King County
Department of Natural Resources and Parks
Parks and Recreation Division
King Street Center
201 South Jackson Street, Suite 5702
Seattle, WA 98104
http://www.kingcounty.gov/parks

SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. **Name of proposed project, if applicable:**

   Taylor Mountain Forest
   Sustainable Trail System Improvements

2. **Name of applicant:**

   King County Department of Natural Resources and Parks

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

   Sam Jarrett, Open Space Project/Program Manager
   Environmental Policy & Initiatives Unit
   King County Parks and Recreation Division
   201 South Jackson Street, Room 5702
   Seattle, WA 98104
   206-477-7372 (SEPA)
   KCParks.SEPA@kingcounty.gov

4. **Date checklist prepared:**

   8/15/2023

5. **Agency requesting checklist:**

   King County Department of Natural Resources and Parks

6. **Proposed timing or schedule (including phasing, if applicable):**
   It is anticipated that proposed work will occur over a period of several years, targeted to begin as early as fall 2023. Timing of implementation will be dependent on available

funding, length of the construction field-work season, and public volunteer donated labor support. The tentative phased implementation schedule is as follows:

Phase 1: Hermit, Trail, Sherwood Trail and Road I Trail Reroute

Phase 2: Six trail bridge installations along Beaver Pond and Road I trails.

Phase 3: Three trail bridge installations along Holder Ridge, Mt. Beaver, and Carey Creek trails. Carey Creek Trail renovation and re-routes.

Phase 4: Knee Knocker trail renovation and one trail bridge installation. Holder Creek decommission, restoration, new trail development. Elk Ridge Trail renovation and one trail bridge. Donkey Engine Trail decommission and re-route.

Phase 5: All other remaining new proposed trail development and 6 anticipated new or replacement trail bridge, boardwalk or culvert installations.

Most of the proposed trail system improvements are expected to occur during the dry season over the next two to five years, with some of the proposed improvements potentially requiring additional time to implement. Winter restoration and development work will be dependent on field conditions and permit stipulations, while periods of heavy precipitation will typically require temporary delays in renovation and construction work, due to a higher likelihood of unfavorable project site conditions.

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

Additional, future recreation trail system improvement work could occur utilizing adaptive management practices, in response to any new information, new land acquisitions, changes to circumstances on the ground, changes in new laws, new recreational use patterns and trends, and new scientific and technological developments. Additional SEPA review, if required, will be conducted for any proposed additional future trail system improvement related site-specific actions, not covered within this proposal, at the time the specific activities are proposed.

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

Taylor Mountain Public Use Plan and Trails Assessment (October 2004)
Taylor Mountain Forest – Forest Stewardship Plan (August 2003)
Taylor Mountain Forest - Trail System Concept Plan Map (August 2023)

Environmental information was gathered and reviewed, in order to develop the proposed Taylor Mountain Forest – Trail System Concept Plan Map (attached), through field reconnaissance and a remote GIS-based trail suitability assessment. The purpose of the suitability assessment was to identify and map areas within Taylor Mountain Forest that have long-term limiting factors that could affect sustainability of existing and new

recreation development. The assessment evaluated biological, geology/soils and management suitability. King County staff utilized this information for trail concept planning during field review, to assess existing trail routes and possible required renovation efforts, to determine sustainable long-term trail re-route locations, and to identify suitable proposed new trail routes and trail bridge locations. In addition to conducting a broad-scale landscape level review of the forest, a more detailed project proposal assessment was conducted. Field verification was conducted by King County program staff with feedback from user group representatives, engineers, and geologist, where applicable. Trail bridge plans, for portions of the overall proposal with current funding, and a trail system concept plan map were completed.

Environmental information directly related to this proposal is available for review on the King County website at http://www.kingcounty.gov/parks/publicnotices

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.**
Yes, there are active forest stand management related projects occurring within Taylor Mountain Forest. Forest Practices type government approval applications, often required for certain proposed forest health improvement management actions, are ongoing and directly affecting the properties covered under this proposal. These forest health related management actions seek to improve forest health by promoting diversity of wildlife habitat and tree species, while being resistant to wildfire, climate change, insects, and disease.

10. **List any government approvals or permits that will be needed for your proposal, if known.**
The following approvals and permits are anticipated to be required for implementing this entire proposal; (some government approvals and permits have been completed for portions of the overall proposal in order to implement portions with secured funding):

- King County Department of Local Services, Clearing & Grading and Building permits
  Clearing & Grading Permit approvals for trail work related to Hermit and Sherwood Trails and Road I Trail re-route have been secured.
- Washington State Department of Fish & Wildlife – Hydraulic Project Approval (HPA)
- King County Historic Preservation Program (HPP) Review
  HPP Review has been completed for the majority of proposed work. Some additional HPP field surveys will be needed for proposed work related to enhancing existing trails, including: new trail re-routes along Holder Creek Trail, the new trail bridge along Holder Ridge Trail, Carey Creek Trail re-routes and trail bridges, and Donkey Engine Trail re-route.
- Washington State Department of Archeology & Historic Preservation (DAHP) Review
  DAHP review for Beaver Pond and Road I Trail bridge installations has been completed by the Recreation & Conservation Office (RCO), due to state RCO grant funding requirements, funding a portion of that work.

11. Give a 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.)

Taylor Mountain Forest is a very popular location for people to ride horses, hike, mountain bike and recreate. Public use has increased significantly over the past decade and is expected to continue to increase into the future. The trails are showing the impact of this heavy use; tread surfaces are eroding in many locations, portions of the system require users to pass through streams without trail bridges, certain trails are closed during the rainy months, and in some cases, eroding into streams that are important habitat for salmon. King County Parks plans to improve the trails to a standard that will serve the recreation community into the future and protect our valuable natural resources. The voter-approved 2020-2025 Parks, Recreation Trails, and Open Space Levy included funding for King County Parks to begin improvements to backcountry trails at five parks, and Taylor Mountain has been prioritized as one of those locations.

Proposed trail system improvements will provide sustainable long-term recreation opportunities for equestrian, pedestrian, and mountain bike use types by protecting resources and discouraging reopening and use of decommissioned unsustainable trail segments, while developing new bridges and trails to improve connectivity and offer multiple trail loop opportunities with improved user experiences. The project proposal includes:

- Development of approximately four miles of new multiple-use non-motorized trail meeting King County's most current trail standards for sustainability
- Decommission and restore approximately 1.5 miles of existing unsustainable trail segments that are often difficult to maintain, and provide a dissatisfactory user experience, and in some circumstances are causing resource damage.
- Constructing nine trail bridges with secured funding, including: Five new trail bridges to cross streams on the Beaver Pond Trail, one new bridge on Road I Trail, one new bridge on Holder Ridge Trail, One new bridge on Mt. Beaver Trail, and one new bridge on Carey Creek Trail.
- Construction of up to eight additional surface water crossings (either bridges, culverts, or boardwalks) throughout the park as future funding becomes available.

Most proposed trail routes are conceptually designed, and final trail locations will be fully completed once the more detailed full trail design and layout process is finalized. Overall, a stacked-loop trail system design is targeted where successive trail loops are "stacked" upon each other, connecting in such a way as to give users options for extended distance or varied routes. The stacked loop trail system design is a method that helps achieve a positive

user experience, while reducing and balancing overall density of trail development, by allowing for various loop options, which can disperse visitors within the network and reduce trail conflicts between users.

Future conceptual trail work shown on non-King County managed land will not occur unless the owner grants formal legal approval, or the property is acquired by King County Parks and Recreation Division.

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.

Taylor Mountain Forest is owned by King County Parks and is located between Issaquah and Maple Valley, near the community of Hobart. State Route 18 is along the property's western border. The site can be accessed from Issaquah-Hobart Road by turning east onto "Road A", just south of SE 188th Street. There is a small parking lot for cars and a much larger horse trailer parking area.

The approximate 1,924-acre site, which offers sweeping views of Mount Rainier, forested wetlands, and meadows of wildflowers, provides an important habitat link between the City of Seattle's Cedar River Watershed and Tiger Mountain State Forest. Taylor Mountain Forest is also a Forest Stewardship Council® (license code FSC-C008225) certified working forest demonstrating how environmentally sound forest management protects and restores ecological systems while providing recreational opportunities.

The legal description of the project areas is as follows: Taylor Mountain Forest, within King County: Section 5 Township 22N, Range 7E and within Sections 31, 32, and 33 within Township 23N, Range 7E.

B. Environmental Elements

1. Earth

a. General description of the site:

Circle or highlight one: Flat, rolling, hilly, steep slopes, <u>mountainous</u>, other:

Taylor Mountain Forest elevations range from 500 feet to 2,120 feet. Topography on site varies widely, from relatively flat to some slopes exceeding 40%. Steep areas occur along hilltops and ravines. Where the ground is relatively flat, either wetlands or streams and floodplains are more likely to be present.

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

Many of the proposed trail bridge installation locations and trail development sites are located on variable terrain with gentler slopes. The proposed trail renovation and new development project sites, at lower elevations, are located on slopes not typically exceeding 10%. The proposed work at higher elevations can vary dramatically and pass-through terrain with slopes ranging from

approximately 20% - 40% or more. Careful avoidance of unsustainable excessively steep slopes for proposed trail routes and trail bridge locations were avoided in the trail system concept design process.

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.

According to the *Taylor Mountain Public Use Plan and Trails Assessment* (October 2004) and *Taylor Mountain Forest – Forest Stewardship Plan* (August 2003) five soil types compose most of Taylor Mountain Forest: Chuckanut, Tokul, Beausite, Rangnar and Everett. Soil types present to a lesser degree include Blethen, Elwell, Tokul-Pastik, Ragner-Indianola, Puyallup, and Pilchuck.

Trail, and trail bridge development will include removal of forest debris and organic forest surface duff to a mineral soil surface to create a stable & firm trail tread and a stable and firm surface for precast concrete trail bridge abutments when conducting site preparation for installing bridges.

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

Yes, landslide mapping indicates that mass wasting activity is concentrated along incised stream channels and steep slopes in the vicinity of proposed trail bridge sites, although mass wasting is not limited to these areas. Unstable soils were evaluated and avoided as part of the trail and bridge suitability concept planning and design process. The glacial-ice contact soils on steep slopes throughout the property are highly susceptible to erosion if excessively disturbed, these areas were avoided in the trail system improvement field design process.

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.

For recreational trail development, minor trail tread surface grading is anticipated for hand built and potential mini excavator renovated and constructed trail segments to provide a defined and durable trail surface. Minor fill, using on-site soil, may be required to provide gentle trail gradients on short distance trail segments and to create gentle, mostly level, trail grade approaches to trail bridges. Bridge abutments will also require minor grading and fill, typically for an abutment footprint of 3-foot deep and 8 to 10-foot wide.

Fill will be used within the same trail corridor footprint, sourced from trail drainage surface depressions, during frequent grade reversal construction, to improve drainage.

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

The design of trail construction will reduce long-term erosion potential by routing the trails in sustainable locations that are less prone to erosion potential. Some minor erosion could occur because of trail development. Careful field verification when designing new trails includes avoidance and limiting impacts to potentially unstable slopes and landforms and areas of high mass wasting potential. To prevent significant erosion, trail work will seek to maintain natural drainage patterns. In addition, trails will target a constructed travel width of approximately 36 inches or less and will be limited in grading, which will reduce their footprint and thus, further reduce potential erosion. Decommissioning identified unsustainable trail segments will help return the hillslope to its natural

slope and drainage patterns, creating conditions to encourage natural regeneration of native vegetation.

This proposal also includes trail bridge installations, required to safely cross stream channels, which due to their complexity, can often be associated with potential shallow landslides within riparian corridors. Careful field reconnaissance and verification was performed to avoid unstable riparian areas for proposed trail bridge installation site locations. Trail bridge installations will provide a safe crossing, improved user experience for recreationists, and reduce any sediment delivery associated with current wet crossings or existing undersized bridges.

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

Less than 2% of the site, which includes gravel roads, will be covered with impervious surface after project construction. Packed dirt trails are considered an impervious surface under the *King County Surface Water Design Manual* and have reduced permeable surface compared to the forest understory but are not completely impervious. Trails will be naturally surfaced with native mineral soil and rock, if necessary, some trail surfaces may be hardened with gravel and other various sizes of native on-site rock. Trail bridges require small, typical approximate sized 3' depth X 8-10' width, pre-cast concrete abutment foundations that are impervious.

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

Sustainable trail design and construction techniques, following the *United States Forest Service (USFW) Trail Construction and Maintenance Notebook* (0723-2806-MTDC), will reduce the need for significant erosion control measures through use of frequent trail grade reversals, drainage dips, and cross drains. Use of significant erosion control methods are not anticipated, however; if necessary, erosion control best management practices will be used, such as silt fencing, erosion control fabric, weed free wood straw, straw wattles, and other methods may be used as necessary to reduce or control erosion on trails and at trail bridge installation sites, and in some circumstances, may be required by permits. Impacts will be reduced through project design seeking minimal tree removal during construction and retention of native plants, while decommissioning unsustainable trail segments will help mitigate overall project impacts by removing existing unsustainable trail and restoring the cleared and graded trail footprint back to a more natural forest ecosystem.

Trail construction will generally include approximately two to three feet travel width of forest floor exposure to mineral soil using ordinary hand tools and/or a mini fuel-powered excavator. Trail segments proposed for decommission and restoration work will typically involve trail crews utilizing hand tools to place dead non-habitat timber across travel routes, replant native vegetation within impacted trail corridors and directly on the trail tread surface, and scatter forest debris to mimic the natural environment and encourage natural regeneration processes to occur. Trail system and new route design will encourage most recreation visitors to travel sustainably built and appropriately located trail routes to help reduce the need for recreationists to travel off-trail and along active forest roads that disperse throughout the forest. This project should provide visitors with designated and sustainably built and located trail options, reduce user conflicts with other visitors and motorized forest management related vehicle traffic, within the gate access narrow forest road network, while improving the recreational experience for equestrian, hiking, and mountain biking visitors.

In addition, all trail bridge installations require a Washington State licensed engineer stamped design to ensure stability of the foundations and to ensure proper clearance over stream channels, including accommodating large debris flow events to meet Washington Department of Fish & Wildlife Hydraulic Project Approval requirements. In addition, a geologist reviews the designs and coordinates with the engineers to verify stability of proposed trail bridge installation sites, including an evaluation of proposed trail bridge lengths, abutments, and soil bearing capacity.

2. Air

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 majority of construction work will be done using hand tools and will not generate emissions. During construction of some trail segments, if fuel powered mini excavators are utilized for construction and/or if motorized tracked wheelbarrows are utilized to transport trail-hardening materials, there may be temporary minor dust and equipment emissions. Trail bridge development will require helicopter aerial transport and precise placement of bridge materials using a long-line delivery system, during construction, which will produce some emissions but are considered negligible. The completed project is not expected to generate any new sources of emissions during operation.

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

No.

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

Standard best management practices would be used to mitigate any temporary fugitive dust impacts during construction. The surrounding forest ecosystem or existing adjacent transportation corridor (State Route 18) will provide a large buffer to adjacent properties.

3. Water

a. Surface Water:

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.**

   Yes, several active designated trails where proposed construction of trail bridges are planned, currently cross year-round and seasonal intermittent streams, some of which are unnamed streams and drainages, which eventually flow into named waterways. All proposed trail bridge crossings are located within Water Resource Inventory Area (WRIA) 8 Cedar-Sammamish. All waterways eventually flow into Holder Creek or Carey Creek, part of the Issaquah Creek Basin, with both eventually flowing into Middle Issaquah Creek.

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.**

Yes, proposed trail work will require crossing regulated waters using proposed trail bridges to span over and protect water resources. Each proposed trail bridge length is designed for the size of the water channel and will require additional review by Washington Department of Fish & Wildlife, to ensure requirements for protection of fish habitat are met.

Generally, all regulated water crossings with substantial flows will require trail bridge installations for public safety, improved user experience, and resource protection. Trail bridges will be constructed of precast concrete abutments, weathering steel superstructures with rough sawn surface western red cedar decking with 5' clear travel width and have weathering steel 54" vertical railing height to better accommodate safe equestrian travel. The Hydraulic Project Approval (HPA) from the Washington Department of Fish & Wildlife (WDFW) will stipulate regulations concerning work within the described waters. Trail bridges will be necessary to better accommodate non-motorized year-round trail access across larger streams.

This proposal involves protecting surface water through the installation of 17 total structures to safely and sustainably cross regulated waterways. Six proposed trail structures will be required along new proposed trail routes, while eleven trail bridges will be required on the existing system of active designated and open trails. Six of the eleven proposed trail bridges along the current trail system, will be installed over surface water channels with former culvert crossings, that have been removed from prior active forest roads, that have since been converted to recreational trails. Of these six proposed trail bridges spanning drainages that formerly had forest road culverts, five will be installed along the Beaver Pond Trail and one trail bridge installation is proposed on a trail named "Road I." The remaining proposed five trail bridges are proposed on Holder Ridge Trail (1), Mt. Beaver Trail (1), Carey Creek Trail (1), Elk Ridge Trail (1), and Knee Knocker Trail (1). In addition, approximately six additional trail structures, likely trail bridges, are proposed to cross surface water channels along proposed new, yet to be named, trail routes.

Beaver Pond Trail (5 proposed trail bridges): All 5 trail bridges will span former culvert crossings that were removed from a former active forest road. 4 of the 5 trail bridges will cross unnamed water course Type N (non-fish) tributaries with 1 trail bridge crossing over a water course Type F (fish) tributary, with all tributaries eventually flowing into Carey Creek, a water course Type Fp, (fish-perennial creek), which eventually flows into Middle Issaquah Creek.

Road I Trail (1 proposed trail bridge): A proposed trail bridge will span over an upper elevation non-fish, a water course Type N (non-fish) segment of Carey Creek, which eventually flows into Middle Issaquah Creek.

Holder Ridge Trail (1 proposed trail bridge): A proposed trail bridge will span an unnamed water course Type N (non-fish) tributary that eventually flows into Holder Creek, a water course Type Fp, (fish-perennial creek), which eventually flows into Middle Issaquah Creek.

Mt. Beaver Trail (1 proposed trail bridge): A proposed trail bridge replacement at an improved location downstream, of a current undersized bridge, will span over a water course Type Fp (fish perennial) segment of Carey Creek, which eventually flows into Middle Issaquah Creek.

Carey Creek Trail (1 proposed trail bridge): A proposed trail bridge will span over a water course Type F (fish) tributary that flows into Carey Creek, a water course Type Fp, (fish perennial creek), which

eventually flows into Middle Issaquah Creek.

Elk Ridge Trail (1 proposed trail bridge): A proposed trail bridge will span over a water course Type N (non-fish) unnamed tributary that flows into Carey Creek, which flows into Middle Issaquah Creek.

Knee Knocker Trail (1 proposed trail bridge): A proposed trail bridge will span over a water course Type N (non-fish) unnamed tributary that flows into Carey Cree, which flows into Middle Issaquah Creek.

Unnamed new proposed trail routes (approximately 6 proposed trail structures): New proposed trail routes will likely require trail bridge, boardwalk, or in some circumstances along smaller width waterways, culvert structures. New upper elevation trails north and east of Road H are anticipated to require crossing over unnamed tributaries, water course Type N (non-fish) in four locations, eventually flowing into Carey Creek, which eventually flows into Middle Issaquah Creek. In addition, at two locations new trail routes below Road K, will require crossing over two unnamed Type N (non-fish) tributaries, flowing into Holder Creek, which eventually flows into Middle Issaquah Creek.

It is possible that additional water crossings, or trail improvements will be identified during the proposed project implementation process. In those circumstances, when a new water crossing is proposed during implementation, WDFW will be notified and the HPA application process followed to add the water crossing to the project permit. These addition

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.

This project proposal does not include fill or dredge material being placed or removed from any surface water or wetlands.

4) Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.
No surface water withdrawals or diversions are necessary for this proposal.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
No. There is not a FEMA mapped 100-year floodplain on the property.

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.
This proposal does not involve discharge of waste materials into surface waters.

b. Ground Water:

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.

No groundwater is planned to be withdrawn with this proposal. No well or drinking water is planned for this proposal.

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.**
No waste materials will be discharged into the ground because of this proposal.

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 primary source of runoff will be from precipitation. Trail development will target a 5% trail tread surface outslope to encourage precipitation-delivered water, that is not intercepted by the forest canopy, to sheet flow directly across the trails, retaining the natural side slope drainage of the terrain. Water from trails will be diverted from running down the trails and instead be immediately dispersed onto the forest floor, encouraging water sheet flow immediately across the contours of the trail, to mimic the natural water runoff process of the forest ecosystem.

2) **Could waste materials enter ground or surface waters? If so, generally describe.**
No waste materials should enter surface or ground waters.

3) **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**
Trail routes will be designed following the *USFW Trail Construction and Maintenance Notebook* (0723-2806-MTDC) to manage runoff on site and to minimize the impact of runoff and altered drainage patterns to adjacent areas. The natural terrain's side slope drainage will be retained with appropriate trail tread outslope. Incorporating frequent trail grade reversals and undulations will encourage water sheet flow directly across the trails. New or replacement trail bridges will improve drainage patterns by preventing recreationists from crossing through stream channels on foot, reducing the chance of sediment and limiting erosion occurring near riparian areas.

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

Proposed measures will involve stabilizing any soils that are exposed by recreation trail bridges and trail work with weed free wood straw bales, re-vegetation via plantings where necessary, layering of forest surface woody debris, and/or implementing other best management practices, as needed during the construction phase. Stream crossing approaches can be elevated to prevent channeling of storm water towards streams and to direct water off the trails and onto the forest floor prior to the stream crossings, to act as a natural buffer. Trail additions will be rock surfaced and hardened in appropriate locations, as necessary, to prevent erosion. The HPA issued by WDFW, may require more control measures near trail bridges based on permit stipulations.

4. Plants

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**

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

Trail development will require removal of small forest understory vegetation, when it is present, to expose mineral soil to allow shaping/construction of the trail tread at a variety of targeted widths, typically from two feet minimum up to five feet maximum travel width. Trail bridges will require clearing vegetation to mineral soil an area of approximately three-foot depth by eight-foot width for helicopter placement of pre-cast concrete abutment foundations installed outside of the Ordinary High-Water Mark (OHWM) & 100-year potential water flow storm event. A minimal number of large mature trees are anticipated to be required for removal, but likely to be required for safe helicopter operations to precisely place trail bridge materials. The WDFW HPA will stipulate requirements for tree removal within riparian areas, typically requiring trees to be felled into nearby streams to create large woody debris and improve long-term stream health.

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

There are no known occurrences of threatened, or endangered plant species within the project area. If observed during construction, King County will seek biologist guidance on proper project buffering and/or required protective measures. Maps and resources were reviewed August 2023, utilizing the Washington Department of Natural Resources Natural Heritage Program database.

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

Restoration work associated with trails would involve re-vegetation techniques using native plant communities. Trail bridge installations will require best practice erosion control measures that should also aid in re-establishing native vegetation within the limited impact areas due to excavation and grading for installing trail bridge abutments. The WDFW HPA may require replanting native conifer species to mitigate for required tree removal to safely install the trail bridges using helicopter aerial transport. Work will include retention of existing trees when feasible, and placing natural features, such as boulders and/or timber barriers to delineate trails, which will also aid in creating and protecting areas for establishing native plant growth on the edge of impacted trail corridors.

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

The general project area contains isolated patches of tansy ragwort (King County Regulated Noxious Weed), English holly (King County non-regulated, weed of concern), Himalayan blackberry (King County non-regulated, Class C), foxglove (King County non-regulated, weed of concern), and scotch broom (King County non-regulated Class B).

5. Animals

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:**
  hawk, heron, eagle, songbirds, barred owls, pygmy owls, pileated woodpeckers, common raptors, peregrine falcon, northern goshawk, migratory neotropical waterfowl, woodpeckers, and common game birds
- **Mammals: deer, bear, elk, beaver, other:**
  Columbia black-tailed deer, Roosevelt elk, mountain goats, bear, beavers, cougars, bobcats, coyotes, fox raccoons, mountain beavers, pikas, hares, weasels, skunks, bats, rodents, shrews, moles, and others
- **Fish: bass, salmon, trout, herring, shellfish, other:**
  Trout, salmon, shellfish (freshwater)
- **Reptiles/Amphibians**:
  Pacific tree frog, other common toads, frogs and salamanders, garter snake

b. List any threatened and endangered species known to be on or near the site.
An August 2023 search of the WDFW Priority Habitat and Species Web Tool was conducted. A search of the Web Tool indicated the following priority threatened, endangered, or priority species on or near the site including: coho salmon, bull trout, chinook salmon (Puget Sound population), resident coastal cutthroat trout and steelhead (Puget Sound population). Three of those species have state or federal status: bull trout in the coastal Recovery Unit (state Candidate and federally Threatened), chinook salmon (federally Threatened) and steelhead (federally Threatened). Elk and a species of Myotis bat (*Myotis yumanensis/lucifigus*) are other priority habitat species found in this area. Neither are state or federally listed. In addition, a Washington State Candidate Species, western toad (*Anaxyrus boreas*), was found in Taylor Mountain in the past.

c. Is the site part of a migration route? If so, explain.
The project site is located within the Pacific Flyway, which is a major north-south route of travel for migratory birds in America, extending from Alaska to Patagonia. Migrating and nesting birds within the project area will be protected under the Migratory Bird Treaty Act.

d. Proposed measures to preserve or enhance wildlife, if any.
Trail renovation and trail bridge installations are focused on improving sustainability of existing recreation use and minimizing wildlife impacts.

If any threatened or endangered animal species are observed during project implementation, appropriate biologist guidance on proper project buffering and/or

required protective measures, or area avoidance, will be followed.

Decommissioning existing unsustainable trail routes will reduce human access and activity in certain areas within the project vicinity, reducing overall trail density and potential impacts. Providing sustainable, designated, and managed trail routes will provide visitors established trails as an alternative to discourage off-trail travel often located in sensitive areas which can potentially disturb wildlife. Overall, a stacked loop trail system design is targeted where successive trail loops are "stacked" upon each other, connecting in such a way as to give users options for extended distance or varied routes. The stacked loop trail system design is a method that helps achieve a positive user experience, while reducing and balancing overall density of trail development, which can reduce trail conflicts between users while also reducing the overall trail density required to manage recreation visitation carrying capacity. The stacked loop system design can simultaneously provide access to portions of Taylor Mountain Forest, while also discouraging non-designated trail construction and off-trail travel, by providing a high quality and sustainable user experience. Reducing overall trail system density and leaving large portions of the forest without designated public trail access, may have positive impacts on wildlife distribution.

King County's *Taylor Mountain Forest Stewardship Plan* provides guidance for this proposal, protecting, enhancing, and restoring ecological systems and restoration of forest health and diversity, while providing passive recreation opportunities for the public.

e. List any invasive animal species known to be on or near the site.
Invasive animal species known to inhabit areas within or near the project area include Starlings, House sparrows, Eurasian collared-dove, Barred Owl, and Bullfrogs which are found throughout the lowlands of western Washington.

6. Energy and Natural Resources

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.
The completed project will result in sustainable improvements made to an existing outdoor recreation soft surface trail system. This proposal will not require energy needs. The completed project trails will be available for non-motorized travel only.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No, there are no known plans for large scale solar energy sites nearby, while adjacent properties are heavily buffered with forested land. This project will not affect adjacent private landowners from potentially using solar energy.

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.

During construction, utilizing manual labor to complete difficult hand-built trail construction segments, will help offset any required diesel-powered mini excavator machine-built trail segments and associated energy use to power equipment.

Trail bridge designs utilizing weathering steel, concrete, and galvanized hardware should require minimal maintenance and are estimated to lasts 50 years or more, which should reduce vehicular trips for staff to conduct maintenance throughout their lifespan and eliminate two to three replacement cycles that would likely be required if a native log stringer bridge were to be constructed.

7. Environmental Health

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.

The result of this proposal will be designated outdoor recreation trails open to non-motorized use. During the project implementation phase, WA DNR's Industrial Fire Precaution Level (IFPL) restrictions will be followed for construction operations during the fire risk season. IFPL stipulations guide the safe use and proper storage of motorized construction equipment, fuel, and required precautions and protocols to prevent forest fires. Helicopter operations will follow their spill prevention control, and countermeasures plan to ensure safe fueling operations for trail bridge transport and aerial placement. In addition, the Washington Department of Fish & Wildlife Hydraulic Project Approval will stipulate fueling locations and best practices for fueling construction equipment, related to trail bridge installations.

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

No known contamination exists at this site. The DOE Confirmed and Contaminated Sites table shows no confirmed or suspected contaminated sites.

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.

Electric transmission lines are in the general project vicinity but are located at a safe distance away from proposed helicopter aerial transport flight paths for trail bridge placement and can easily be avoided.

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.

Diesel fuel and gasoline will be temporarily used to power excavators, plate compactors, chainsaws, and other small equipment to implement this project. Small construction equipment will produce temporary emissions during construction phase of the project. Helicopter operations will produce emissions during the construction phase and will follow their spill prevention control, and countermeasures plan to ensure safe fueling operations for trail bridge transport and aerial placement. Industrial Fire Precaution Level requirements and WDFW HPA rules/regulations will be followed to ensure safe fuel

storage and acceptable re-fueling locations that will protect resources.

4) **Describe special emergency services that might be required.**
Fire or emergency medical response may be required if an accident occurs during equipment and helicopter operations and/or manual labor during project implementation. Any oil or fuel spills discovered from equipment or vehicles will be appropriately cleaned and/or removed immediately.

5) **Proposed measures to reduce or control environmental health hazards, if any.**
Careful equipment fuel storage in spill proof containers will be utilized during project implementation. Machine operators are required to have proper training to operate equipment safely. Machines will be regularly inspected for leaks. Spill response kits will be present for each vehicle on site to start the cleanup process as soon as possible after a detected leak or spill. The WDFW HPA will include conditions for safe and proper fuel storage locations, an appropriate distance from regulated waters and other critical areas. If contamination of the environment is suspected, King County is required to contact the Department of Ecology to determine the necessary cleanup actions, if any, depending on the content and severity of the spill.

b. Noise

1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**
There is limited anthropogenic noise on this site. Occasional traffic can be heard from the main road, from State Route 18, or from airplanes flying overhead. Vehicle noise may be more frequent during the spring, summer, and autumn when weather is more favorable for driving.

In addition, other noise emitting forest health related management activities will continue to occur within the general Taylor Mountain Forest area, including forest health thinning and variable retention harvest activities and associated forest road work. None of this noise will affect the project.

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)?**
Construction equipment will include small hand tools, chainsaws, and possibly motorized wheelbarrows and mini excavators and equipment necessary to transport materials. In addition, trail bridge installations will require helicopter transport and aerial placement of construction materials. Temporary construction noise from heavy equipment will follow the operating hours in King County Noise Ordinance, Title 12, which is 7am to 7pm on weekdays and 9am to 7pm on weekends. Work is typically during weekday daylight work hours only.

Noise associated with vehicles utilizing existing access roads to park at trailheads, and noise generated from recreational trail use will continue to be periodically present in the project area and vicinity with similar levels occurring with current visitation.

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

Construction noise would be short-term and limited to the typical daytime working hours as defined in King County Noise Ordinance, Title 12 and permit conditions. No other noise-control measures are necessary.

8. Land and Shoreline Use

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 project site is categorized as a "Working Forest," within the 2022 King County Open Space Plan Update and Taylor Mountain Forest Stewardship Plan. The King County Open Space Plan definition of "Working Forest" is *land managed to balance sustainable timber production with conservation, ecological restoration, and public use. These sites also support research related to forestry practices.* This proposal will not affect current land uses on nearby or adjacent properties. It is anticipated that locating new and existing designated trail routes in more sustainable locations with safe trail bridges that provide appropriate resource protection, will help improve and accommodate current and forecasted use patterns and projected visitation.

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?

Most of the lands within and adjacent to the proposed project areas are managed as forest lands, for a variety of goals, such as: sustainable timber harvesting to generate revenue with compatible public access, and protected forest lands to the east managed by the City of Seattle for providing safe and clean drinking water within the Cedar River Watershed. Some private residences are adjacent to the project proposal vicinity, predominantly at the southern Taylor Mountain Forest boundary. Timber extraction, from prior landowners, has occurred within the majority of the proposed Taylor Mountain Forest project areas. This project will not change the status of how Taylor Mountain Forest, or the adjacent lands in the project vicinity are managed.

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?

No, there are no significant anticipated affects to surrounding forest land operations or management, other than the periodic need for communicating temporary public access recreation closures required to safely perform active forest health related management activities.

c. Describe any structures on the site.

Some minor structures are present within or near the project sites, which are predominantly for managing existing recreation use and for security and safe recreation and vehicle travel along King County forest management access roads. Examples include forest road gates, forest road bridges, recreation information kiosks, trail bridges, and self-contained vault toilets at the trailhead.

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

No significant structures will be demolished. An existing undersized trail bridge will be removed and replaced with a longer, more sustainable trail bridge, providing improved protection of regulated waters and visitor safety.

e. What is the current zoning classification of the site?
The proposed project sites are located within Taylor Mountain Forest and the parcels have a zoning classification of F- Forest.

f. What is the current comprehensive plan designation of the site?
The current comprehensive plan designation of Taylor Mountain Forest is OS (Open Space), King County open space system.

g. If applicable, what is the current shoreline master program designation of the site?
An August 2023 search of data available on King County iMap indicates that the Holder Creek waterway and surrounding riparian buffer has shoreline management designations of both "aquatic shoreline," and "natural shoreline." Proposed work in this area includes decommissioning some unsustainable trail segments and re-routing some unsustainable trail segments to improved locations.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
Yes. Careful planning and trail design has avoided and minimized locating trails in critical areas to the maximum extent possible, however, the proposed trail bridge installation locations cross surface water bodies that are designated as critical areas under King County Code.

King County Department of Local Services Permitting Division will require full compliance with any applicable critical area codes and protections. Permit approvals and conditions, including the pending HPA to be secured from WDFW, will address impacts and any required mitigation to critical areas.

i. Approximately how many people would reside or work in the completed project?
No people will reside in the project. This project does not include housing. King County staff maintenance personnel or volunteers work in the project area when maintaining recreation resources.

j. Approximately how many people would the completed project displace?
None.

k. Proposed measures to avoid or reduce displacement impacts, if any.
Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.
The King County Taylor Mountain Forest was acquired to preserve the natural resources located within Taylor Mountain including the headwaters of lssaquah Creek (Holder and Carey Creeks), to demonstrate environmentally-sound forest management, to enhance flood protection for Issaquah Creek, and to provide passive recreational opportunities for the public. Forestry and recreational uses must preserve the site's ecological, wildlife and water quality values. A Forest Stewardship Plan has been prepared for the site, with guidance to protect and restore the health and diversity of the forest, while providing passive trail access in concert with protecting the site's

conservation values. This proposal is compatible with the various strategies and goals outlined in the *Taylor Mountain Forest Stewardship Plan*.

The 2020 update to the *King County Open Space Plan: Parks, Trails, and Natural Areas* (Open Space Plan) also helped to guide this proposal. This effort updates the 2016 plan, reflecting the current factors that influence how King County provides parks and recreation service. The Open Space Plan reconfirms the agency's mission and goals of stewarding regional and local parks, regional and backcountry trails, natural areas, and forests to provide recreation and environmental benefits. The plan addresses the *King County Strategic Plan* goals of achieving environmental and social justice, public engagement, environmental and financial sustainability, quality local government, and regional collaboration. In addition, many of Parks' goals and objectives are informed by the *Clean Water Healthy Habitat Strategic Plan*, Land Conservation Initiative, *Strategic Climate Action Plan*, *30-Year Forest Plan*, and salmon recovery plans. These related efforts often include their own goals, objectives and targets that help Parks prioritize projects, programs, and investments. Taylor Mountain Forest is identified as a rural "working forest," Open Space Park Classification, within the 2022 Open Space Plan. This project proposal is compatible with this land use type classification, of "land managed to balance sustainable timber production with conservation, ecological restoration, and public use. These sites also support research related to forestry practices."

The *Taylor Mountain Public Use Plan and Trails Assessment* (completed October 2004) and *Taylor Mountain Forest – Forest Stewardship Plan* (completed August 2003) identified objectives, strategies, management, and implementation plans that are consistent with the components of this project proposal. More recently, King County conducted virtual public meetings and several targeted recreation and non-profit group outreach efforts. These recreation planning and outreach processes actively engaged the public and helped contribute to developing the recreation planning concepts for proposed trail system improvements, in which formed the basis for this overall proposal.

<u>Recent public engagement, that helped inform this proposal, is summarized below</u>:

4/7/2021 – King County hosted a trail system improvement focused virtual public meeting information session focused on Taylor Mountain Forest. A trail system improvement map was shared, discussing draft trail improvement plans, including a public participant question-and-answer session.

4/29/2022 – An onsite meeting between King County staff and Backcountry Horseman of Washington (BCHW) Hobart Chapter and the BCHW Statewide Public Lands Chair was held. Discussions involved prioritizing and discussing the scope and locations of trail system improvements and the first phase of funded trail bridge construction locations.

11/7/2022 – King County and BCHW Hobart Chapter and BCHW Statewide Public Lands Chair met on site to review two proposed trail bridge locations (one replacement and one new trail bridge) along the Carey Creek and Mt. Beaver Trails.

1/20/2023 – King County and BCHW Hobart Chapter and BCHW Statewide Public Lands Chair met on site to discuss updated short and long-term trail system improvement plans, shared maps and

received feedback on those concepts.

3/20/2023 – King County and BCHW Hobart Chapter and BCHW Statewide Public Lands Chair met virtually to discuss upcoming forest health improvement plans and final trail system concept plans and implementation schedules for funded trail bridge installations.

3/21/2023 – King County and Washington Trails Association met virtually to discuss overall trail system concept plans, forecasted project schedules, and to receive feedback.

4/5/2023 – King County and Issaquah Alps Trails Club met virtually to discuss overall trail system concept plans, forecasted project schedules, and to receive feedback.

4/11/2023 – King County hosted a virtual online public meeting to share about upcoming Taylor Mountain projects and news, updating on trail bridge construction and trail system planning.

March/April 2023 - In addition, King County corresponded with both the Mountains to Sound Greenway Trust and Evergreen Mountain Bike Alliance, via a combination of emails, virtual meetings, and phone calls - sharing trail system concept plan maps and upcoming forest health improvement plans, answering questions, and soliciting feedback.

In addition, portions of this proposal's projects will be implemented, and funded utilizing King County awarded grants, evaluated through an open and competitive grant application process, with funds administered through the Washington State Recreation and Conservation Office (RCO). Grant applications undergo public review by advisory committees made up of citizens, nonprofit conservation and outdoor recreation group representatives, and local, state, and federal agency representatives, with knowledge of outdoor recreation and wildlife habitat. Grant advisory and evaluation committees review and score applications and provide advice on policy changes, legislative issues, and statewide planning to RCO.

Several King County grant awards related to this project proposal, have been used for prior planning and development efforts, and/or will provide some funding towards implementation of this proposal. To strengthen the success of grant applications, King County typically seeks to incorporate Letters of Support from a mix of various stakeholders, user groups, and partner agency representatives. Letters of Support were provided to King County for several grant applications eventually awarded or pending possible award to King County, providing additional funding to help implement portions of this proposal, with many larger recreation and conservation groups and partner agencies supporting the various project components encompassed in this proposal, or prior efforts that have led up to this proposal.

Each supporting group is listed below each grant application title and with the date referenced on each Letter of Support received by King County:

<u>Taylor Mountain Forest Public Use Plan and Trail Assessment – (IATC grant award)</u>
Issaquah Alps Trail Club – (11/25/2002)
Washington Trails Association – (11/26/2002)
Chairman – Hobart Rural Association – (12/9/2002)

Backcountry Horseman of Washington, Tahoma Chapter – (12/11/2002)
Taylor Mountain Forest – Trail & Parking Improvements – (NOVA grant award)
Backcountry Horseman of Washington, Tahoma Chapter – (8/30/2012)
City of Seattle, Cedar River Watershed Director – (8/30/2012)
Washington Trails Association – (No date referenced in letter)

Taylor Mountain Trail Bridge Construction – Phase 1 (NOVA grant award)
Backcountry Horseman of Washington Tahoma Chapter - (No date referenced on letter)
Washington Trails Association - (11/3/2018)
Mountains to Sound Greenway Trust - (11/21/2018)
Issaquah Alps Trails Club - (11/8/2018)

Taylor Mountain Trail Bridge Development – Phase 2 (pending NOVA grant award)
Backcountry Horseman of Washington (Statewide) - (1/18/2023)
Backcountry Horseman of Washington (Tahoma Chapter) – (No date referenced in letter)
Washington Trails Association - (1/18/2023)
Mountains to Sound Greenway Trust - (2/7/2023)
Issaquah Alps Trails Club – (2/16/2023)
Evergreen Mountain Bike Alliance - (1/19/2023)

There are several recreation evaluation, maintenance, and development objectives, strategies, and goals identified from the Taylor Mountain Public Use Plan and Trails Assessment (October 2004) and Taylor Mountain Forest – Forest Stewardship Plan (August 2003). These prior planning efforts help support, influence, and guide this proposal, through evaluation of the existing trail network and helping determine overall trail system concept locations. A summary of general findings identified from both planning documents, that this project proposal seeks to help address, are summarized below:

- Accommodate passive recreational opportunities for the public, while preserving the sites ecological, fish and wildlife, forestry, and water quality values.
- Design a trail network with low impacts on the ecological features, build new trails that protect the ecological elements from degradation.
- Inactivate or abandon non-essential roads and trails to reduce ecological impacts.
- Evaluate passive recreation use for conflicts with ecological goals. When use levels interfere with ecological systems or enhancement and improvements, close and remove trails.
- An interpretive trail loop will be developed near the parking facility, towards Holder Creek to focus on streams, salmon, wetlands, and watersheds.
- Renovate, reconstruct, or construct new trails (re-routes), to decrease the seasonal closure and open the trails year-round.
- Seasonal closures shall continue to be in effect until the trails can support decreased seasonal closures or year-round use. Trails in good or excellent condition will remain open and others will be seasonally closed.
- Seasonal trail closures provide for protection of fish and wildlife habitat and forest health from soil erosion due to trail use during the winter rains. Seasonal trail closures will also improve water quality by reducing sediment in the runoff helping to protect salmon spawning in the streams during the winter.

- Locate, design, and develop trails consistent with King County standards, forest stewardship responsibilities, location suitability criteria (evaluation of slopes/critical areas/habitat), safety and risk management, and visitor desires for an enjoyable user experience.
- Consider proposals submitted to King County by others that are consistent with achieving public use plan concepts, goals, strategies, and objectives, and are compatible with agency policies, initiatives, & requirements.
- Locate trails in a manner that limits the potential for users to trespass into private lands and the City of Seattle's Cedar River Watershed to the east.
- Plan public access in coordination with the site's Open Space Plan definition of "Working Forest" which is "land managed to balance sustainable timber production with conservation, ecological restoration, and public use."

In addition, general trail development and evaluation strategies, that influenced the project proposal's compatibility with existing plans and projected land uses, include:

- Evaluate site-specific conditions when implementing projects on the ground. Respond and adapt to new or changing information and variable site conditions.
- Create and maintain trail systems that minimize long term maintenance needs and costs and prevent or minimize the potential for erosion and sediment delivery into nearby water bodies that are important for fish habitat.
- Provide clear signage and connections that direct users to the appropriate recreation and reduce the potential for trail conflicts.
- Evaluate existing trail systems utilizing suitability criteria and field verification to determine optimal long-term sustainable trail routes to ensure the trail network's long-term resiliency and sustainability.
- Relocate trails or facilities that are in unsustainable locations.
- Once relocated or removed, restore old trail routes or recreation sites and limit access to prevent further resource damage.

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

The proposed project site is located within forest lands designated as rural "working forest," Open Space Park Classification, within the 2022 King County Open Space Plan Update. This project proposal is compatible with this land use type classification, of "land managed to balance sustainable timber production with conservation, ecological restoration, and public use. These sites also support research related to forestry practices." The proposed trail system improvements will be able to co-exist with timber production and other forest health actions occurring and planned at the site. Adjacent private and state-owned forest lands of long term-commercial significance including revenue generating State Department of Natural Resources-managed trust lands, Tiger Mountain & Raging River State Forests, are nearby and this proposal is compatible with state trust land management. Locating facilities and trails in long-term sustainable locations, while coordinating trail development and maintenance with forest health and stewardship actions is an ongoing King County-

management process that seeks to strike a balance between limiting the timeframe of temporary trail access closures, while continuing to actively implement forest stewardship activities.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None proposed, no housing will be provided.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None proposed, no housing will be eliminated.

c. Proposed measures to reduce or control housing impacts, if any.
Does not apply, there will be no housing impacts.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
Trail development and renovation work will require small boardwalks and trail bridges, which will be approximately 5 to 10 feet tall and constructed of steel and/or wood materials.

b. What views in the immediate vicinity would be altered or obstructed?
Trail segments will be located within a variety of forested settings, or at elevations that cannot be viewed from a long distance away. New views will be provided for recreationists utilizing the new proposed trail bridges and trail segments. Trail renovation and additions should not have a significant impact to alter or obstruct existing views.

c. Proposed measures to reduce or control aesthetic impacts, if any.
Trail construction will follow best management practices of scattering and dispersing the removed forest duff layer into the nearby forest understory away from any regulated waters. Restoration of trail segments proposed to be decommissioned involves replanting native on-site plants and covering exposed mineral soil with on-site downed forest organic debris to help mimic a natural forest environment and encourage natural forest restoration processes to be successful.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
The proposal will not directly produce light or glare. Trails and trailhead parking facilities, utilized to access the proposed trail system improvements, are serving non-motorized outdoor recreation trail access and open for day-use visitor access only. Indirectly, vehicle access to trailhead facilities will produce light and potential glare when recreationists select

vehicle transportation and operate headlights during the sunrise and sunset hours to access the trailhead parking area.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
No lighting is proposed, trail bridges and recreational soft surface trails should not create glare as trail bridges are constructed with concrete, wood and weathering steel, all non-glare surfaces.

c. What existing off-site sources of light or glare may affect your proposal?
None, there are no existing off-site sources of light or glare in the immediate vicinity of the proposed project sites.

d. Proposed measures to reduce or control light and glare impacts, if any.
No reduction or control measures are proposed since there will be no significant light or glare impacts produced by the proposal.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?
Designated recreation opportunities in the immediate vicinity include a trail loop located west of Taylor Mountain Forest, on south Tiger Mountain State Forest, which is open to equestrian and hiking travel and a trail system primarily managed for mountain biking access in the east Tiger Mountain State Forest area. To the northeast of Taylor Mountain, the Rattlesnake Mountain hiking-only trail is located within the Rattlesnake Mountain Scenic Area. Primary management objective mountain biking trails are located south of Rattlesnake Mountain, and to the northeast of Taylor Mountain, within Raging River State Forest. A forest road network within Raging River State Forest is open to non-motorized equestrian, hiking, and mountain biking access. Informal hunting on game management units is allowed per Washington State Department of Fish & Wildlife rules and regulations, on state trust lands, and occurs within the Raging River State Forest area. Taylor Mountain, to the south of Raging River State Forest, offers approximately 30-miles of multi-use trail access for non-motorized visitors, and is primarily used by the equestrian community, but includes secondary trail access for hiking and mountain biking, with all users yielding to equestrian travel along the trails.

b. Would the proposed project displace any existing recreational uses? If so, describe.
No, this proposal will renovate and improve a designated trail system at an existing site. This proposal includes decommissioning specific trail segments that are unsustainable and are incompatible with agency management plans and protection of resources. Some new trail segments are proposed for development and some existing trail segments are proposed for renovation, where they are compatible with land management goals. This project seeks to provide sustainable long-term trail routes allowing trail system loop options for visitors.

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

This project will retain and improve recreation opportunities in the service area by ensuring long-term sustainable trail connections to desirable locations via hiking, equestrian, and mountain bike use. Properly sited and managed sustainable trail segments coupled with signage will improve resource protection, user dispersal, safety, and user experience.

The implemented project should disperse user densities and reduce the potential for user conflicts. In addition, improving the sustainability of trail crossings over typed and regulated streams, with proposed trail bridge, boardwalk, and potential culvert installations, will improve resource protection and recreational access, safety, and user experiences for all trail users. More sustainable trail segments, coupled with proper signage, will improve communications with the public on what designated recreation opportunities are available. Renovation, construction, and unsustainable trail decommissioning and restoration work seeks to provide long-term more suitable alternatives for sustainable and improved trail user experiences.

Throughout the forest, there are approximately 30 miles of trails and gravel roads used primarily by equestrians, but also shared with hikers and mountain bike riders. Some trails are closed, during the rainy season, between October 15 and April 15 to protect the trails, prevent erosion, and reduce the amount of sediment entering the streams. This seasonal trail closure of specific individual trails will be re-evaluated as the proposal is implemented and trail conditions are improved to better accommodate year-round recreational use, while protecting resources. Individual trails, with a current seasonal closure, will be evaluated for suitability for year-round use, on a case-by-case basis, with King County Operations and Planning staff working with user groups to evaluate trail conditions and help determine whether or not certain trails can sustainably be open throughout the typical high average rain months.

13. Historic and Cultural Preservation

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.

There are no known buildings, structures, or sites, located in or immediately adjacent to the proposed project areas that are over 45 years old, listed in, or eligible for listing in any national state, or local preservation registers. The closest recorded historic properties include historical roads and features, which are beyond the project vicinity within adjacent state-owned lands. However, to date, most of Taylor Mountain Forest has not been systematically surveyed to look for cultural resources. This proposal requires coordination with the King County HPP to ensure systematic and consistent review of project components and undertakings for potential effects to cultural resources and subsequent mitigation if necessary. This proposal must comply with applicable laws and regulations concerning cultural resources prior to any ground disturbing activities.

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.

There are no known recorded landmarks, features, burials, cemeteries, historic properties, or archaeological sites in or immediately adjacent to the proposed project sites. The King County HPP reviewed the proposed projects and determined there is variable potential for encountering archaeological sites based on environmental and other factors - from low to high. Previous King County Parks projects throughout Taylor Mountain Forest, specifically along Holder Ridge Trail, have included cultural resources assessments. Scattered, possibly historical, non-diagnostic debris, such as glass and metal items, have been identified along the trails throughout the park. No significant cultural materials have yet been identified.

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 King County HPP reviewed several proxies, such as old maps, aerial images, soils, the state database of known resources and previous investigations, and predictive GIS mapping and modeling to assess the potential impacts to cultural and historic resources at or near the project, pursuant to King County LUD 16-1-1-EP for cultural resources review and protection. King County will also contact the interested Tribes to inform them about the individual projects covered in this SEPA checklist, as needed, as well as to solicit comments, concerns, and to exchange information about potential impacts to cultural and historic resources on or near the project areas.

HPP determined that the chance of encountering intact archaeological sites (preservation potential) is low for the majority of proposed work because these project areas are located on steeply sloping stable glacial landforms that have not been subject to much natural sedimentary deposition. Therefore, any archaeological materials present should be close to the ground surface. And if present, they have likely been previously disturbed by logging, culvert and bridge installation, and trail construction. Such post-depositional activity would have removed, or at least heavily disturbed, any near-surface archaeological materials. Therefore, HPP determined that field survey is not needed ahead of planned project ground disturbance in the majority of the project areas.

Areas that HPP determined have somewhat heightened sensitivity for encountering cultural resources based on the natural and cultural setting, such as along Holder Creek Trail, Carey Creek Trail, and Donkey Engine Trail will be surveyed by a professional archaeologist digging shovel probes prior to project ground disturbance. Trail bridge installations proposed for Holder Ridge and Carey Creek Trails will also require shovel probe survey. These more sensitive areas are closer to fresh water sources and/or in less steeply sloping parts of Taylor Mountain Forest, that would have been more accessible in the past. The sensitivity of those locations is tempered by the past disturbance associated with past logging and Park development. Parks will avoid or mitigate negative impacts to any significant cultural resources identified during project assessment. The Tribes will be updated about the field schedules of the archaeologist and their staff will be invited to attend and/or participate in cultural resources assessment, as needed.

Following Executive Order 21-02, the Washington State Recreation and Conservation Office (RCO) took the results of HPP review and determined the state-funded portion of the project will have no negative impact on cultural resources, and the Washington State

Department of Archaeology and Historic Preservation (DAHP) concurred with RCO's determination with the stipulation for an unanticipated discovery plan. RCO will conduct formal government-to-government tribal consultation about the state-funded, as needed. King County will conduct coordination with Tribes concerning any portions of the project that do not receive outside funding or permitting, as needed. Any changes or additions to the project will be reviewed following the same process.

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.

Negative impacts to historic properties are not expected during this project. No excavation permits are currently required to complete the project. If future field investigations identify cultural resources, King County will obtain any needed state-issued Excavation Permits, as needed, prior to project work.

The King County Historic Preservation Program (HPP), the Washington State Recreation & Conservation Office (RCO), and the Washington State Department of Archaeology and Historic Preservation (DAHP) request an Inadvertent Discovery Plan (IDP) for this project. So, project work will be completed by crews that have been trained in how to recognize cultural resources and what to do if they are found, following the King County Parks Inadvertent Discovery Plan (IDP).

A project specific IDP will be followed during work proposed within the majority of the proposed project area, in work areas where HPP determined there is lower sensitivity and risk for encountering significant cultural resources.

If no significant cultural materials are identified during survey of work areas with slightly heightened sensitivity; along Holder Creek Trail, Holder Ridge Trail, Carey Creek Trail, and Donkey Engine Trail; then the IDP will also apply there. Parks will avoid or mitigate negative impacts to any significant cultural resources identified during project assessment, but negative impacts to historic properties are not expected.

14. Transportation

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 existing Taylor Mountain Forest Trailhead currently serves and will continue to provide vehicle parking access for visitors accessing proposed trail system improvements. The Taylor Mountain Forest Trailhead access road entry is located at the eastern junction of SE 188th Street and 276th Avenue SE, Issaquah, WA 98027, just south of State Route 18.

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?

Public bus transit service stops are nearby, but do not currently directly stop at the Taylor Mountain Forest Trailhead parking are. King County Metro Bus Route 143 and DART Route 907 offer public transit bus stops nearby.

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).

This proposal does not involve new or improvements to existing roads or transportation facilities.

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

Yes, during the implementation phase, the project is anticipated to utilize helicopter air transportation for precise placement of recreational trail bridges, as a more sustainable construction method, versus hauling materials to project sites along roads, trails, or through the forest understory. Utilizing helicopter transportation and placement of trail bridges can eliminate or reduce the need for ground equipment and/or trail bridge construction materials, to pass through and impact sensitive streams. The contracted helicopter company will follow all requirements to ensure their flight plan (at low elevation) follows all required protocols and will not interfere with commercial 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?

Since this proposal involves designated trail decommission work coupled with renovation and new trail segments located within the vicinity of established active trail systems, it is unclear whether an increase in visitation would occur once the project is completed. Generally speaking, peak park user volumes occur during the late spring, summer, and early fall months when higher elevation trails are more likely to be snow-free. It is anticipated that the Taylor Mountain Forest trail system could receive approximately 75,000 annual user visits. This number was derived based upon parking lot vehicle counts and data extrapolation to estimate visitation.

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.

No, the proposal is located within Taylor Mountain Forest, which has a King County Open Space Plan classification of "Working Forest." The Open Space Plan definition of "Working Forest" is "land managed to balance sustainable timber production with conservation, ecological restoration, and public use. These sites also support research related to forestry practices." Forests can also provide economic value, both as a source of revenue generated from harvesting timber and other forest products and as a recreation destination. King County supports working forests, and as such classifies some forested properties as working forestlands. These lands preserve contiguous tracts of forested property (primarily in the Rural Forest Focus Areas and the Forest Production District) to retain active forestry, protect areas from development and/or provide a buffer between commercial forests and adjacent residential development.

King County's working forests were acquired for, and are managed to support, sustainable timber production in service to conservation and restoration objectives. These lands also

provide for public use where appropriate. King County conducted forest health thinning projects in the past and is currently thinning portions of Taylor Mountain with the goal of forest stand health improvement. King County will conduct similar forest stewardship activities in the future. King County Parks has received certification from the Forest Stewardship Council for sustainably managing Taylor Mountain Forest. Trail bridge locations will not be impacted, there may be minor temporary closures to short trail segments to ensure public safety during forest health related stand management actions.

g. Proposed measures to reduce or control transportation impacts, if any.
No measures are proposed since an existing trailhead parking facility already serves the project area and no impacts are expected.

15. Public Services

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.
Appropriately constructed, signed, mapped, and managed trail system improvements should reduce emergency response visits by search and rescue services, with more clearly designated and managed recreation resources. Proposed trail restoration, trail bridges, and new trail routes will occur within an existing actively visited trail system network.

b. Proposed measures to reduce or control direct impacts on public services, if any.
No measures are proposed since no long-term direct impacts on public services are anticipated.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:
No utilities are directly located at the site. However, self-contained vault sanitation toilets are located at the Taylor Mountain Forest designated trailhead parking facility.

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.
No utilities are proposed for the project.

C. Signature

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: DocuSigned by: Sam Jarrett 1D1D30CF4FD4410... **Date:** 8/18/2023 | 4:04 PM PDT

Sam Jarrett, Open Space Project/Program Manager
Environmental Policy & Initiatives Unit
King County Parks and Recreation Division