listing in national, state, or local preservation registers, and are potentially on sites where development projects could be proposed that are subject to the proposed ordinance. Such developments would be required to comply with all federal, state, and local regulations related to historic and cultural resources.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material

¹⁵ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p>

evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

The proposed ordinance is a nonproject action with no specific site or location. However, landmarks, features, and other evidence of Indian or historic use or occupation exist throughout unincorporated King County, and potentially on sites where development projects could be proposed that are subject to the proposed ordinance. Such projects would continue to be required to comply with federal, state, and local rules related to historic and cultural resources.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The proposed ordinance is a nonproject action that will not have any direct impacts to historic and cultural resources. King County's existing regulations related to cultural and historic resources would apply to any proposed development projects subject to the proposed ordinance. Such requirements could include consultation with tribes and associated agencies as well as use of archaeological surveys, GIS data, and historic maps to assess potential impacts to cultural and historic resources if needed. The Muckleshoot, Puyallup, Samish, Snoqualmie, Squaxin, Stillaguamish, Suquamish, and Tulalip tribes are regularly notified during the County's SEPA process for proposed development projects, and affected tribes receive notice when the County receives an application for a Type 2, 3, or 4 project, or for a Type 1 project subject to SEPA.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The proposed ordinance is a nonproject action that will not have any direct impacts to cultural or historic resources. However, King County's existing regulations related to avoidance, minimization of, or compensation for loss, changes to, and disturbances to cultural and historic resources would apply to any individual development proposals subject to the proposed ordinance.

14. Transportation

[Find help with answering transportation questions](#)¹⁶

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The proposed ordinance is a nonproject action with no specific site or location. The proposed ordinance would apply to development project sites that are served by a variety of public streets and highways.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

¹⁶ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation>

The proposed ordinance is a nonproject action with no specific site or location. However, unincorporated King County is generally served by public transit. It is unknown how far the nearest transit stop would be for any future development proposals subject to the proposed ordinance.

- c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

The proposed ordinance is a nonproject action that would not directly involve any roadway, bicycle, or pedestrian improvements. While these transportation facilities are often required to be built or improved as a result of the growth associated with new developments, the criteria for how to build these facilities, and the threshold for when facilities are required to be built or improved, are not found within the building code, and therefore there are no direct impacts to these facilities by the update of this code.

- d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The proposed ordinance a nonproject action that would not have any direct impacts to transportation facilities. However, individual development projects subject to the proposed ordinance may use or occur proximal to water, rail and air transportation.

- e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

The proposed ordinance is a nonproject action that would not directly generate any vehicular trips. Development projects subject to the proposed ordinance would likely generate vehicular trips, though the volume of those vehicle trips is unlikely to be greater as a result of implementing the proposed ordinance.

- f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

Although the proposed ordinance would not have any direct impact on the movement of agricultural and forest products on roads or streets on the area, individual development projects subject to the ordinance could generate some additional traffic that could interfere with, affect, or be affected by the movement of agricultural and forest products.

- g. Proposed measures to reduce or control transportation impacts, if any:**

The proposed ordinance is a nonproject action that would not have any direct impacts to transportation volumes. No additional measures to reduce or control transportation impacts are proposed. Development projects subject to the proposed ordinance will be subject to existing zoning and development regulations, including, to the extent required, transportation analysis and mitigation.

15. Public services

[Find help answering public service questions¹⁷](#)

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

The proposed ordinance is a nonproject action that would not directly result in an increased need for public services. Development projects subject to the proposed ordinance would need public services to be available at a similar level to what is currently required in the affected zones.

- b. Proposed measures to reduce or control direct impacts on public services, if any.**

There are several code sections that support emergency response:

- Specific lettering sizes would be required based on the distance of the building from the right of way, improving address legibility and helping responders find locations quickly during emergency situations to align with state adopted 2021 IFC code.
- New sections would be added to the building code to support and improve emergency radio network system performance in buildings required to provide radio connections, which would improve radio communications between responders during an emergency.
- Several code sections are proposed for removal and minor tweaks would be conducted concerning emergency responder radio coverage to property align with state adopted IFC 2021 code.

16. Utilities [Find help answering utilities questions¹⁸](#)

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:**

The proposed ordinance is a nonproject action with no specific site or location. A variety of utilities are generally available in unincorporated King County depending on the service area of specific utility providers. Municipal sanitary sewer is not likely to be available in most rural and agricultural areas in unincorporated King County, with notable exceptions for the Vashon and Snoqualmie Pass Rural Towns, which do have sanitary sewer service.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

The proposed ordinance is a nonproject action that would not have any direct connection to utilities, and is not directly connected to a development site on which general construction activities would occur. Development projects subject to the proposed ordinance would require connection to the electrical grid, with an increased ratio of building energy provided by electrical energy over natural gas or propane energy. Where developments are connected to the electrical grid, the probable utilities providing electrical service would be either Puget Sound Energy (PSE) or Seattle City Light. Further, the ordinance would require on-site power generation and provisions for required electric vehicle charging infrastructure to be installed, for

¹⁷ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services>

¹⁸ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities>

certain development projects. Developments may also require connection to water, sewer, gas, telephone, cable, and internet. Construction activities associated with installation of and connection to utilities include trenching and pile driving.

C.Signature

[Find help about who should sign](#)¹⁹

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Nicole Gaudette

Type name of signee: Nicole Gaudette

Position and agency/organization: Code Writer, King County Department of Local Services

Date submitted: February 11, 2025

¹⁹ <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-C-Signature>

D. Supplemental sheet for nonproject actions [\[HELP\]](#)

[Find help for the nonproject actions worksheet²⁰](#)

Do not use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

The proposed ordinance is unlikely to increase the production, storage, or release of toxic or hazardous substances, or to increase discharges to water. Adoption of the proposed energy code amendments within the ordinance is expected to reduce air emissions related with building fossil-fuel energy consumption.

Air Emissions

Overall, the above proposed ordinance sections are projected to reduce installation of systems using onsite combustion of fossil fuels for affected building types, which in turn is projected to reduce air emissions from this combustion process. Typical building systems using onsite combustion of fossil fuels include water-and space-heating systems that rely on burning natural gas. Combustion of natural gas emits multiple air pollutants, including nitrogen oxides (NO_x), nitrous oxide (N₂O), carbon monoxide (CO), carbon dioxide (CO₂), methane (CH₄), volatile organic compounds (VOCs), trace amounts of sulfur dioxide (SO₂), and particulate matter (PM). Several of these are also classified as greenhouse gases (GHGs), including carbon dioxide, methane and nitrous oxide, contributing to environmental impacts that result from climate change.

These proposed ordinance sections are projected to advance GHG emission reductions in King County over time. The King County 2017 GHG emissions inventory found that in the built environment, natural gas consumption is responsible for:

- 34 percent of GHG emissions overall, and for
- 13 percent of GHG emissions of commercial buildings specifically.

Although the building codes would not affect existing buildings immediately, it would significantly decrease GHG emissions from new development of multifamily buildings four stories or taller, and from new commercial buildings. Over time, this impact would grow as the existing building stock undergoes substantial renovations that would trigger application of the proposed ordinance, or when buildings are demolished and new structures are built. This impact will expand as state legislation comes into effect. The Washington State Clean Energy Transformation Act (CETA) requires that electricity supplied by utilities in Washington State be:

- Coal-free by 2025;
- GHG-neutral by 2030, meaning their emissions must be offset by other actions; and
- Non-emitting for GHGs by 2045.

²⁰ <https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions>

Once electricity becomes GHG-neutral in 2030 due to CETA, the primary (and potentially sole) GHG emissions from building operations will be from on-site fossil fuel combustion, which primarily is used for space- and water-heating. By prohibiting fossil fuel combustion for water-heating in larger buildings, and for space heating for all commercial buildings and applicable multifamily buildings, the proposed ordinance would potentially yield some building operations that are GHG-free starting in 2030 for all commercial buildings, and multifamily buildings four stories or taller, constructed under the proposed ordinance.

Air pollutants from the combustion of natural gas emits have other impacts beyond contributing to climate change and its consequent environmental impacts. This includes various environmental and human health impacts associated with nitrogen dioxide, particulate matter, and VOCs, and impacts from potential onsite fossil fuel leaks.

The U.S. EPA notes the following impacts from nitrogen dioxide pollution:

Breathing air with a high concentration of NO₂ can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO₂.

NO₂ along with other NO_x reacts with other chemicals in the air to form both particulate matter and ozone. Both of these are also harmful when inhaled due to effects on the respiratory system... NO₂ and other NO_x interact with water, oxygen and other chemicals in the atmosphere to form acid rain. Acid rain harms sensitive ecosystems such as lakes and forests... [Additionally,] NO_x in the atmosphere contributes to nutrient pollution in coastal waters...

In Washington state, the Department of Ecology estimates that there are 77,400 metric tons of atmospheric nitrogen emitted annually across all counties within Puget Sound. Of these, 77 percent of emissions stem from transportation, nine percent is from agriculture and seven percent is from point sources of pollution, and 13 percent stem (10,000 metric tons) are emitted from buildings.

The U.S. EPA notes the following impacts from particulate matter pollution:

The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream.

Exposure to such particles can affect both your lungs and your heart. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- *premature death in people with heart or lung disease*
- *nonfatal heart attacks*
- *irregular heartbeat*
- *aggravated asthma*
- *decreased lung function*
- *increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.*

People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution exposure...

Particles can [also] be carried over long distances by wind and then settle on ground or water. Depending on their chemical composition, the effects of this settling may include: making lakes and streams acidic

- *changing the nutrient balance in coastal waters and large river basins*
- *depleting the nutrients in soil*
- *damaging sensitive forests and farm crops*
- *affecting the diversity of ecosystems*
- *contributing to acid rain effects...*

The impact of releases of VOCs varies depending on whether it is being released indoors through off-gassing, or is being released or created in an outdoor environment. Onsite combustion of fossil fuels for water or space heating vent emissions outdoors; the primary concern of outdoor VOC releases is chemical reactions that lead to the creation of ground-level ozone; it should be noted that NOx releases also lead to the generation of ground-level ozone. While high-altitude (stratospheric) ozone provides a protection from harmful ultraviolet rays, ground-level or tropospheric ozone negatively impacts human health and can negatively affect sensitive vegetation and ecosystems.

Breathing in ground level ozone can reduce lung function by 20 percent and can trigger health reactions by those most particularly sensitive to poor air quality – children, older adults, those with respiratory or pulmonary conditions, athletes, and those most often outdoors – in addition to our ecosystem. Reactions may look like shortness of breath, coughing, wheezing, fatigue, headaches, nausea, chest pain, and eye and throat irritation. The EPA estimates that 5 to 20 percent of the total U.S. population is especially susceptible to the harmful effects of ozone.

Ground-level ozone can also negatively affect vegetation, namely black cherry, quaking aspen, tulip poplar, white pine, ponderosa pine, and red alder.

The above discussion indicates that the proposed ordinance would reduce air emission impacts, including releases of GHG emissions and other resulting environmental effects, from the reduction of onsite fossil fuel combustion.

Toxic or Hazardous Substances

Proposed ordinance sections that would reduce installation of combustion of fossil fuel combustion systems may also result in reduced leaks of fossil fuels, connected with potential issues of carbon monoxide releases and gas accumulation to a combustible or explosive concentration.

If natural gas does not undergo complete combustion it releases carbon monoxide, a colorless, odorless and toxic gas.

...small amounts of carbon monoxide can dramatically reduce hemoglobin's ability to transport oxygen. Common symptoms of carbon monoxide exposure are headache, nausea, rapid breathing, weakness, exhaustion, dizziness, and confusion. Hypoxia (severe oxygen deficiency) due to acute carbon monoxide poisoning may result in reversible neurological effects, or it may result in long-term (and possibly delayed) irreversible neurological (brain damage) or cardiological (heart damage) effects.

It is estimated that the U.S. oil and gas system leaks about 2.3% of all the gas it produces.

Natural gas leaks can be dangerous as an indoor air pollutant and, if the leak persists such that gas accumulates, it can result in fires and explosion incidents. Research conducted in development of this checklist did not find data on the amount of gas leaks associated with building types that would be affected by the proposed ordinance namely commercial buildings, and multifamily buildings four stories or taller. However, the 2018 National Fire Protection Association report estimates that 4,200 home fires start with

natural gas ignition per year, causing an average of 40 deaths annually, and that local fire departments respond to 340 gas or LP-Gas leaks per day with no ignition. Research conducted in development of this checklist did not find similar information on explosions associated with building leaks. However some explosions have occurred in the region in the last decade that help illustrate the potential range of impacts that can occur from an explosion associated with a natural gas leak from a commercial building. This includes the following:

- 2014 explosion in North Bend destroyed three buildings and caused additional property damage to other buildings, including windows, doors and roofs; one city park building roof was temporarily lifted off its foundation. Nearby, five apartments were “red-tagged” as unlivable until repairs could be made and 24 residents of an assisted living facility had to be temporarily relocated due to glass shards and furniture damage; 55 properties were damaged by the blast.
- 2016 explosion in Seattle’s Greenwood neighborhood, that destroyed three businesses and windows of dozens of nearby businesses and apartment buildings; sent nine firefighters to the hospital; and caused \$3 million in damages.

The above review indicates that the proposed ordinance could reduce impacts associated with natural gas distribution systems, namely the hazards associated with carbon monoxide releases and with natural gas accumulation associated with the potential for fire starts and explosion incidents.

Production of Noise

This section reviews the potential noise impacts of MSHPs, VRFs and HPWHs that could be determined from research conducted in development of this checklist.

The manufacturer-reported range of MSHP operational noise is 20 to 60 decibels (dBs). For comparison 50 dB is the equivalent of a quiet conversation at home, and 60 dB is closer to the volume of a conversation at a restaurant, or a normal conversation. This maximum MSHP sound level rating is not unlike the sound of other appliances with which persons are already familiar. For instance, washing machines and dishwashers tend to operate around 70 dB, and air conditioners operate around 60 dB.

A similar, comprehensive noise assessment for VRFs could not be found in research conducted in development of this checklist, though some sources indicate that a VRF system may be quieter than a MSHP system. One VRF unit cited operational noise of 23 to 31 dB(A); note that dB(A) stands for weighted sound levels that discriminate against low frequencies similar to the human ear. Typically systems that use ductwork will be a few decibels louder.

Overall, for heat pumps used for space heating, some unit functions will cause decibel emissions closer to the louder end of the range for short period of times. For instance, heat pumps may be louder or sound different when a heat pump unit starts up or shuts down, enters a defrost mode or when the fan is in operation. Design decisions may help mitigate equipment noise; for instance, one research product noted that rooftop placement of VRFs may reduce noise impacts, though some installations may also distribute the units in mechanical rooms throughout a building.

A comprehensive assessment of operating noise from HPWHs for larger commercial systems could not be found in research conducted in development of this checklist. HPWHs designed for single family homes tend to emit noise levels similar to that of a dehumidifier; it is unknown if large commercial and multifamily HPWHs emit more noise on average. The Northwest Energy Efficiency Alliance (NEEA) has provided extensive ratings of multiple HPWH models according to operating tiers, with tier three units indicating higher efficiency and quieter operation. When such units are installed in multifamily applications, they typically operate at less than 55dBA; one HPWH unit cited typical operational noise of 37 dB.

Given the range of equipment and design options available to mitigate noise, and that estimated impacts do not exceed noise levels that may be emitted today through the installation of other common household appliances, no adverse levels of noise production are anticipated to result from the proposed ordinance.

- **Proposed measures to avoid or reduce such increases are:**

Existing regulations that aim to avoid or reduce increased discharges to water, emissions to air and the production, storage, or release of toxic or hazardous substances, and to limit noise would also apply to development projects subject to the proposed ordinance and are not changed by the proposed ordinance. Proposed ordinance sections limiting onsite fossil-fuel combustion are projected to have positive impacts on air emissions originating from some new developments compared to current development regulations.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

There are numerous plants, animals, fish, and marine life within unincorporated King County, but the proposed ordinance is unlikely to result in activities that would cause a greater impact to these resources than might otherwise occur under the current code because the regulations protecting those resources are not changed by the proposed ordinance.

- **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

Existing regulations that protect and conserve plants, animals, fish, and marine life would apply to development projects subject to the proposed ordinance and are not changed by the proposed ordinance, including the County's Shoreline and Critical Areas Code. No additional measures to avoid or reduce such impacts are proposed.

3. How would the proposal be likely to deplete energy or natural resources?

The proposed ordinance would alter the energy source of some building systems. The proposed ordinance discourages fossil fuel use combustion for new, or whole-system replacement of, HVAC and service water heating systems in all commercial buildings, and multifamily buildings four stories or taller. These proposals would reduce energy consumption associated with the onsite combustion of fossil fuels. Alternative HVAC and service water heating systems would typically rely on electricity for energy, and hence would increase the consumption of electricity. Estimating how much electricity consumption would increase as a result of the proposed ordinance would be challenging to predict, as zoning and allowable uses in unincorporated King County allow for development of a variety of building sizes, heights and types. Such buildings, in turn, can have varying needs and energy demands for space and water heating depending on occupant activity. However, the types of space and water heating that would be allowed under the proposed ordinance are all space and water heating options that could be installed without passage of the proposed ordinance. As such, the proposed ordinance would not affect the potential maximum electrical load associated with new building construction.

- **Proposed measures to protect or conserve energy and natural resources are:**

The proposed ordinance includes multiple measures that would conserve energy, and some additional measures that may help conserve natural resources as part of the energy code strengthening amendments. The overall building energy efficiency increases resulting from projects subject to the proposed ordinance will be increased, resulting in lower energy usage as well as a lower dependence on fossil-fuel energy and transition to cleaner electrical energy.

The remaining measures that would conserve energy, and some that may help conserve natural resources, include the following new K.C.C. code sections under the proposed ordinance. These proposed ordinance measures propose to modify the Washington State commercial energy code application for unincorporated King County for commercial buildings and multifamily buildings four stories or taller.

Several sections would improve the energy efficiency of heating, ventilation and air conditioning (HVAC) mechanical systems. Some sections of the ordinance will improve the efficiency of HVAC space heating systems through multiple means, namely by limiting the use of fossil-fuel fired and electric resistance HVAC systems. There are multiple exceptions, including for building dwelling units with rooms under a certain HVAC capacity wattage; this exception has the potential to drive additional efficiency improvements in insulation or reduced window heat loss in buildings eligible to qualify for this exception. A section of the ordinance would limit the use of internal electric resistance systems within heat pumps to achieve improved electrical efficiency. Further, provisions in the ordinance would require additional insulation of refrigerant piping for HVAC systems to limit transmission losses. Although limiting consumption of fossil fuels, some provisions of the ordinance could increase the consumption of electricity for HVAC systems overall. However, other features of the proposed ordinance drive energy efficiency improvements and require renewable electricity generation as detailed in this subsection that may counterbalance these effects. Additionally, increased renewable energy generation would result in improved air emissions related to building construction; for more on this topic, please see section D.1 of this checklist. Provisions of the ordinance specifically improve ventilation system efficiencies by requiring increases in energy recovery ventilation systems and occupied standby controls.

Lighting System Efficiency

Several sections would improve lighting system energy efficiency. For instance, provisions of the ordinance require enhanced lighting controls that allow for increased dimming, sectional lighting operation and the option of occupant-sensitive lighting. Multiple reductions to the lighting power allowance tables will result in higher-efficiency equipment or increased use of natural lighting.

Additional changes to modify the required efficiency package of the code to require higher levels of energy efficiency through:

- Direct increases in the number of energy efficiency credits for compliance;
- Modifying specific credits to either align credit requirements with other restrictions stipulated elsewhere in the proposed ordinance; and
- Removing options that would either be met through the baseline code, are disallowed elsewhere in the proposed ordinance, or that provide low-efficiency options for credit compliance.

Solar Ready and Solar PV Installations

- Provisions in the ordinance reduce the threshold for buildings and additions which require a “solar-ready” area be provided on qualifying buildings with appropriate design support. Solar readiness prepares rooftops to support a future renewable solar energy installation, including protected routing for future wiring and preparation of the electrical system for a future connection from a renewable energy system. Although solar-readiness would not reduce consumption of utility-supplied electricity by itself, extending these requirements to multifamily buildings makes adding solar rooftop energy systems more cost-effective and feasible at a later date.
- Provisions in the ordinance reduce the threshold for buildings and additions which require the installation of solar energy production based on the conditioned floor area of a building or addition, which would increase renewable energy generation for new development structures subject to the proposed ordinance. This would reduce energy requirements from the utility energy grid. Puget Sound Energy (PSE)-provided electricity includes coal- and natural-gas derived electricity

generation; as such the proposed ordinance may help reduce the consumption of coal and natural gas.

Other Natural Conservation Features

- Improvements to building thermal envelope efficiency, which would provide minor energy efficiency improvements for some building features compared to state code, such as for mass walls and high performance vertical glazing.
- Provisions which would require commercial food service equipment to meet energy- and water-efficiency criteria of the federal Energy Star label.
- These combined requirements help ensure the reduced consumption of natural gas, and the increased energy efficiency of equipment for structures converting land uses in this fashion.

Beyond the above, there are additional federal, state and local regulations that protect and conserve energy and natural resources that would also apply to development projects subject to the proposed ordinance.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The proposed ordinance is unlikely to result in activities that would cause a greater impact to environmentally sensitive areas or areas designated as eligible or under study for governmental protection than might otherwise occur under the existing code. Any development project that would be subject to the proposed ordinance would be subject to the same development restrictions concerning environmentally sensitive areas that are currently in place.

- **Proposed measures to protect such resources or to avoid or reduce impacts are:**

Existing regulations that protect such resources would apply to development projects subject to the proposed ordinance and are not changed by the proposed ordinance. No additional measures to avoid or reduce such impacts are proposed.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposed ordinance does not alter, and is not anticipated to affect, currently allowed land uses or shoreline uses in King County.

- **Proposed measures to avoid or reduce shoreline and land use impacts are:**

As the proposed ordinance does not alter, and is not anticipated to affect, currently allowed land uses or shoreline uses in King County, no measures to avoid or reduce impacts are proposed.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The proposed ordinance is not anticipated to increase demand on public transportation or government-provided services in the unincorporated area. However, some demands related to utility-supplied electricity and natural gas may shift. These potential impacts are addressed in the energy and natural resources section under Checklist section D.3.

- **Proposed measures to reduce or respond to such demand(s) are:**

Proposed measures to address demands on utilities related to electricity and natural gas supply are addressed in the energy and natural resources section under Checklist section D.3.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The proposed ordinance is consistent with local, state, and federal law requirements for the protection of the environment. Existing regulations related to the protection of the environment, including the County's Critical Areas Code, Shoreline Master Program, King County Code (particularly development regulations such as Title 9 Surface Water Management, Title 10 Solid Waste, Title 13 Water and Sewer Systems, Title 21A Zoning, and Title 23 Code Compliance), the Clean Air Act, the Clean Water Act, and others, are not amended by the proposed ordinance. These regulations would still apply to development projects subject to the proposed ordinance in unincorporated King County.