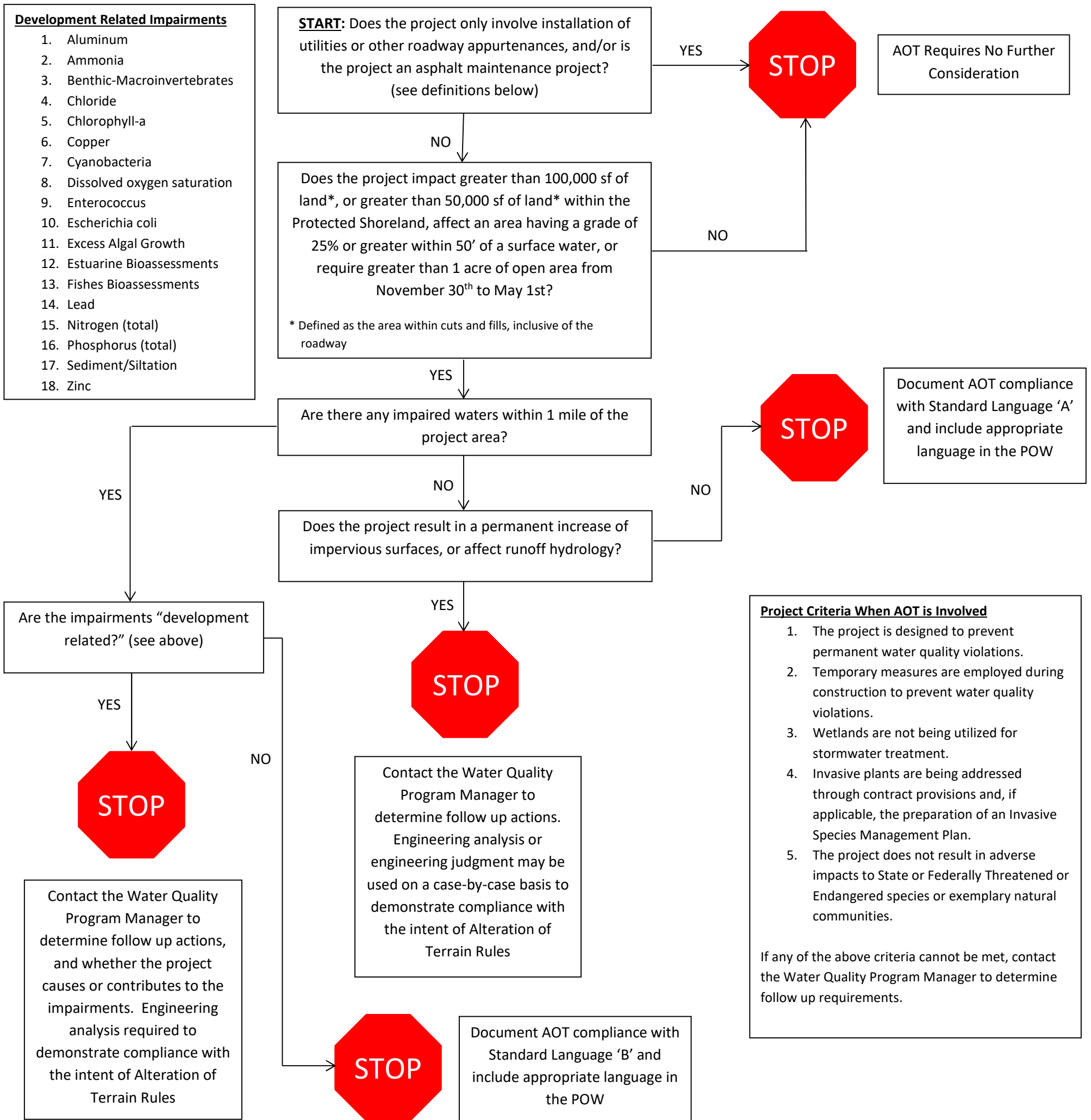


# ALTERATION OF TERRAIN (AOT) PROCESS FOR NHDOT PROJECTS

December 7, 2022



Are the impairments "development related?" (see above)

YES ↓

NO →

Contact the Water Quality Program Manager to determine follow up actions, and whether the project causes or contributes to the impairments. Engineering analysis required to demonstrate compliance with the intent of Alteration of Terrain Rules

YES ↓

NO →

Contact the Water Quality Program Manager to determine follow up actions. Engineering analysis or engineering judgment may be used on a case-by-case basis to demonstrate compliance with the intent of Alteration of Terrain Rules

YES ↓

NO →

Document AOT compliance with Standard Language 'B' and include appropriate language in the POW

**Project Criteria When AOT is Involved**

1. The project is designed to prevent permanent water quality violations.
2. Temporary measures are employed during construction to prevent water quality violations.
3. Wetlands are not being utilized for stormwater treatment.
4. Invasive plants are being addressed through contract provisions and, if applicable, the preparation of an Invasive Species Management Plan.
5. The project does not result in adverse impacts to State or Federally Threatened or Endangered species or exemplary natural communities.

If any of the above criteria cannot be met, contact the Water Quality Program Manager to determine follow up requirements.

**Definition of Installation of Utilities or Other Roadway Appurtenances for AOT**

Installation of utilities or other roadway appurtenances includes culvert, signage, and/or guardrail installation whether done by itself, or in combination with an asphalt maintenance project as defined below, provided that the excavation and installation of any culvert, sign or guardrail is completed within the same day.

**Definition of Asphalt Maintenance Projects for AOT**

Asphalt maintenance projects are those projects that are designed to perpetuate the service life of a roadway by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples include crack sealing, chip sealing, slurry or micro-surfacing, or hot-mix asphalt overlays. Asphalt maintenance also can consist of structural enhancements that extend service life or improve load carrying capacity, such as reclamation or structural overlays. Asphalt maintenance may require a raise in the grade of the existing road by as much as approximately 12 inches. It is recognized that in instances where the grade is raised, there will be an accompanying application of pervious crushed gravel for shoulder leveling, or other pervious materials for elimination of pavement edge lips. Asphalt maintenance for the purposes of AOT compliance does not include activities that widen existing asphalt surfaces, or require application of pavement where it does not currently exist.

**Standard AOT Compliance Language for Inclusion in Environmental Documents**

**'A'** DOT has designed this project so as to prevent or control erosion in accordance with contract provisions, engineering standards, guidelines, or best management practices (BMPs) and regulatory standards as outlined in the Terrain Alteration Permit Exemption dated March 1, 2022. As appropriate, the project includes channel protection measures at drainage outfalls, and results in no change in peak runoff.

**'B'** DOT has designed this project so as to prevent or control erosion in accordance with contract provisions, engineering standards, guidelines, or best management practices (BMPs) and regulatory standards as outlined in the Terrain Alteration Permit Exemption dated March 1, 2022. As appropriate, the project includes channel protection measures at drainage outfalls, and results in no increase in peak runoff. Although waterbodies in the project area have been identified as impaired pursuant to the NH 303(d) list, impairments are not development related and highway runoff does not cause or contribute to the impairment.