

Working DRAFT - Dissolved Oxygen Definitions Clarification

Background

DEQ is proposing to remove the definitions for “cold-water aquatic life,” “cool water aquatic life,” and “warm water aquatic life” from the water quality standards definition rule found at OAR 340-041-0002(9), (12), and (68), respectively. DEQ adopted the definitions when it revised the temperature standard in 2003, however these terms are not used in the temperature standard. They are used in the dissolved oxygen standard, OAR 340-041-0016 and associated Table 21, which were adopted in 1996. Table 21 also provides a definition of these terms as they apply to the dissolved oxygen criteria, which differ from the definitions in 340-041-0002. Therefore, there is an inconsistency within the rules. The U.S. Environmental Protection Agency requested that DEQ resolve the inconsistency and DEQ agree to undertake rule revisions to clarify or remove the definitions of cold- and cool-water aquatic life so that they are consistent with the definitions and DEQ’s application of the DO standard since 1996.

Aquatic species can be classified as cold, cool and warm water species, which indicates their relative thermal tolerance and the types of aquatic habitats in which they tend to occur. These are scientific terms. Both the dissolved oxygen and temperature issue papers developed for the 1996 rulemaking identify which species present in Oregon, whether native or introduced, are classified as cold, cool or warm water. These commonly used classifications may be found in many published scientific documents.

DEQ is in the process of designating the use subcategories used in the dissolved oxygen standard, which will define where the criteria for the three aquatic life categories (as defined in Table 21) apply. As a result, the definitions for these terms in OAR 340-041-0002 are not needed.

Scope of rulemaking

The rulemaking will involve removal of OAR 340-041-0002(9), (12) and (68) and resulting renumbering of the definitions rule.

Impact of Rulemaking

Removing the three definitions from OAR 340-041-0002 will remedy the inconsistency between these definitions and the definitions where these terms are used in the dissolved oxygen standard at OAR 340-041-0016 (Table 21). Removing these terms will not impact how and where DEQ applies its dissolved oxygen criteria for cold-water, cool-water, and warm-water aquatic life, which was first documented in a memo to EPA in 1998 and is now compiled in DEQ's 2019 Dissolved Oxygen Interpretation Guidance.¹

The rulemaking will require DEQ to make minor corrections to its DO interpretation guidance. The guidance refers to the definitions that DEQ is proposing to remove; however, these corrections, as noted above, will not impact actual implementation of the dissolved oxygen criteria, as described in the 2019 guidance.

¹ Oregon DEQ. 2019. Oregon’s Dissolved Oxygen Water Quality Standard: Interpretation and Application Procedures. Portland, OR. 72 pp.