

**WAC 173-183-500 Vulnerability of the Columbia River estuary environment to oil spills.** (1) The purpose of this section is to describe the method of ranking vulnerability of the Columbia River estuary environment to oil spills for purposes of assessing damages using the compensation schedule.

(2) The Columbia River estuary has been distinguished from other estuarine waters of the state because it resides within the jurisdiction of two states, Washington and Oregon.

(3) For purposes of RCW 90.48.366, estuarine waters of the Columbia River are divided into one kilometer square cells. Bird, fish, mammal, invertebrate, habitat, and human use resource sensitivity have been evaluated for each cell by season. Seasonal resource sensitivities are ranked for each cell on a 1 to 5 scale where 5 represents the greatest sensitivity and 1 represents the least sensitivity as designated on the maps attached as Appendix 6 of this chapter.

(4) A vulnerability score (VS) shall be calculated at the time of a spill for each cell and for the most sensitive season impacted by the spill. The VS rates the vulnerability of public resources to the spilled oil.

(a) VS for a particular cell is determined by summing the sensitivity scores assigned to each cell for bird, fish, mammal, invertebrate, habitat, and human use resources as follows:

$$VS_{ij} = BSS_{ij} + FSS_{ij} + MSS_{ij} + ISS_{ij} + HSS_{ij} + HUS_{ij}$$

where  $VS_{ij}$  = spill vulnerability score for a particular cell and season

BSS = bird sensitivity score (from Appendix 6 of this chapter)

FSS = fish sensitivity score (from Appendix 6 of this chapter)

MSS = mammal sensitivity score (from Appendix 6 of this chapter)

ISS = invertebrate sensitivity score (from Appendix 6 of this chapter)

HSS = habitat sensitivity score (from Appendix 6 of this chapter)

HUS = human use sensitivity score (from Appendix 6 of this chapter)

i = the cell under consideration

j = the most sensitive season impacted; fall, winter, spring, or summer

(b) The raw vulnerability score for a spill (SVS) is determined by calculating the average of the vulnerability scores for the cells exposed to the spill as follows:

$$SVS_j = (VS_1 + VS_2 + \dots + VS_x) / x$$

where  $VS_i$  = vulnerability score for cell i (from subsection (4)(a) of this section),

x = number of cells exposed to the spill, and

(5) The final SVS score is found by rounding the raw SVS score calculated from the formula in subsection (4) of this section to the nearest 0.01 as follows: Decimals less than 0.005 shall be rounded down and decimals equal to or greater than 0.005 shall be rounded up.

[Statutory Authority: Chapter 90.48 RCW. WSR 92-10-005 (Order 91-13),  
§ 173-183-500, filed 4/23/92, effective 5/24/92.]