

Tualatin River Watershed Council

Criteria For Rating Tualatin Basin Stream Reaches

Determine stream reach for restoration.

Collect all the necessary data and information for this site

- USGS maps
- Aerial photographs
- 303 (d) and TMDL lists
- Appropriate stream studies

1. Anadromous Spawning/Rearing Criteria -

- 5 = 100% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe.
- 4 = 75% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 75% of spawning/rearing habitat is available and is moderately to severely degraded.
- 3 = 50% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 50% of spawning/rearing habitat is available and is moderately degraded.
- 2 = 25% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 25% of spawning/rearing habitat is available and is minimal to moderately degraded.
- 1 = 1% to 24% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 10% of spawning/rearing habitat is available and is minimally degraded.
- 0 = Not present, passage only.

2. Resident Salmonid Spawning/Rearing Criteria -

- 5 = 100% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe.
- 4 = 75% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 75% of spawning/rearing habitat is available and is moderately to severely degraded.
- 3 = 50% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 50% of spawning/rearing habitat is available and is moderately degraded.
- 2 = 25% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 25% of spawning/rearing habitat is available and is minimal to moderately degraded.
- 1 = 1% to 24% of reach is accessible for spawning/rearing and degradation of spawning/rearing habitat is severe OR > 10% of spawning/rearing habitat is available and is minimally degraded.
- 0 = Not present, passage only.

3. 303 (d) List Criteria - How many parameters the stream reach has listed on the current Oregon 303(d) list.

One point per criteria listed excluding temperature, up to 5 points. 303(d) list parameters, excluding temperature, are identified as:

- aquatic weeds or algae
- bacteria
- biological criteria
- chlorophyll-a
- dissolved oxygen
- habitat modification
- flow modification
- nutrients
- pH
- sedimentation
- total dissolved gas
- toxics
- turbidity

Note: Add 1 point each (but not to exceed a total of 5 points) for each parameter with a developed TMDL, excluding temperature. Parameters with a developed TMDL are removed from the 303(d) list but are still critical parameters.

4. Temperature List Criteria -

- 5 = Stream segment listed in the current Oregon 303(d) list and maximum temperature exceeds 70⁰F, or data shows temperature equal to or exceeds 70⁰F.
- 3 = Stream segment listed in the current Oregon 303(d) list and maximum temperature does not exceed 70⁰F, or data shows temperature ranges between 64⁰F and 69⁰F.
- 0 = Stream segment not listed in the current Oregon 303(d) list or data indicates temperatures do not exceed 64⁰F.

5. Accelerated Erosion Criteria –

- 5 = > 60% of banks have accelerated erosion. (ORIS indicator: Bank Erosion = Severe in Non-Point Source Details Window).
- 3 = 15% - 60% of banks have accelerated erosion. (ORIS indicator: Bank Erosion = Moderate in Non-Point Source Details Window).
- 0 = < 15% of banks have accelerated erosion. (ORIS indicator: Bank Erosion is not listed as a problem in Non-Point Source Details Window).

Note: Add 2 points to any score (but not to exceed total of 5 points) if streambank in this reach is typically higher in elevation than the floodplain.

6. Riparian Quality (Vegetation Width and Diversity) Criteria –

- 5 = Average width of naturally functioning riparian vegetation is < 25 feet on each side of the stream.
- 3 = Average width of naturally functioning riparian vegetation is 25 – 50 feet on each side of the stream.
- 0 = Average width of naturally functioning riparian vegetation is > 50 feet on each side of the stream.

Note: Determine above widths from measuring random samples from original 1 inch = 660 feet aerial photographs, if available (use most recent photographs available). Add 1 point to any score (but not to exceed a total of 5 points) if riparian area in this reach is typically grazed by livestock.

7. Potential for Anadromous Fish Use Criteria –

- 5 = The reach is a 3rd order stream containing a man-made barrier which impairs migratory movement upstream.
- 3 = The reach is a 2nd order stream containing a man-made barrier which impairs migratory movement upstream.
- 0 = No man-made barrier present or migratory movement not impaired.

Note: 0 points if fish passage at the man-made barrier is infeasible.

8. Connected to Wildlife Corridor Criteria –

- 5 = the riparian area in this stream reach has potential to serve as a wildlife corridor.
- 3 = the riparian area in this reach already serves as a wildlife corridor.
- 0 = the riparian area in this stream reach has little or no potential to serve as a wildlife corridor.

9. **Overall Rating Score** – this score is an average of the weighted scores for all 8 criteria for a stream reach. Five is the maximum score. The higher the overall rating for a particular stream, the more important for stream restoration to occur.