

Environmental Baseline within the Project Action Area

The project biologist must characterize the habitat features used by listed species present within both the project vicinity and the project action area, and describe how the habitat elements will be affected by the proposed action. The current condition of the habitat in the action area and the factors responsible for that condition should be discussed with appropriate supporting documentation.

If listed terrestrial species are potentially present in the project vicinity, the BA should assess and describe in detail the relevant habitat characteristics essential to the species occurring within the action area (e.g., foraging habitat, nesting habitat, prey overwintering areas, and perch trees). The existing environmental conditions within the action area should be identified and discussed in relation to the project impacts. Habitat characteristics relevant to designated critical habitat should also be addressed.

Follow this link to view the Environmental Baseline section of the [BA Form](#).

Environmental Baseline Conditions in Action Area

For projects that could potentially affect listed aquatic species, the project biologist should systematically assess the environmental baseline conditions or, more specifically, the pertinent aquatic habitat pathway indicators defined in the NOAA Fisheries and USFWS pathways and indicators matrices (see [Environmental Baseline](#) for a more detailed discussion of this assessment). Assess all pathway indicators that relate to potential effects on listed species and critical habitat from the proposed action, including the following:

- Water quality parameters (temperature, sediment loading, chemical and nutrient contamination)
- Habitat access (physical barriers to fish passage)
- Habitat elements (substrate composition, large woody debris, pool frequency measures for salmon or bull trout, pool quality, presence of large pools, off-channel habitats, and refugia)
- Channel conditions and dynamics (width/depth ratio for salmon or bull trout, stream bank condition, floodplain connectivity)
- Flow or hydrology (change in peak/base flows, increase in drainage network due to human activities or roads)
- Watershed conditions (road density and location, disturbance history, and presence of riparian reserves).

If bull trout are present, the subpopulation characteristics in the watershed must be assessed, and the assessment of species and habitat conditions must be integrated (i.e., will anticipated impacts on habitat conditions lead to species impacts?).

An overview of this baseline information should be provided in a table in the body of the BA. Detailed description and analysis of aquatic environmental baseline information should be included in a BA appendix. The USFWS and NOAA Fisheries matrices apply to freshwater habitats, not marine systems. NOAA Fisheries is working on expanding the matrices to incorporate other habitat types such as lakes. Follow this link to access the Environmental Setting/Baseline section of the [BA Form](#). Follow this link to access [Appendix F of the BA Form](#).

The discussion of existing environmental conditions (environmental baseline conditions) should include a summary of relevant land use and past and present activities that relate to the species and critical habitats potentially occurring in the action area, as well as those impacts that directly define the action area (development areas, impervious surface area, etc.). The following link, [Environmental Baseline](#), provides a more detailed discussion of this BA section.

The project biologist completes an assessment of existing environmental or baseline conditions (and documents these characteristics) during a thorough field review of the action area. This section of the BA should also provide a brief synopsis of the date(s) on which field biologists visited the project site, the habitat parameters that were assessed relevant to the species identified, and the methods used. This information may also appear as part of the action area discussion or in the introduction section of a BA.