

SEPA 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.

A. Background [\[HELP\]](#)

1. Name of proposed project, if applicable:

Amendments to King County code ("search and rescue ordinance") to allow facilities related to the operation of search and rescue organizations ("search and rescue facilities") in the Rural Area zone of unincorporated King County.

2. Name of applicant:

The proposal was initiated by the King County Council.

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

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4. Date checklist prepared:

May 5, 2021

5. Agency requesting checklist:

King County

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

The King County Council anticipates a public hearing on, and possible adoption of, the ordinance in August or September 2021.

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

King County anticipates potential, future, individual applications for permits, including conditional use and special use permits, for search and rescue facilities.

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

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.

No applications are currently pending for any search and rescue organizations in unincorporated King County.

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 search and rescue 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 objective of the search and rescue ordinance is to amend King County Code (K.C.C.) regulations to allow facilities in unincorporated King County that accommodate the operations of search and rescue nonprofit organizations or organizations that work under the direction of, or in collaboration with, law enforcement. To accomplish this objective, the search and rescue ordinance does the following:

- Defines search and rescue facility as "a multiuse facility operated by a nonprofit organization or organizations that, under direction from or in collaboration with a law enforcement agency, utilize emergency workers to conduct search and rescue operations as described in chapter 118-04 WAC."
- Specifies that such facilities may include, but are not limited to:
 - Indoor and outdoor training areas;
 - Administrative offices and associated food preparation and dining facilities;
 - Equipment storage and maintenance areas;
 - Vehicle storage and maintenance areas;
 - Meeting space;
 - An assembly hall, which is a large room used for the assembly of persons without fixed seats or a permanent stage; and
 - Heliports and helicopter fueling, maintenance and storage, including hangars.

The uses above would be restricted to activities directly relating to the search and rescue organization, except that the facility may be used by law enforcement and other public emergency responders for training and operations.

- Requires a conditional use permit for all search and rescue facilities, subject to the requirements of K.C.C. 21A.44.040. If Helicopter fueling, maintenance, or storage are proposed, a special use permit is required subject to K.C.C. 21A.44.050

- Limits search and rescue facilities to rural area (RA) zones.
- Establishes a minimum lot size of 4.5 acres.
- Establishes a minimum setback of 75 feet for structures and parking areas for RA or Residential (R) zones, unless in an historic building.
- Requires twenty feet of Type II ("filtered screen") landscaping along street frontages, and ten feet of Type II landscaping along interior lot lines.
- Tasks the Permitting Division Director with determining parking requirements for search and rescue facilities through the conditional use or special use permit process.

The search and rescue ordinance would not change other existing regulations, including stormwater management and critical areas, or make changes to special district overlays (SDOs).

Compliance with existing federal, state, and local regulations is presumed for purposes of this SEPA checklist, including compliance with regulations 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 in King County, would evaluate any modifications that are proposed to be made to the search and rescue 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 SEPA 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 search and rescue 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 Agriculture (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.

In particular, search and rescue facilities would be allowed only in RA zones, which are exclusively located outside of the urban growth boundary, and are generally located in a stretch running from the northern to southern border of the central portion of the county, as well as on Vashon-Maury Island.

B. Environmental Elements [\[HELP\]](#)

1. **Earth** [\[help\]](#)

a. General description of the site:

(circle one) Flat, rolling, hilly, steep slopes, mountainous, other _____

Although the search and rescue 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.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” unincorporated King County includes 16,596 acres of steep slope critical areas. It is possible there may be steep slopes on RA-zoned properties where a search and rescue facility is allowed. Any search and rescue facility located on a parcel where a steep slope is located would be identified and 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 search and rescue ordinance is a nonproject action with no identifiable “site,” 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. 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 property 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).

Because search and rescue facilities would not be allowed in the A zone, it is not anticipated that any of the classes of farmland described above would be impacted.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” 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. There may be unstable soils on properties permitted for a search and rescue facility. For any proposed search and rescue facility that is located on a parcel where landslide or erosion-prone areas 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 search and rescue ordinance is a nonproject action that would not directly authorize any fill, excavation, or grading, individual projects could include fill, excavation, or grading. All search and rescue facilities would be subject to existing development regulations related to stormwater management, impervious surfaces, critical areas, clearing and grading, and landscaping.

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

Although the search and rescue ordinance would not directly cause any development activities, potential erosion could result from clearing, construction or use of land for a search and rescue facility. The search and rescue 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 KCC Chapter 21A.24, which regulates critical areas, would be unchanged by the search and rescue ordinance and apply to search and rescue facilities.

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

Although the search and rescue ordinance would not have any direct impacts, applications for individual search and rescue facilities would be subject to a conditional use or special permit process, during which limits on impervious surface could be established.

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

Because the search and rescue ordinance is a nonproject action that would not have any direct impacts, no measures to control erosion or other impacts to the earth have been proposed. However, King County’s existing regulations related to erosion and soils would apply to any development proposals for a search and rescue facility.

2. Air [\[help\]](#)

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.

Although the search and rescue ordinance is a nonproject action that would not result in any direct emissions to the air, the operation of some search and rescue facilities may result in emissions from building HVAC equipment, vehicles, and livestock (horses for horseback search and rescue). The search and rescue ordinance would not modify any federal, state, or local codes that provide standards or controls for these types of emissions.

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

The search and rescue 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 affect individual search and rescue facilities.

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

Although the search and rescue ordinance is a nonproject action and would not have any direct impacts to air, any search and rescue facility 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 search and rescue ordinance. As a result, no measures to reduce or control emissions or other potential impacts to air are proposed.

3. Water [\[help\]](#)

a. Surface Water: [\[help\]](#)

- 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 search and rescue ordinance is a nonproject action with no identifiable “site,” 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; for search and rescue facilities near those features, a critical areas report could be required.

- 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.**

Although the search and rescue 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 search and rescue facility 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 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 search and rescue ordinance is a nonproject action that would not authorize filling or dredging from surface water or wetlands. Individual search and rescue facilities, like any development in unincorporated King County, would 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 general description, purpose, and approximate quantities if known.**

The search and rescue ordinance is a nonproject action that would not require any surface water withdrawals or diversions. Individual search and rescue facilities would be subject to existing regulations concerning surface water diversions and withdrawals, including those regarding in-stream flows, if needed. There could be withdrawals of ground water as a result of the search and rescue ordinance to the extent that new search and rescue facilities established under the ordinance utilize ground water as their water source, but the approximate quantities are unknown.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” several areas of unincorporated King County, where the search and rescue ordinance would apply, lie within a 100-year floodplain. Search and rescue facilities would 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 search and rescue ordinance is a nonproject action and would directly involve any discharge of waste materials to surface waters. The construction and operation of search and rescue facilities could involve vehicle use, storage, and fueling, which have the potential to result in accidental discharge to surface waters. Search and rescue facilities would be subject to existing state, local, and federal regulations concerning the protection of and discharge of waste materials to surface waters, including the state’s antidegradation standards.

b. Ground Water: [\[help\]](#)

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 general description, purpose, and approximate quantities if known.

The search and rescue ordinance is a nonproject action and would not directly involve any withdrawals of groundwater or discharge to groundwater. Search and rescue facilities could draw groundwater from a well for drinking water or other search and rescue purposes, but the approximate quantities are unknown. Any groundwater use or discharge to groundwater would be subject to all existing state, local, and federal regulations concerning groundwater removal and protection.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: 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.

Although the search and rescue ordinance is a nonproject action that would not result in any discharge of waste material into the ground, individual search and rescue facilities may discharge waste material from septic tanks, livestock, or other sources. Any search and rescue facilities allowed under the ordinance would be required to treat and dispose of any waste in a manner compatible with state and local regulations. Specifically, all search and rescue facilities would be required to comply with Department of Ecology and King County Board of Health regulations for water use and wastewater disposal, which could include discharging treated wastewater into the ground after treatment in on-site septic systems. If livestock is housed on-site, the facility would be required to meet the same animal waste disposal requirements as other properties housing livestock.

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.

Although the search and rescue ordinance is a nonproject action that would not directly affect water runoff, individual search and rescue facilities may result in some water runoff. The primary source of runoff for search and rescue facilities would be stormwater. As with any development in unincorporated King County, on-site stormwater management for search and rescue facilities 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.

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

The search and rescue ordinance is a nonproject action that would not directly result in any waste material entering ground or surface waters. Search and rescue facilities may result in waste matter that could enter ground or surface waters and the development and operation of search and rescue facilities, like many other uses, could expose ground or surface water to waste materials, depending on their proximity. Search and rescue facilities would be subject to existing state, local, and federal regulations concerning the protection of surface and ground water, which would be unchanged by the search and rescue ordinance.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” search and rescue facilities allowed under the ordinance may involve construction of structures and parking, which could affect drainage patterns on their respective sites. Search and rescue facilities would be subject to existing regulations related to drainage, which would be unchanged by the search and rescue ordinance.

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

The search and rescue 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 search and rescue facilities allowed under the search and rescue ordinance. No additional measures to reduce or control any potential surface, ground, and runoff water and drainage pattern impacts are proposed. Individual development proposals may be required to provide these measures.

4. **Plants** [\[help\]](#)

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 search and rescue ordinance is a nonproject action with no identifiable “site,” unincorporated King County includes a variety of vegetation types on the various lands that the search and rescue ordinance would apply to, including those listed above.

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

Although the search and rescue ordinance is a nonproject action that would not directly remove any vegetation, the development of individual search and rescue facilities could include the removal or alteration of vegetation (potentially of the types identified in question 4.a). The kind and amount of vegetation that could be removed or altered is not known. Search and rescue facilities allowed under the search and rescue ordinance 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 search and rescue ordinance is a nonproject action with no identifiable “site.” There are no known federally listed threatened or endangered plant species in King County. However, there are several species in King County listed as threatened or endangered according to the Washington State Natural Heritage Program, including clubmoss mountain-heather, Kamchatka fritillary, Pacific peavine, white meconella, choriso bog-orchid, and little bluestem.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” landscaping, use of native plants, or other measures to preserve or enhance vegetation could be proposed for individual search and rescue facilities. As with any development in unincorporated King County, search and rescue facilities would be subject to existing regulations governing landscaping, use of native plants, and preservation of vegetation on their respective sites. Search and rescue facilities would be required to provide Type II (“filtered screen”) landscaping along all property lines. Plants used for landscaping are required to be natives or other plants adapted to King County’s climate.

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

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

5. **Animals** [\[help\]](#)

a. **List any birds and other animals which 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 search and rescue ordinance is a nonproject action with no identifiable “site,” a variety of birds, mammals, and fish have been observed in unincorporated King County.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” 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 Canada lynx, gray wolf, grizzly bear, North American wolverine, marbled murrelet, northern spotted owl, streaked horned lark, yellow-billed cuckoo, Oregon spotted frog, bull trout, Puget Sound Chinook salmon, Puget Sound steelhead, bocaccio rockfish, yelloweye rockfish, southern resident killer whale, and humpback whale.

In addition to the federally listed species above, the Washington Department of Fish and Wildlife maintains a list of priority species for which conservation measures should be taken. State threatened and endangered species not included with the federally listed species include the western pond turtle and the fisher.

As with any development in unincorporated King County, search and rescue facilities developed under this 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 search and rescue ordinance is a nonproject action with no identifiable “site,” King County is within the Pacific Flyway migratory pathway for birds, and there are numerous streams and water bodies within the County that serve as migration routes for fish. These water bodies could potentially be near or cross through sites where a search and rescue facility would be allowed under the search and rescue ordinance.

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

The search and rescue ordinance is a nonproject action and would not have any direct impacts to wildlife, so no measures to preserve or enhance wildlife are necessary. For any search and rescue facilities allowed under the ordinance, existing federal, state, and local wildlife regulations would apply.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” numerous invasive animal species are known to exist in unincorporated King County. Invasive species may be located on a site that could be used as a search and rescue facility.

6. Energy and Natural Resources [\[help\]](#)

- 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 search and rescue ordinance is a nonproject action that would not have any direct energy needs, any search and rescue facility allowed under the ordinance would require energy for such things as lighting, heating/cooling, and operation of equipment, including fuel for ground and aerial vehicles. Search and rescue facilities would be subject to existing energy codes and regulations, like other uses.

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

Although the search and rescue ordinance is a nonproject action that would not have any direct impacts to the use of solar energy, search and rescue facilities allowed under the ordinance are also unlikely to affect the potential use of solar energy by adjacent properties due to the required setback requirements that would be included in the search and rescue ordinance.

- 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:**

Although the search and rescue ordinance is a nonproject action that would not have any direct impacts to energy use, and therefore no energy conservation features are included, search and rescue facilities could include energy conservation features or other measures to reduce or control any energy impacts.

7. Environmental Health [\[help\]](#)

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

Although the search and rescue ordinance is a nonproject action that would not directly cause any environmental health hazards, it is possible that a search and rescue facility could result in exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste. To the extent any search and rescue facility may create such exposure or risk, those hazards would be regulated by existing state and local regulations.

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

Although the search and rescue ordinance is a nonproject action with no identifiable "site," sites with contamination exist within unincorporated King County where the search and rescue ordinance would apply, and where search and rescue facilities could be developed.

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.

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” sites with hazardous chemicals/conditions exist within unincorporated King County and could be located on or near a site where a search and rescue facility could be located. As with any development in unincorporated King County, a new search and rescue facility would investigate the presence of hazardous chemicals/conditions, including hazardous liquid or gas transmission pipelines, as necessary prior to construction. 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 search and rescue ordinance is a nonproject action that would not include the storage, use, or production of any toxic or hazardous chemicals, the construction of search and rescue facilities could require the use of toxic or hazardous chemicals, such as gasoline or diesel fuel, to operate construction equipment. Individual search and rescue facilities would be required to store, use, and produce any toxic or hazardous chemicals, such as cleaning supplies, in accordance with applicable laws and regulations. Individual search and rescue facilities may also include fuel storage for ground and aerial vehicles, and fueling facilities for such vehicles, which would also be subject to the applicable local, state, and federal regulations.

4) Describe special emergency services that might be required.

The search and rescue ordinance is a nonproject action that would not have any direct impacts. Individual search and rescue facilities would bring more paid and volunteer emergency responders and their equipment onto the site, which could in turn reduce response times for the rural areas surrounding a search and rescue facility.

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

The search and rescue ordinance is a nonproject action that would not have any direct impact on the environment; so, no measures to reduce or control environmental health hazards are proposed. Search and rescue facilities would be required to meet all applicable regulations governing the storage, use, and disposal of contaminated, toxic, or hazardous materials that they are required to meet under existing regulations.

b. Noise

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

Various types of noise exist in the areas where the search and rescue ordinance would apply, including noise from traffic, operation of equipment, and more. These noise sources are not anticipated to affect the development of search and rescue facilities.

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.

Although the search and rescue ordinance is a nonproject action that would not have any direct noise impacts, search and rescue facilities allowed under the ordinance may create some new types and levels of noise, such as construction noise, noise from horses and dogs used for search and rescue purposes, noise related to ground and aerial vehicles, and noise related to outdoor training exercises.

While helicopter takeoff and landing is already an allowed use in the RA zone, a search and rescue facility would constitute a new use in the RA zone in which helicopters could be used, creating additional noise impacts. This is discussed further in the supplemental sheet for nonproject actions below.

Hours of operation or hours in which certain activities could occur would be established on a case-by-case basis through the conditional use or special use permit process.

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

The search and rescue ordinance is a nonproject action that would not have any direct noise impacts. However, the adoption of the search and rescue ordinance would result in the same or more stringent regulations of noise related to search and rescue facilities than exist today. Noise from search and rescue facilities would be subject to existing noise regulations, like all other land uses in unincorporated King County. KCC Chapter 12.86 (Noise Code) sets maximum sound levels for RA zones and prohibits public nuisance noise. However, takeoff and landing of aircraft such as helicopters is exempt from the noise ordinance. Mitigation measures for helicopter noise could be established through the conditional use or special use permit process, as would currently happen for a heliport in the RA zone through the special use permit process.

The search and rescue ordinance also includes the requirement that search and rescue facilities be located at least 75 feet from rural and residential zones, which could also reduce potential noise impacts to adjacent properties. Hours during which noise-generating operations could occur could be restricted through the conditional use or special use permit process.

8. Land and Shoreline Use [\[help\]](#)

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.

Although the search and rescue ordinance is a nonproject action with no identifiable “site” and would not have any direct impacts on the current land uses on nearby or adjacent properties, the ordinance would change the uses allowed on certain properties by amending the King County Code land use tables. 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 search and rescue ordinance does not change any of the land use designations or zoning classifications in unincorporated King County.

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 as a result 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 search and rescue ordinance is a nonproject action with no identifiable “site” and would not have any direct impacts to working farmlands or forestlands. The search and rescue ordinance would not allow search and rescue facilities in the Forest Production District, F zone, Agricultural Production District or A

zone. Some sites in the RA zone where a search and rescue facility may be allowed could have been or may currently be used as working farmland.

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 search and rescue ordinance is a nonproject action that would not directly affect or be affected by the normal business operations of working farmland or forestland and search and rescue facilities would not be allowed on forestland. Search and rescue facilities, particularly outdoor training activities, may be affected by the normal business operations of surrounding farms, such as the application of pesticides, the odor from fertilizer, crop burning, and the use of farm equipment.

c. Describe any structures on the site.

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” various structures are located on parcels within unincorporated King County, where the search and rescue ordinance would apply.

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

Although the search and rescue ordinance is a nonproject action that would not directly result in any demolition, existing structures could be demolished as part of the development of any new search and rescue facilities. 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.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” search and rescue facilities would only be allowed in RA zones.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” unincorporated King County includes a variety of land use designations to which the search and rescue ordinance would apply. However, the large majority of the RA zone carries the comprehensive plan designation "ra," – rural area.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” unincorporated King County includes a variety of shoreline master program designations. Any search and rescue facility sited within or proximate to the County’s shoreline jurisdiction would need to comply with applicable shoreline regulations.

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

Although the search and rescue ordinance is a nonproject action with no identifiable “site,” portions of unincorporated King County are classified as critical areas where a search and rescue facility may be allowed. 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?

Although the search and rescue ordinance is a nonproject action that would not directly result in a completed project where people would reside or work, people would work at existing or completed search and rescue facilities. It is unknown how many people would work or report as volunteers to facilities allowed under the search and rescue ordinance. While a search and rescue facility is not a residential use, the RA zone does allow for a mix of uses and it is therefore possible that a home and a search and rescue facility could be co-located on a single property.

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

Although the search and rescue ordinance is a nonproject action and would not directly result in any displacement, it is possible that projects allowed under the search and rescue ordinance could result in displacement. The likelihood of displacement would be similar to that of other nonresidential uses allowed under King County Code. As noted above, the code does not preclude co-locating commercial and residential uses on a single site in the RA zone.

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

No measures to avoid or reduce displacement impacts are proposed.

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

The search and rescue ordinance was drafted to be compatible with existing and projected land uses and plans. It utilizes existing review processes and requirements that are frequently required of other nonresidential land uses in residential zones. Search and rescue facilities would be subject to a conditional use permit or a special use permit, which could place conditions or limitations on these facilities to be compatible 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 search and rescue ordinance would prohibit search and rescue facilities from locating in the A and F zones, which would prevent direct impacts on these types of lands. In the case that an individual search and rescue facility was proposed to locate on an RA-zoned property adjacent to agricultural or forest lands of long-term commercial significance, any potential impacts would be reviewed as part of the conditional use or special use permit process. Permits could be conditioned or denied through this process to mitigate or avoid impacts.

9. Housing [\[help\]](#)

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

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

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

Neither the search and rescue ordinance itself or the development of search and rescue facilities 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:

No measures to reduce or control housing impacts are proposed.

10. Aesthetics [\[help\]](#)

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

The search and rescue ordinance is a nonproject action and 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 search and rescue facility will be subject to existing regulations.

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

The search and rescue ordinance is a nonproject action that would not have any direct impacts to views and any search and rescue facility allowed under the ordinance would not result in the alteration or obstruction of any views to a greater degree than any other development allowed under the existing code.

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

Although the search and rescue ordinance is a nonproject action that would not have any direct impacts to views or aesthetics, the 75-foot setback requirement from rural and residential zones may reduce or control potential aesthetic impacts related to search and rescue facilities. Other uses in the RA zone have a setback as small as five feet.

11. Light and Glare [\[help\]](#)

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

The search and rescue ordinance is a nonproject action that would not directly cause any light or glare and any search and rescue facility allowed under the ordinance would not produce any light or glare beyond other development allowed under the current code. Light and glare impacts would be evaluated through the conditional use or special use permit process and permits could be conditioned or denied to avoid impacts.

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

The search and rescue ordinance is a nonproject action that would not have any direct impacts. As with any development in unincorporated King County, any search and rescue facility 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?

Various off-site sources of light or glare exist throughout unincorporated King County, but it is unlikely that any would affect a particular search and rescue facility.

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

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

12. Recreation [\[help\]](#)

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

The search and rescue ordinance is a nonproject action with no identifiable “site.” A variety of designated and informal recreational opportunities exist in unincorporated King County where the search and rescue ordinance would apply.

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

The search and rescue 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 the 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 search and rescue 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 [\[help\]](#)

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 search and rescue ordinance is a nonproject action with no identifiable “site.” However, 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 potentially on sites where an individual search and rescue facility could be proposed. Search and rescue facilities would be required to comply with all federal, state, and local rules related to cultural resources. The search and rescue ordinance allows for reduced setbacks if the facility is located in a building that is designated as a historic resource.

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 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 search and rescue ordinance is a nonproject action with no identifiable “site.” However, landmarks, features, or other evidence of Indian or historic use or occupation exist throughout unincorporated King County and potentially on sites where an individual search and rescue facility use could be proposed. Projects permitted under the ordinance would be required to comply with federal, state, and local rules related to 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 search and rescue 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 search and rescue facilities, which 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.

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 search and rescue 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. The allowance for reduced setbacks if the facility is located in a building that is designated as a historic resource could serve to encourage the preservation and reuse of historic buildings.

14. Transportation [\[help\]](#)

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 search and rescue ordinance is a nonproject action with no identifiable "site." However, the search and rescue ordinance would apply to 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?

The search and rescue ordinance is a nonproject action with no identifiable "site." However, unincorporated King County is generally served by public transit. It is unknown how far the nearest transit stop would be for any future proposed search and rescue facility.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Although the search and rescue ordinance is a nonproject action that would not have any direct impacts to parking, parking requirements for individual search and rescue facilities proposed under the search and rescue ordinance would be determined by the permitting director through the conditional use or special use permit process. This requirement applies to all "regional land uses" in the County's zoning code, which search and rescue facilities would be categorized as.

d. 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).

Although the search and rescue ordinance is a nonproject action that would not directly involve any roadway, bicycle, or pedestrian improvements, improvements to existing roads, streets, or pedestrian or bicycle transportation may be associated with individual search and rescue facilities under this ordinance. Improvements may also be required as a condition on a conditional use or special use permit, particularly if the development is located within a failing travel shed, which means that the area does not meet County travel time standards. Currently the only failing travel shed is located in the Green River Valley Agricultural District.

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

The search and rescue ordinance is a nonproject action that would not have any direct impacts to transportation facilities. It is not anticipated that any search and rescue facility developed under this ordinance would be directly accessed by water or rail. Search and rescue facilities would be allowed to have helicopter takeoff and landing facilities. These facilities would be restricted to use only for the

operations of the search and rescue organization, law enforcement, or emergency responders. They would not be allowed to be used for other commercial or private transportation purposes.

f. 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 search and rescue ordinance is a nonproject action that would not directly generate any vehicular trips. However, search and rescue facilities allowed under the ordinance would generate vehicular trips, and the number of trips would be dependent on the types of activities occurring at the individual search and rescue facility. Administrative office work, trainings, and direct responses to a variety of search and rescue-related emergencies would each generate different volumes of trips at different times. The conditional use or special use permit process would evaluate traffic impacts and could propose mitigation measures if determined to be necessary.

g. 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 search and rescue ordinance would not have any direct impact on the movement of agricultural and forest products on roads or streets on the area, individual search and rescue facilities allowed under the ordinance could generate some additional traffic that could interfere with, affect, or be affected by the movement of agricultural and forest products.

h. Proposed measures to reduce or control transportation impacts, if any:

The search and rescue ordinance is a nonproject action that would not have any direct impacts to transportation; so, no additional measures to reduce or control transportation impacts are proposed. Search and rescue facilities will be subject to existing zoning and development regulations, including, to the extent required, transportation analysis and mitigation.

15. Public Services [\[help\]](#)

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 search and rescue ordinance is a nonproject action that would not directly result in an increased need for public services. However, an individual facility, as a training location for, and launching point of, search and rescue and other emergency services, would increase availability of these services and response times to such emergencies in the rural areas of King County.

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

The search and rescue ordinance is a nonproject action that would not have any direct impacts to public services, so no additional measures to reduce or control impacts on public services are proposed.

16. Utilities [\[help\]](#)

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

Sites where a search and rescue facility could be allowed under the ordinance would likely include electricity, water, refuse service, telephone, and septic system. Municipal sanitary sewer is not likely to be available in most rural areas in unincorporated King County, with notable exceptions for the Vashon and Snoqualmie Pass Rural Towns, which do have sanitary sewer service.

i. 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 search and rescue ordinance is a nonproject action that would not directly result in installation of utilities. Individual search and rescue facilities would use utilities and require construction similar to other nonresidential uses allowed in the RA zone.

C. Signature [\[HELP\]](#)

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.

Signature: _____ /s/ Jake Tracy

Name of signee _____ Jake Tracy

Position and Agency/Organization _____ Principal Legislative Analyst, King County
Council

Date Submitted: _____ 5/5/21

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

(IT IS NOT NECESSARY to use this sheet 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?

Discharge and Emissions

The search and rescue ordinance would amend King County Code to allow search and rescue facilities in the rural area (RA) zone of unincorporated King County. Operation of search and rescue facilities could result in discharges to water; emissions to air; or storage or release of toxic or hazardous substances similar to public agency offices, yards, and/or training facilities, which are currently allowed in the RA zone in unincorporated King County. Emissions would likely result from operation of HVAC equipment, generators, and vehicles, as well as from the waste produced by horses that could be housed on-site. Discharge could occur from these sources as well.

However, because these activities would be subject to existing federal, state, and local regulations that would not be amended by the search and rescue ordinance, search and rescue facilities developed under the ordinance are unlikely to increase those impacts above what might otherwise occur under the current code or from other uses allowed in unincorporated King County. Search and rescue facilities would have to comply with Washington State Department of Ecology and King County Board of Health regulations for water usage and wastewater disposal, which could include discharging treated wastewater into the ground after treatment in on-site septic systems. 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 would also apply to search and rescue facilities and are not changed by the search and rescue ordinance.

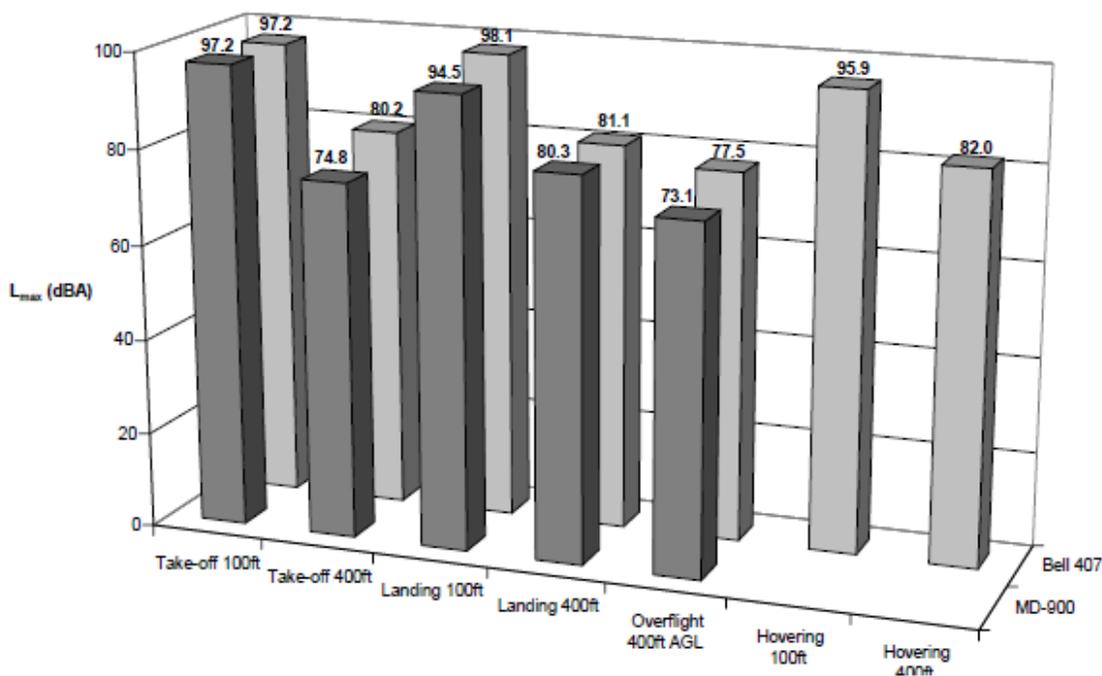
Noise

Trainings and use of ground-based equipment at search and rescue facilities could produce noise, but it is not anticipated that this noise would be beyond what would otherwise be allowed under existing regulations, particularly from public agency yards and training facilities, which are currently allowed in the RA zone. Search and rescue facilities would be subject to the same noise restrictions as other uses in the RA zone.

The search and rescue ordinance would allow for helistops, which would involve the takeoff and landing of helicopters. Noise from aircraft, including helicopters, is exempt from the noise regulations in King County Code. Although helistops are not allowed in the RA zone under the current code, heliports, which are more intensive than helistops in that they can also include passenger and freight terminals, among other things, are currently allowed as standalone land uses in the RA zone subject to a special use permit. Therefore the search and rescue ordinance would not be introducing a more intensive helicopter land use into the RA zone. Indeed, if helistops were not specifically included in the definition of search and rescue facilities, a search and rescue facility could still apply for a separate special use permit to have a heliport on its property. The primary difference between the conditional use permit process that would be required for search and rescue facilities under this ordinance and the special use permit process required for standalone heliports is that the conditional use permit is an administrative decision appealable to the hearing examiner, whereas the special use permit is a quasi-judicial decision made by the County Council. Both processes allow for public notice and input, site-specific analysis of impacts, and conditioning or denial based on any impacts discovered.

The chart below shows the results of one study from the Grand Canyon National Park on noise levels from two Park-owned helicopter types at various stages of flight and distances.¹

¹ Falzarano and Levy. "Sound Level of Helicopters Used for Administrative Purposes at Grand Canyon National Park." NPS Report No. GRCA-07-05. 2007.



Lmax levels (in dBA) of the MD-900 and Bell 407 Helicopters for Take, Landing, Overflight, and Hovering.

The Federal Aviation Administration has undertaken research on the effects of aircraft noise generally, and helicopter noise specifically, on humans. One study in particular looked into the impacts of nonmilitary helicopter noise on urban areas. The report found that noise-induced hearing impairment from nonmilitary helicopter operations in urban environments is unlikely.² This danger would be expected to be even less likely in rural environments where adjacent residences and businesses would be greater distances from the takeoff and landing zone. The study states that 24-hour equivalent levels of 70dB or greater would be necessary to cause hearing impairment. Because search and rescue helicopters would not be hovering at the site for long periods of time, and would likely not be sent out on operations every day, it is therefore unlikely that the 24-hour equivalent levels would ever be reached.

While hearing damage is unlikely, sleep disturbance is a possibility. The same FAA study cited a FICAN study that found that 10% of people will be awakened by a sound with an indoor level of 80 dB.³ Because some the helicopter noise levels shown above exceed this level, it is possible that the some of the nearest neighbors could be awakened, if the walls and vegetation between the helicopter and person did not sufficiently dampen the sound below 80dB.

Additionally, a 2021 survey by the FAA of residents living around major airports found that 42 respondents reported being "highly annoyed" by aviation noise at any level, and two thirds were highly annoyed by aviation noise at a day-night average level of 65 dB.⁴ While it is highly unlikely that, with the infrequency of search and rescue-related helicopter trips, the day-night average sound levels near a search and rescue facility would come anywhere close to 65 dB, the fact that *any* aircraft noise was found to cause high annoyance in a significant portion of the population suggests that a helistop at a search and rescue facility would cause annoyance for some people on adjacent properties.

² Federal Aviation Administration. "Report to Congress: Nonmilitary Helicopter Urban Noise Study." December 2004.

³ Federal Interagency Committee on Aviation Noise. "Effects of Aviation Noise on Awakenings from Sleep." June 1997.

⁴ Federal Aviation Administration. "Analysis of the Neighborhood Environmental Survey." February 2021.

However, as noted above, the allowance for a helistop at a search and rescue facility through this ordinance does not introduce a more-intensive helicopter-related use to the RA zone than what is already allowed. If helistops were not specifically allowed by this ordinance as part of a search and rescue facility, a search and rescue organization could still apply under the existing code to locate a heliport on the property.

Proposed measures to avoid or reduce such increases are:

In part to avoid any noise impacts, the search and rescue ordinance includes a 75-foot setback for structures and parking areas from RA or residential zones, as well as a minimum lot size requirement of 4.5 acres. Through the conditional use or special use permit process, proposals could be conditioned to mitigate impacts, through conditions such as use of greater setbacks and/or vegetative screening for certain activities, or limits to hours during which certain activities could occur.

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 search and rescue ordinance is unlikely to result in activities that would cause a greater impact to these resources than might otherwise occur with other land uses allowed in the RA zone because the regulations protecting those resources, including critical area and shoreline regulations, are not changed by the search and rescue 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 search and rescue facilities and are not changed by the search and rescue ordinance, including the County's Shoreline and Critical Areas Code. Therefore no additional measures are proposed.

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

The search and rescue ordinance is unlikely to result in activities that would cause a significantly greater impact to these resources than might otherwise occur with other nonresidential uses allowed in the RA zone. Energy use would primarily be related to building heating and cooling functions and fuel used by vehicles. Water use would likely be lower than many uses allowed in the RA zone, such as agricultural activities.

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

Existing regulations that protect and conserve energy and natural resources would apply to search and rescue facilities and are not changed by the search and rescue ordinance. Therefore no additional measures are proposed.

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 search and rescue 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 in the RA zone. Any facility developed under the search and rescue ordinance

would be subject to the same development restrictions concerning environmentally sensitive areas as other allowable uses. If an individual proposal is near a wildlife habitat conservation area, lighting and noise from the facility could potentially impact wildlife.

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

Existing regulations that protect such resources would apply to search and rescue facilities and are not changed by the search and rescue ordinance. Therefore no additional measures are proposed. If individual proposals are near wildlife habitat conservation areas, permits could be conditioned to mitigate impacts from lighting or noise, or denied if impacts cannot be mitigated.

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 search and rescue ordinance would affect land use by allowing search and rescue facilities to be located in the RA zone. However, all of the activities included in the definition of "search and rescue facility" are already allowed in the RA zone as part of other uses and subject to other conditions. For instance, a utility yard in the RA zone could include the storage, repair and maintenance of vehicles and other equipment, a public agency office could include administrative offices, and a public agency training facility could include indoor and outdoor training areas and meeting and assembly. Heliports may also be allowed in the RA zone subject to conditions.

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

The search and rescue ordinance is intended to avoid land use impacts by doing the following:

- Making the establishment or alteration of a search and rescue facility subject to a conditional use or special use permit, so that public notice and input will occur, and so that the proposal can be conditioned or denied based on the individual circumstances and any negative impacts on surrounding uses
- Limiting search and rescue facilities to sites 4.5 acres or more
- Requiring Type-II landscaping on all property lines
- Establishing 75-foot setbacks from interior property lines for structures and parking areas

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

Search and rescue facilities that would be allowed under the ordinance could increase demands on transportation and utilities at certain times. Increased traffic could result at times when volunteers, law enforcement and emergency responders are called to the site for trainings or for response to an emergency. Traffic impacts would be evaluated through the conditional use or special use permit process and the permit could be conditioned or denied based on impacts. Impacts to energy and water demand would be comparable or less than other nonresidential uses of similar size allowed in the RA zone.

A search and rescue facility could also increase the supply of public services by allowing for faster response times to search and rescue-related emergencies in the rural area. Search and rescue operations are time sensitive, with an expeditious volunteer response potentially meaning the difference between life and death for the individual or individuals who are the subject of the search. According to the King County Sheriff's Office, a majority of King County search and rescue operations occur in the rural area, with over seventy percent of search and rescue operations in the year 2020 occurring in wilderness areas outside of the urban growth area. Having a base of operations located in the rural area could reduce response times in these areas.

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

The search and rescue ordinance requires that any search and rescue facility go through a conditional use permit process, during which the transportation impacts of each facility would be analyzed. Individual conditional use permits could be conditioned to mitigate transportation impacts, or denied if impacts could not be mitigated. If a proposal triggered the special use permit process, those impacts would be evaluated as part of that process.

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

The search and rescue 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 search and rescue ordinance and would apply to any search and rescue facility in the same way as other uses in unincorporated King County.