**Green Hydrogen Energy Facilities PEIS**

**Project Siting and Design Worksheet**

**Purpose**

**This worksheet helps developers avoid and minimize impacts by considering potential impacts during their siting and project design process.** Gathering information and engaging with agencies, Tribes, and communities early to identify issues can reduce the overall environmental review and permitting timelines.

Developers should review the [Green Hydrogen Programmatic Environmental Impact Statement (PEIS)](https://apps.ecology.wa.gov/publications/summarypages/2506004.html)[[1]](#footnote-2) to learn about potential impacts. The PEIS includes measures to avoid, reduce, and mitigate impacts (compiled in Appendix A) and they are grouped into the following five categories:

* **General measures:** The general measures apply to all projects using the PEIS.
* **Recommended measures for siting and design:** These measures are recommended for siting and design in the early phases of a project.
* **Required measures:** These measures must be implemented, as applicable, to use the PEIS. These include permits and approvals, plans, and other regulatory requirements.
* **Recommended measures for construction, operation, and decommissioning:** These measures are recommended for the construction, operation, and decommissioning phases of a project.
* **Mitigation measures for potential significant impacts:** These measures are provided only for resources for which potential significant impacts have been identified.

This optional worksheet focuses on the first two categories. A second optional worksheet, the Project Consistency Worksheet, covers the other categories. A developer could provide these worksheets along with the State Environmental Policy Act (SEPA) checklist and permit application to demonstrate measures to avoid and minimize impacts and consistency with the PEIS. [Revised Code of Washington (RCW) 43.21C.538](https://app.leg.wa.gov/RCW/default.aspx?cite=43.21C.538)[[2]](#footnote-3) requires a lead agency consider the PEIS and these worksheets will assist in the review process.

**How to use this worksheet**

**Project developers:**

* Use as early as possible in the project development process—ideally before site selection—to document measures to avoid and minimize impacts and track a project’s consistency with the PEIS.
* Discuss with agencies during preliminary or pre-application meetings.
* At the time of project application for SEPA environmental review, can submit this worksheet with the SEPA checklist and Project Consistency Worksheet as supporting documentation.

**Lead agencies:**

* Request a developer submit this worksheet prior to project application for SEPA environmental review as part of pre-threshold discussions.
* At the time of project application for SEPA environmental review, can request a developer submit this worksheet with the SEPA checklist and Project Consistency Worksheet as supporting documentation.

**A. Background**

1. **Name of proposed project:**
2. **Name, address, email, and phone number of applicant and contact person:**
3. **Date worksheet prepared:**
4. **Current phase of project review:**

[ ]  Pre-application review

[ ]  SEPA environmental review

**B. Tiering to the PEIS**

1. **Green hydrogen energy facility type proposed (refer to PEIS Section 2.5):**

[ ]  Production facility

[ ]  Production facility with co-located battery energy storage system (BESS)

[ ]  Storage facility

1. **Is the proposed project consistent with the facility type as described in the PEIS? If not, describe any differences.**
2. **Location of green hydrogen energy facility relative to PEIS geographic scope of study (refer to map shown in PEIS Figure 1-1):**

☐ Within PEIS geographic scope of study

☐ Outside of PEIS geographic scope of study

☐ Unknown/not sure

**C. General measures**

Use the following table to describe the implementation status for the general measures.

For sections C and D, select an implementation status from the following options. Supporting rationale and notes with additional information can be added in the last column.

* Measure completed
* Measure completed with modifications
* Measure will be implemented
* Measure will be implemented with modifications
* Measure will not be implemented
* Measure not applicable

| **#** | **Measure** | **Implementation Status** | **Rationale / Notes** |
| --- | --- | --- | --- |
| 1 | **Laws, regulations, and permits:** Obtain required approvals and permits and ensure that a project adheres to relevant federal, state, and local laws and regulations | Select descriptor. | Enter supporting rationale or notes. |
| 2 | **Coordination with agencies, Tribes, and communities:** Coordinate with agencies, Tribes, and communities prior to submitting an application and throughout the life of the project to discuss project siting and design, construction, operations, and decommissioning impacts; and measures to avoid, reduce, and mitigate impacts. Developers should also seek feedback from agencies, Tribes, and communities when developing and implementing the resource protection plans and mitigation plans identified in the PEIS. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | **Land use:** Consider the following when siting and designing a project:* Existing land uses
* Land ownership/land leases (e.g., grazing, farmland, forestry)
* Local comprehensive plans and zoning
* Designated flood zones, shorelines, natural resource lands, conservation lands, priority habitats, and other critical areas and lands prioritized for resource protection
* Military testing, training, and operation areas
* State-designated harbors
* Air quality nonattainment areas
 | Select descriptor. | Enter supporting rationale or notes. |
| 4 | **Choose a project site and a project layout to avoid and minimize disturbance:** Select the project location and design the facility to avoid potential impacts to resources. Examples include:* Minimizing the need for extensive grading and excavation and reducing soil disturbance, potential erosion, compaction, and waterlogging by considering soil characteristics.
* Minimizing facility footprint and land disturbances, including limiting clearing and alterations to natural topography and landforms and maintaining existing vegetation.
* Minimizing the number of structures required and co-locate to share pads, fences, access roads, lighting, etc.
 | Select descriptor. | Enter supporting rationale or notes. |
| 5 | **Use existing infrastructure and disturbed lands, and co-locate facilities:** During siting and design, avoid and minimize impacts by:* Using existing infrastructure and disturbed lands, including roads, parking areas, staging areas, aggregate resources, and electrical and utility infrastructure.
* Co-locating facilities within existing rights-of-way or easements.
* Considering limitations of existing infrastructure, such as water and energy resources.
 | Select descriptor. | Enter supporting rationale or notes. |
| 6 | **Conduct studies and surveys early:** Conduct studies and surveys early in the process and at the appropriate time of year to gather data to inform siting and design. Examples include:* Geotechnical study
* Habitat and vegetation study
* Cultural resource survey
* Wetland delineation
 | Select descriptor. | Enter supporting rationale or notes. |
| 7 | **Restoration and decommissioning:** Implement a Site Restoration Plan for interim reclamation following temporary construction and operations disturbance. Implement a Decommissioning Plan for site reclamation at the end of a project. Coordinate with state and local authorities such as the Washington Department of Fish and Wildlife (WDFW), county extension services, weed boards, or land management agencies on soil and revegetation measures, including approved seed mixes. Such plans address:* Documentation of pre-construction conditions and as-built construction drawings
* Measures to salvage topsoil and revegetate disturbed areas with native and pollinator-supporting plants
* Management of hazardous and solid wastes
* Timelines for restoration and decommissioning actions
* Monitoring of restoration actions
* Adaptive management measures
 | Select descriptor. | Enter supporting rationale or notes. |
| 8 | **Cumulative impact assessment:** Assess cumulative impacts on resources based on reasonably foreseeable past, present, and future projects. Identify actions to avoid, reduce, and mitigate cumulative impacts. Consider local studies and plans, such as comprehensive plans. | Select descriptor. | Enter supporting rationale or notes. |

**D. Recommended measures for siting and design**

Use the following table to describe the implementation status for the recommended measures for siting and design.

| **#** | **Category / Measure** | **Implementation Status** | **Rationale / Notes** |
| --- | --- | --- | --- |
|  | Tribal Rights, Interests, and Resources |  |  |
| 1 | Site and design projects to avoid impacts to Tribal rights, interests, and resources. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Contact potentially affected Tribes early in the siting process, ideally before land is acquired for a project or before permit applications are developed and offer information relevant to Tribal technical staff to help identify potential impacts to Tribes. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Include Tribal treaty-reserved rights, Tribal reservations, off-reservation rights, trust lands, other Tribal-owned land, and other areas of significance to Tribes in consideration of potential impacts and mitigation. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Consider including a Tribal monitor from each potentially affected Tribe on archaeological survey crews to provide input on Traditional Cultural Properties, sacred sites, and culturally significant sites. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Tribal preferred aesthetic or visual quality mitigation practices may vary from those considered for other visual quality mitigation; consult with potentially affected Tribes on any aesthetic or visual quality mitigation practices. | Select descriptor. | Enter supporting rationale or notes. |
|  | Environmental Justice |  |  |
| 1 | Site and design projects to avoid adverse impacts to populations with environmental justice considerations and overburdened community areas. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Use available information, including the latest Washington state guidance, and mapping tools to identify people of color populations, low-income populations, and overburdened community areas potentially affected by a proposed project. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Engage potentially affected communities and local community service providers early in the process to understand concerns, identify potential impacts, and consider preferred mitigation options. | Select descriptor. | Enter supporting rationale or notes. |
|  | Earth Resources (SEPA checklist Section B.1) |  |  |
| 1 | Conduct detailed geotechnical engineering, soil, and hydrologic studies to characterize site conditions to identify options for siting and reducing impacts from earthwork. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Avoid geologic hazard areas such as mapped seismic hazards, landslide hazard areas, surface fault rupture hazard areas, and volcanic flow hazard areas to reduce risk of erosion or damage. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Identify the level of seismic design, material types, and development strategies needed based on the potential risk of earthquakes. Design facilities to account for current seismic design parameters and building codes. | Select descriptor. | Enter supporting rationale or notes. |
|  | Air Quality & Greenhouse Gases (SEPA checklist Section B.2) |  |  |
| 1 | Conduct a life cycle assessment of potential greenhouse gas emissions and design the facility and incorporate ways to minimize use of fossil fuels to reduce greenhouse gases and other air emissions into project planning. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Consider options to reduce embodied carbon when selecting construction and operations materials and equipment. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Optimize the hydrogen production process and implement advanced process controls to increase efficiency, reduce waste, and minimize energy use to lower potential carbon dioxide equivalent emissions. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Consider state-of-the-art equipment and utilize leak monitoring and detection technology (e.g., infrared gas detectors) to minimize emissions of hydrogen and other air pollutants due to leaks in process equipment, hydrogen transportation, and storage and distribution systems (e.g., piping, pumps, tanks). | Select descriptor. | Enter supporting rationale or notes. |
|  | Water Resources (SEPA checklist Section B.3) |  |  |
| 1 | Site production facilities in areas with adequate physical and legal water availability for construction and production facility operation needs. Consider the proposed production method, as water needs vary between production methods. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Characterize and quantify the potential volume of wastewater and pollutant loading to be discharged. Identify potential treatment options as applicable. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Site the facility in a location where anticipated pollutant loading either from onsite water quality treatment or to local stormwater and water treatment facilities is compatible with receiving water body assimilative capacity. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Conduct a hydrologic study of the site to understand the local surface water and groundwater hydrology. Identify site surface runoff and drainage patterns and groundwater levels and flow direction. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Conduct site reconnaissance to identify the potential presence of wetlands, seeps, and intermittent or ephemeral waters, including seasonally flowing drainageways and vernal pools, that may be present on the site. | Select descriptor. | Enter supporting rationale or notes. |
| 6 | Perform a wetland delineation on the wetlands present on the project site, including access roads and gen-tie line corridors. Delineations need to identify and map the boundaries of wetlands present on the site and indicate where wetlands continue off the site. Assess wetland functions and rate all on-site wetlands using the appropriate Washington Wetland Ratings System method to determine their category and local buffer requirements. Examine adjacent properties for the presence of off-site wetlands that could be affected by project construction and operation, map their locations, and identify any off-site connections to surface waters. | Select descriptor. | Enter supporting rationale or notes. |
| 7 | Identify sources of water for project water needs, including for firefighting. Examine existing water rights and alternative sources of water. Water availability for new water rights varies dramatically across the state. Many areas have administrative rules that close or limit water sources for new consumptive water rights. Contact Washington State Department of Ecology’s water rights program early for new or modified water rights. Some Water Resource Inventory Areas have more restrictive administrative groundwater permit exemptions, which the developer should verify for the project location early in the planning process. Local water purveyors may have existing water right capacity to serve. | Select descriptor. | Enter supporting rationale or notes. |
| 8 | Avoid siting structures and roads within waterbodies, wetlands, associated buffers, shorelines of the state, mapped floodplains and other frequently flooded areas, and critical aquifer recharge areas. Where these areas cannot be avoided, span waterbodies (e.g., road bridges or aboveground lines) or use horizontal directional drilling to cross beneath (e.g., underground lines). | Select descriptor. | Enter supporting rationale or notes. |
| 9 | Design structures located within floodplains or other frequently flooded areas to not restrict or redirect flows from their natural flow path. | Select descriptor. | Enter supporting rationale or notes. |
| 10 | Avoid siting structures in areas of known soil or groundwater contamination or in proximity to impaired receiving waters. | Select descriptor. | Enter supporting rationale or notes. |
| 11 | Avoid alteration of existing drainage patterns, especially in sensitive areas such as erodible soils or steep slopes. | Select descriptor. | Enter supporting rationale or notes. |
| 12 | Avoid creating hydrologic conduits between two aquifers ([Chapters 173-200](https://app.leg.wa.gov/wac/default.aspx?cite=173-200)[[3]](#footnote-4) and [173-201A](https://app.leg.wa.gov/wac/default.aspx?cite=173-201A)[[4]](#footnote-5) Washington Administrative Code [WAC]). | Select descriptor. | Enter supporting rationale or notes. |
|  | Biological Resources (SEPA checklist Sections B.4 and B.5) |  |  |
| 1 | Contact applicable federal (e.g., U.S. Fish and Wildlife Service [USFWS] and National Oceanic and Atmospheric Administration [NOAA] Fisheries), state (e.g., WDFW and Washington State Department of Ecology), and local agencies and use mapping resources early to identify potentially affected sensitive ecological resources, including special-status species and habitats, aquatic habitats, and wetland habitats. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Use the mapping resources to identify sensitive ecological resources, including:* Washington Shrubsteppe Restoration and Resiliency Initiative Map Portal
* WDFW’s priority habitat and species online viewer
* USFWS Information for Planning and Consultation map viewer
 | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Conduct pre-construction surveys if native habitat is present on the site, or if existing information suggests the probable occurrence of state or federal threatened, endangered, or sensitive-status species on the project site. Conduct surveys during the appropriate season to determine the presence or likelihood of presence of the species. Consult with WDFW and other applicable agencies on field survey methodologies. Consult a county-level noxious weed list prior to conducting pre-construction vegetation surveys. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Site and design projects to avoid and minimize:* Impacts to special-status habitat or species, such as shrubsteppe habitat, aquatic habitat, wetlands, and wetland buffers
* Habitat loss, fragmentation, and resulting edge habitat
* Impacts to wildlife corridors and landscape connectivity
 | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Coordinate with WDFW and other applicable agencies to establish site-specific buffers around habitats and areas identified as critical to special-status species (e.g., nests) and exclude or modify facilities and activities within those areas. | Select descriptor. | Enter supporting rationale or notes. |
| 6 | Avoid siting access roads and facilities near open water or other areas known to attract a large number of birds. Coordinate with WDFW to determine project-specific siting distances from these areas. | Select descriptor. | Enter supporting rationale or notes. |
| 7 | Minimize use of overhead distribution lines unless underground distribution lines are not feasible due to environmental conditions (e.g., topography, soil conductivity) or cultural or Tribal resource concerns. | Select descriptor. | Enter supporting rationale or notes. |
| 8 | Follow Avian Power Line Interaction Committee guidelines. | Select descriptor. | Enter supporting rationale or notes. |
|  | Energy and Natural Resources (SEPA checklist Section B.6) |  |  |
| 1 | Estimate electrical energy needs during construction, operation, and decommissioning and confirm adequate resource availability with providers. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | For steam-methane reforming, pyrolysis, and bio-gasification facilities, identify and confirm resource availability with providers. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Minimize electricity demand by using project power for operational needs whenever possible, using high-efficiency fixtures and appliances in operations buildings, and using high-efficiency security lighting. | Select descriptor. | Enter supporting rationale or notes. |
|  | Environmental Health and Safety (SEPA checklist Section B.7.a) |  |  |
| 1 | Utilize wildland fire risk mapping to identify potential areas of risk. Use sources like the Department of Natural Resources’ (DNR) wildland-urban interface and the University of Washington’s climate change prediction data to determine lower risk areas. In areas susceptible to wildfires, coordinate with local fire organizations early in the facility planning process to determine measures to incorporate into the design of the facility to achieve wildland fire resistance and prevent an increase in wildland fire frequency. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | In areas susceptible to wildfires, design facilities to reduce risk of ignitions from distribution lines or other project components, including potential setbacks. Determine appropriate setbacks in consultation with local, state, or federal land managers. Setback distances and right-of-way widths should consider factors such as proximity to residences, terrain, vegetation management clearance requirements for distribution lines, vegetation and natural communities on surrounding lands, and the need to maintain access for maintenance and emergency response. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Consider underground distribution lines in areas with high fire risk unless underground lines are not feasible due to environmental conditions (e.g., topography, soil conductivity) or cultural or Tribal resource concerns. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Design a minimum 20-foot, noncombustible, defensible space clearance around the project site perimeter fencing and around structures, particularly buildings, to serve as a fire break. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Locate refueling areas on paved surfaces and away from surface water locations and drainages; add features to direct spilled materials to sumps or safe storage areas where they can be subsequently recovered. | Select descriptor. | Enter supporting rationale or notes. |
| 6 | Conduct a project-specific Hazard Analysis and Risk Assessment required by National Fire Protection Association (NFPA) 55. Use the hazard analysis and NFPA 55 requirements to site and design facilities to include appropriate setbacks and include defensible space around site perimeter fencing and structures, particularly buildings, to serve as a fire, explosion, and spill break. | Select descriptor. | Enter supporting rationale or notes. |
| 7 | Design facilities with consideration of the most current applicable design and safety standards from the following associations for construction and operation:* American Society of Mechanical Engineers
* National Standards Institute – Environment, Health, and Safety Management System Standards
* American Society for Testing and Materials (ASTM) – Industrial Hygiene Standards and Safety Standards
* NFPA
* Underwriters Laboratory
* Institute of Electrical and Electronics Engineers
 | Select descriptor. | Enter supporting rationale or notes. |
| 8 | Coordinate with agencies having jurisdiction and other applicable agencies (e.g., the U.S. Department of Energy and Transportation Security Administration) to address critical infrastructure and vulnerabilities to minimize and plan for potential risks from natural events, sabotage, and terrorism. | Select descriptor. | Enter supporting rationale or notes. |
|  | Noise and Vibration (SEPA checklist Section B.7.b) |  |  |
| 1 | Site noise sources to reduce impacts and take advantage of existing topography and distances. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Model project-level noise and vibration for construction and operations activities and equipment to determine project-specific setback distances for noise- and vibration-sensitive land uses and receptors. Model noise and vibration using estimates that address variations in equipment type selected in final project design. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Use noise and vibration modeling results during siting and design and establish setback distances for construction and operations. Provision of a setback distance from noise- or vibration-sensitive receptors would reduce the need for additional mitigation measures. Examples of activities and equipment to consider when establishing setback distances include:* Sources of construction vibration
* Construction vehicle routes
* Immobile construction equipment (e.g., compressors and generators)
* Permanent sound-generating facilities, including transformers, inverters, and substations
* Blasting
 | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Incorporate low-noise systems (e.g., for pumps, generators, compressors, and fans) and select equipment with low noise emissions and/or without prominent discrete tones, as indicated by the manufacturer. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Install silencers on piping vents during steam blows to reduce noise levels. | Select descriptor. | Enter supporting rationale or notes. |
|  | Land Use (SEPA checklist Section B.8) |  |  |
| 1 | Coordinate with federal, state, and local agencies; Tribes; property owners; and other interested parties as early as possible in the planning process to identify potential land use conflicts and issues as well as state and local rules that govern project development. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Contact the Federal Aviation Administration (FAA) early in the process to determine if there might be potential impacts on aviation and if mitigation might be required to protect military or civilian aviation use. Submit plans to the FAA for proposed construction of any facility that is 200 feet or taller or that is located in proximity to airports for evaluation of potential safety hazards. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Contact the U.S. Department of Defense (DoD) early in the process of siting facilities near or within military training routes, military bases, or training areas to identify and mitigate potential impacts on military operations. Site design must consider military installations and air space needs. Use the Compatible Energy Siting Assessment mapping tool to determine whether projects are under military-utilized airspace. If so, submit plans to the DoD for review. | Select descriptor. | Enter supporting rationale or notes. |
|  | Aesthetics and Visual Quality (SEPA checklist Section B.10 and B.11) |  |  |
| 1 | Site and design facilities to avoid and minimize visual impacts. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Conduct a detailed visual resource analysis during siting using a qualified visual resource specialist to identify and map landscape characteristics, key observation points (KOPs), and key viewsheds; prominent scenic, Tribal, and cultural landmarks; and other visually sensitive areas near the project location. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Consult with the appropriate land management agencies, planning entities, Tribes, and the local public early to provide input on the identification of important visual resources near a project site and on the siting and design process. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Use geographic information systems and visual impact simulations for conducting visual analyses (including mapping), analyzing the visual characteristics of landscapes, visualizing the potential impacts of facility siting and design, and fostering communication. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Avoid siting facilities where the landscape setting observed from national historic sites, national trails, and cultural resources may be a part of the historic context contributing to its historic significance. | Select descriptor. | Enter supporting rationale or notes. |
| 6 | Site projects outside the viewsheds of KOPs, highly sensitive viewing locations, and/or areas with limited visual absorption capability and/or high scenic integrity. If projects must be sited within view of KOPs, site them as far away as possible to reduce the visual impacts. | Select descriptor. | Enter supporting rationale or notes. |
| 7 | Use topography and vegetation as screening devices to restrict views of the project from visually sensitive areas. Where screening topography and vegetation are absent, use natural-looking earthwork berms and vegetative or architectural screening to minimize visual impacts. Vegetative screening can be particularly effective along roadways. | Select descriptor. | Enter supporting rationale or notes. |
| 8 | Minimize visual impacts by:* Designing the facility to comply with applicable land use regulations related to light, glare, building height, setbacks, vegetation screening, exterior storage, fencing, and any other requirements related to the visual appearance of the facility.
* Avoiding siting near prominent landscape features (e.g., peaks and waterfalls).
* Avoiding siting linear facilities, such as distribution lines and roads, so that they bisect ridge tops or run down the center of valley bottoms.
* Avoiding siting facilities on ridgelines, summits, or other locations where they would be silhouetted against the sky (skylining) from important viewing locations.
* Siting linear features to follow natural land contours rather than straight lines, particularly up slopes. Avoid fall-line cuts. Site facilities to take advantage of natural topographic breaks and avoid siting on steep slopes.
* Avoiding installation of gravel and pavement where possible to reduce color and texture contrasts with the existing landscape.
* Choosing low-profile structures to reduce their visibility.
* Preserving existing rocks, vegetation, and drainage patterns and varying the slope to preserve trees and nonhazardous rock outcroppings.
 | Select descriptor. | Enter supporting rationale or notes. |
| 9 | In forested areas or shrublands, site linear facilities to follow the edges of clearings rather than pass through their center. Locate openings in vegetation for facilities, structures, and roads to mimic the size, shape, and characteristics of naturally occurring openings. Include the feathering of cleared area edges (i.e., the progressive and selective thinning of trees from the edge of the clearing inward) combined with the mixing of tree heights from the edge in the vegetation-clearing design in forested areas. | Select descriptor. | Enter supporting rationale or notes. |
| 10 | Locate distribution line right-of-way crossings of roads, trails, streams, and other linear features to avoid KOP viewsheds and other visually sensitive areas and to minimize disturbance to vegetation and landforms. Locate rights-of-way so they cross linear features at right angles whenever possible to minimize the viewing area and duration. | Select descriptor. | Enter supporting rationale or notes. |
| 11 | Minimize use of distribution lines, unless distribution lines are not feasible due to environmental conditions (e.g., topography, soil conductivity) or potential cultural or Tribal resource impacts. | Select descriptor. | Enter supporting rationale or notes. |
| 12 | Minimize light pollution, including using motion-activated security lights, using full-cutoff designs that minimize upward light scattering and use, and avoiding steady-burn high intensity lights. Use Dark Sky International’s Five Principles for Responsible Outdoor Lighting to design outdoor lighting. | Select descriptor. | Enter supporting rationale or notes. |
| 13 | Design facilities to prevent glint/glare and comply with FAA glare avoidance requirements. | Select descriptor. | Enter supporting rationale or notes. |
|  | Recreation (SEPA checklist Section B.12) |  |  |
| 1 | Consider recreation areas and uses when siting a facility. Contact recreational land managers as early as possible to discuss potential impacts and mitigation. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Avoid siting facilities in areas valued for recreational opportunities, areas with unique recreation resources, areas that would divide existing recreation areas, or areas that would cause overuse of neighboring recreational activities. This includes both informal recreational areas and recreation in designated recreational areas. | Select descriptor. | Enter supporting rationale or notes. |
|  | Historic and Cultural Resources (SEPA checklist Section B.13) |  |  |
| 1 | Design and site projects to avoid impacts on historic and cultural resources. Begin with use of the Washington State Department of Archaeology and Historic Preservation’s (DAHP’s) Washington Information System for Architectural and Archaeological Records Data (including the predictive model) then refine through the development of site-specific environmental and cultural context and Tribal coordination. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Contact potentially affected Tribes early in the siting process, ideally before land is acquired for a project or permit applications are developed and offer information relevant to Tribal technical staff to help identify potential impacts on Tribes. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Consider potential impacts on Tribal treaty-reserved rights, Tribal reservations, off-reservation rights, trust lands, other Tribal-owned land, and other areas of significance to Tribes during project design and in siting decisions. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Conduct a site-specific cultural survey to evaluate potential impacts in accordance with DAHP and federal requirements and guidance. To expedite the review process, DAHP and the affected tribes should be given the opportunity to review the cultural resource survey methodology. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Consider requiring a Tribal monitor for survey crews to provide input on Traditional Cultural Properties, sacred sites, and culturally significant sites during site selection. | Select descriptor. | Enter supporting rationale or notes. |
| 6 | Provide cultural resources survey results to potentially affected Tribes for early review. | Select descriptor. | Enter supporting rationale or notes. |
| 7 | Use previously disturbed lands and lands determined by archaeological inventories to be devoid of historic properties. | Select descriptor. | Enter supporting rationale or notes. |
|  | Transportation (SEPA checklist Section B.14) |  |  |
| 1 | Consider traffic routes and peak hour traffic volumes when designing access roads. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Design any new access roads to the appropriate standard, no higher than necessary for the intended function. | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Assess potential transportation impacts in coordination with appropriate state and local agencies and consult land use plans, transportation plans, and other local plans. | Select descriptor. | Enter supporting rationale or notes. |
| 4 | Coordinate with agencies, Tribes, and interested parties if facility design proposes a change in interstate access or a new interstate access. Consider proposed access changes in the context of statewide and local transportation and land use planning because they can affect local and regional traffic circulation. | Select descriptor. | Enter supporting rationale or notes. |
| 5 | Design the facility to comply with applicable FAA regulations, including lighting requirements, to avoid or minimize potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.  | Select descriptor. | Enter supporting rationale or notes. |
| 6 | Coordinate with FAA and DoD early to identify and reduce impacts on military and civilian airport and airspace use. | Select descriptor. | Enter supporting rationale or notes. |
| 7 | Coordinate with local planning authorities regarding general traffic, public transit routes and stops, school bus routes and stops, and emergency providers and hospitals. | Select descriptor. | Enter supporting rationale or notes. |
| 8 | Consider the impacts of facility siting and design on non-motorized and public transit facilities and routes. | Select descriptor. | Enter supporting rationale or notes. |
|  | Public Services and Utilities (SEPA checklist Section B.15 and B.16) |  |  |
| 1 | If siting is proposed on or near areas of high fire risk, coordinate with the local fire district, emergency management departments, U.S. Forest Service, and/or DNR during siting and design and throughout the life cycle of the project to identify and address fire response needs. | Select descriptor. | Enter supporting rationale or notes. |
| 2 | Site production facilities in areas with adequate utility infrastructure, including electrical, communications, and renewable natural gas (RNG), to meet the demands of the facility. This varies between production methods (e.g., RNG is not needed for all production methods). | Select descriptor. | Enter supporting rationale or notes. |
| 3 | Site production facilities in areas with adequate water availability for construction and production facility operation needs. Consider the proposed production method, as water needs vary between production methods. | Select descriptor. | Enter supporting rationale or notes. |

For green hydrogen production facilities with a co-located BESS, use the following table to describe the implementation status for the recommended measures for siting and design.

| **#** | **Category / Measure** | **Implementation Status** | **Rationale / Notes** |
| --- | --- | --- | --- |
|  | Water Resources (SEPA checklist Section B.3) |  |  |
| 1 | BESS facilities and associated infrastructure should be located so as to prevent contamination of surface waters, floodplains, and wetlands, as well as buffer areas from runoff that may contain chemicals released from a fire and/or integrated fire suppression agents. | Select descriptor. | Enter supporting rationale or notes. |
|  | Environmental Health and Safety (SEPA checklist Section B.7.a) |  |  |
| 1 | Design setback distances around each BESS to allow for maintenance, emergency access, and vegetation management. If there is a thermal runaway event, the required setback distances also prevent spread from one container to another. | Select descriptor. | Enter supporting rationale or notes. |

1. https://apps.ecology.wa.gov/publications/summarypages/2506004.html [↑](#footnote-ref-2)
2. https://app.leg.wa.gov/RCW/default.aspx?cite=43.21C.538 [↑](#footnote-ref-3)
3. https://app.leg.wa.gov/wac/default.aspx?cite=173-200 [↑](#footnote-ref-4)
4. https://app.leg.wa.gov/wac/default.aspx?cite=173-201A [↑](#footnote-ref-5)