

Environmental

Environmental references the effects of a project on the natural environment and communities. Considerations include air, water, soils, wetlands, hazardous materials, fish and wildlife, noise, energy, visual quality, aesthetics, land use, economics, historic and cultural resources, community engagement, environmental justice, human health, and climate change.

WSDOT policy and guidance

- [Environmental Manual](#)
- [Environmental Indirect Effects and Cumulative Impacts](#)
- [National and State Environmental Policy Acts Guidance](#)
- [Social and Land Use Effects, Environmental Justice](#)
- [Noise](#)
- [Considering climate change in WSDOT plans and projects](#)
- [Protecting the Environment, Improving Wildlife Habitat Connectivity](#)
- [Executive Order 14.04 Washington Carbon Pollution Reduction and Clean Energy Action](#)

Additional resources

- [Environmental Review Toolkit](#), Federal Highway Administration
- [Nature-Based Solutions for Coastal Highway Resilience](#), Federal Highway Administration

User tips

Use environmental information early (i.e., pre-scoping) to inform project decisions. This will increase buy-in from local communities and tribal, local, federal, and state land managers and permitting agencies, which will help prevent problems later, including scope change delays.

- Work with region environmental staff or the Headquarters Environmental Services Office to create baseline information if an Environmental Review Summary is not yet completed. Most information is on WSDOT's GIS Workbench, though it is also important to consult with other agencies and stakeholders to make sure you have complete environmental information for the areas in which you are working.
- Consider key areas of interest related to environmental compliance (e.g. Endangered Species Act including fish passage; Section 106 cultural and historic resources; Section 4f public parks, recreation, wildlife refuges and historic properties; and wetlands).
- Document the environmental assets WSDOT must maintain and protect during a project (i.e., noise walls, wetland mitigation sites, storm water facilities, fish and wildlife habitat crossing structures).
- Create a list of stakeholders who might work with WSDOT on environmental protection, clean-up and/or mitigation.
- Review existing environmental studies for your project area. Studies by WSDOT and natural resources agencies can help identify opportunities and potential mitigation options.

- Consider direct, indirect (or secondary) and cumulative effects, including effects on climate change.
- Take steps to ensure long-term interests are met, despite pressures to focus on near-term interests.

Environmental justice and inclusion

Ensure the environmental process and decisions made account for environmental justice and inclusion. Ensure people from historically underrepresented populations participate in the planning and early design process and influence decisions. Document what you heard and how it influenced the outcome. Identify and consider priority populations, the origins and destinations they frequent and the services they use in design decisions.

Energy efficiency

Design for energy efficiency and reduced petroleum use. In the planning phase, incorporate multimodal solutions that reduce energy consumption relative to the use of single occupancy vehicles. In the design phase, examples include LED lighting, lighting controls and electric vehicle charging stations.

Reduced pollution

Ensure that federal funding and approval goes to transportation activities that are consistent with air quality goals (transportation conformity) in designated nonattainment and maintenance areas. In addition, ensure that plans and projects support state direction to reduce greenhouse gas emissions.

When working on congestion relief projects and considering greenhouse gas emissions, analyze both the positive effects that may result from improved traffic flow and mode shift and the detrimental effects that result from increased vehicle trip making.

Design for reduced emissions by providing for lower-carbon modes like walking, bicycling, transit and vanpools. Examples include shared use paths, bicycle lanes, and park and ride lots, coordinated signal systems, transit signal priority at traffic signals, traffic calming, and roundabouts.

Resiliency

WSDOT defines resilience as the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions. Design for threats like sea-level rise, wildfires, drought, flooding, high winds, earthquakes, mudslides and rockslides.

Where to get help

Your region's environmental staff and the Headquarters Environmental Services Office.