

Appendix C. Sample requirements for 303(d) listing

The 303(d) listing criteria available at <http://www.deq.state.or.us/wq/assessment/docs/methodology0406.pdf> are summarized in the table below for freshwaters.

| Parameter | Criteria | Assessment Method | Data Requirements |
|--|--|--|--|
| Bacteria - <i>E. coli</i> (<i>Escherichia coli</i>) | 30-day log mean \leq 126 <i>E. coli</i> MPN/100 ml on a minimum of 5 samples. | A 30-day log mean of 126 <i>E. coli</i> organisms per 100 ml. | A minimum of 5 representative data points available per site collected on separate days for each time period of interest. Time periods are Summer: June 1 through September 30; Fall-Winter-Spring (FWS): October 1 to May 31 |
| Bacteria - <i>E. coli</i> (<i>Escherichia coli</i>) | No single sample may exceed 406 <i>E. coli</i> organisms per 100 milliliters. | When more than 10 samples are available, listing occurs if greater than 10% of the samples exceed 406 <i>E. coli</i> organisms per 100 ml, with at least two exceedances. If data from 5 to 9 samples are available, any exceedances of 406 <i>E. coli</i> organisms per 100 ml result in listing. | A minimum of 10 representative data points available per site collected on separate days for each time period of interest. Time periods are Summer: June 1 through September 30; Fall-Winter-Spring (FWS): October 1 to May 31 |
| Dissolved Oxygen | ^{1,2} <i>Spawning</i> : DO \geq 11.0 mg/l or 95 % saturation; <i>Cold-water</i> : \geq 8.0 mg/l or 90% as an absolute minimum; <i>Cool-water</i> : \geq 6.5 mg/l; <i>Warm-water</i> : 5.5 mg/l. | For 10 or more samples greater than 10 percent of the samples may not exceed the appropriate criterion and a minimum of at least two exceedances of the criterion for the time period of interest. For 5 to 9 samples in the time period of interest, there may be no exceedances of the appropriate criteria. | A minimum of 5 representative data points available per site collected on separate days per applicable time period. Applicable time periods and fish use available on DEQ's Water Quality Standards web page. |
| pH | ¹ $6.5 \leq \text{pH} \leq 8.5$ | Greater than 10 percent of the samples are outside the range of the appropriate criterion and a minimum of at least two samples outside the range of the appropriate criterion for the time period of interest. | A minimum of 5 representative data points available per site collected on separate days for each time period of interest. Time periods are Summer: June 1 through September 30; Fall-Winter-Spring (FWS): October 1 to May 31 |

| Parameter | Criteria | Assessment Method | Data Requirements |
|-------------|---|---|--|
| Turbidity | No more than a ten percent cumulative increase in natural stream turbidities may be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. | | |
| Temperature | ^{1,2} <i>Salmon and steelhead spawning: 7 day moving average (7DMA) ≤ 13 °C; core cold water habitat: 7DMA ≤ 16 °C; salmon and trout rearing and migration: 7DMA ≤ 18 °C; migration corridor use: 7DMA ≤ 20 °C</i> | Where continuous temperature data are collected, the seven-day-average maximum temperature may not exceed the applicable criterion. Seven-day average maximum temperature means a calculation of the average of the daily maximum temperatures from seven consecutive days made on a rolling basis. | Continuous temperature data collected since 1993 for the time period of interest. The time period of interest must be determined from fish use maps or tables available on the DEQ Water Quality Standards page. |

1 Specific standards apply to geographic locations at specified times of year. For more information see the ODEQ standards web page

<http://www.deq.state.or.us/wq/standards/standards.htm>.

2. Additional standards for specific conditions available at <http://www.deq.state.or.us/wq/assessment/docs/methodology0406.pdf>