

effects on the environment is highly site-specific and data sensitive. In addition, EPA did not quantify the potential benefits of this proposed rule for Oregon.

A. Identifying Affected Facilities

According to EPA's Permit Compliance System (PCS), there are 1,447 NPDES-permitted facilities in Oregon. Seventy-six of the facilities are classified as major dischargers, and 1,371 are minor or general permit dischargers. However, EPA did not include general permit facilities in its analysis because data for such facilities are extremely limited, flows are usually negligible, and EPA could not determine if any of these facilities discharge to affected stream segments because location information is not available in EPA's PCS database. Therefore, EPA's analysis includes a universe of 382 permitted facilities (76 major and 306 minor).

To identify facilities potentially affected by the proposed rule, EPA assumed that only facilities that discharge to rivers and streams with new or more stringent uses and criteria may be affected by the water quality criteria and designated uses provisions. (EPA also assumed that facilities discharging directly to the Columbia River and the Pacific Ocean are not affected by the proposed rule, except for portions of the Columbia River where spawning occurs and the proposed IGDO criterion would apply.) For IGDO, the current criterion of 6 mg/L is less stringent than the revised IGDO criterion of 8 mg/L. Therefore, all waters

designated for salmonid spawning are potentially affected by the proposed rule, and facilities discharging to these waters are included in the set of potentially affected dischargers. EPA identified these facilities by overlaying PCS facilities with the waters designated for salmonid spawning using geographic information system (GIS) software.

To identify waters for which the rule provides new or more stringent uses and temperature criteria, EPA compared criteria and uses designated for salmonid spawning and rearing and bull trout protection for waters under the proposed rule with those criteria and uses that are currently designated by the State of Oregon. The State's current temperature criteria for salmonid rearing is 17.8°C/64.0°F, with no differentiation for core juvenile rearing. The proposed rule establishes a 16°C/61°F temperature criterion for core juvenile rearing (and 18°C/64°F otherwise for rearing). Therefore, EPA's rule provides a more stringent criterion for waters it designates for core juvenile rearing (16°C/61°F), and facilities discharging to these waters may be affected. EPA identified these facilities by overlaying PCS facilities with the waters designated for core juvenile rearing using GIS software.

For salmonid spawning, the current State criterion (12.8°C/55.0°F) is slightly more stringent than the proposed criterion of 13°C/55°F. However, the time period that the criterion applies may differ under EPA's proposed rule. Therefore, EPA assumed that any waters for which it is designating a salmonid

spawning period that is earlier or later than currently designated by the State (e.g., current designation from October 1 to May 31, versus a proposed designation from September 1 to June 30) would be affected because a more stringent criterion (i.e., more stringent than the current State salmonid rearing criterion of 17.8°C/64.0°F would apply during the extended time period. Facilities discharging to these waters may be impacted. EPA identified these facilities by overlaying PCS facilities in a GIS map with the waters for which an earlier or later salmonid spawning period applies under the rule.

For antidegradation, the State already has an antidegradation policy in place. This rule would primarily affect the methods by which a review would occur in high quality waters. EPA assumed that facilities discharging to streams not listed by the State as impaired waters (i.e., not on the 303(d) list) are affected. Although high-quality waters are not yet identified by the State, the unimpaired waters provide a reasonable approximation of high-quality waters (although some portion of these will be ORWs and not affected by the procedures because no lowering of water quality is allowed for ORWs). EPA identified these facilities by overlaying PCS facilities with 303(d) listed waters designated using GIS software. Table IV-1 summarizes the potentially affected facilities by provision. The dischargers are grouped by discharger type (e.g., major or minor) and category (e.g., POTW or industry category). Note that there are some facilities affected by more than one provision.

TABLE IV-1. ESTIMATED NUMBER OF FACILITIES POTENTIALLY AFFECTED BY EACH PROVISIONS OF THE PROPOSED RULE

Category	Number of facilities		
	IGDO ¹	Temperature ²	Antidegradation ³
Major POTWs	29	3	14
Major Industrial	14	1	8
Minor Dischargers	149	44	130
Total	192	48	152

¹ Estimated as facilities discharging to waters designated for salmonid spawning, except for portions of the Columbia River where spawning occurs.
² Estimated as facilities discharging to waters designated for core juvenile rearing, or an extended (earlier, later, or both) spawning period, under the proposed rule.
³ Estimated as facilities discharging to waters not on the State's 303(d) list.

B. Method for Estimating Potential Compliance Costs

EPA identified a total of 48 facilities (4 major and 44 minor) that may be potentially affected by the proposed uses and temperature criteria. EPA evaluated all four major facilities and a sample of minor facilities from this

group for potential cost impacts associated with the proposed rule. For these sample facilities, EPA assumed that any discharge that results in a downstream temperature greater than 0.14°C/0.25°F above the applicable criterion would require additional controls (current Oregon water quality standards state that a discharge may not

cause an increase in the surface water temperature of greater than 0.14°C/0.25°F in waters exceeding the applicable criterion [OAR 340-041-0205 (b)(A)]). EPA evaluated the effect of the discharge on the receiving water using monthly effluent and receiving water data. When possible, EPA calculated the