

# “Dirty Dozen” Road Assessment Evaluation Criteria

*The 12 criteria below attempt to provide a “pollution potential” rating for each worksite.*

*Base evaluation on average conditions over site. If a significant change in assessment conditions exists, consider making two worksites and evaluating separately.*

**Road Sediment in Stream:** Overall sediment delivery to stream. Remember that intermittent streams count too.

- None (0): No road sediment in stream. Runoff is buffered before entering stream. (Should it be a worksite!?)
- Slight (5): Any material from the road area makes it to the edge of the stream
- Moderate (10): Ditches or ditch outlets drain directly into stream. Road sediment may be visible in channel
- Severe / Stream Encroachment (15): Significant road area drains to stream. Include fords, sediment deltas, stream cutting into road, etc.

**Wet Site Conditions:** General water table conditions of the road area. Consider time of year and recent weather.

- Dry (0): Road and ditches are dry. No roadside springs or seeps.
- Saturated Ditches (3): Road ditches are damp. May contain standing water or wetland plants.
- Roadside Springs (5): Springs present on uphill side of road or seeps present under road.
- Flow in Ditches (7): Water moving in ditches from springs and seeps. Significant water problems.
- Saturated Base (10): Significant road area is wet due to springs and seeps in road ditches, banks and base.

**Road Surface Material:** The approximate makeup of the driving surface. (n/a for low volume roads – use (0))

- Hard Gravel (0): Predominantly limestone or sandstone. Not necessarily DSA, just hard gravel.
- Mixed Stone (5): A variety of stone material with no dominant type. Commonly with some hard stone.
- Soft Stone / dust (7): Any other type of dominant natural stone material with some soil, or a light dust problem.
- Stone/dirt / dust (10): A mixture of soft stone and native dirt/earth, or a dust problem and loss of fines.
- Severe dust (15): Earthen material with little to no stone aggregate. Muddy when wet, and dusty when dry.

**Road Slope (Grade):** Measure of the average steepness of the road in feet of rise in height per feet of road distance.

- <10% (0): Relatively flat. Rises less than 1 foot for every 10 feet of road length.
- 10 – 30% (5): Steep slope. Rises 1 – 3 feet for every 10 feet of road length.
- >30% (10): Extremely Steep slope. Rises more than 3 feet for every 10 feet of road length.

**Road Shape:** Cross sectional shape of the road for proper runoff pattern. Good slope is ½” to ¾” per foot.

- Good (0): Needs no grading work for proper runoff patterns. This includes crowned, in-slope, and out-slope.
- Fair (3): Needs grading to reestablish proper runoff patterns. Small wheel ruts/grader berm trap water on road.
- Poor (5): No specific cross section shape or flat. Rutted or showing signs of water being retained on surface.

**Slope to Stream:** Slope of the land from the side of the road to the stream.

- <30% (0): Gentle bank slope from road to stream. Falls less than 3 feet at 10 feet away from road.
- 30 – 60% (3): Fairly steep bank slope from road to stream. Falls 3 to 6 feet at 10 feet away from road.
- >60% (5): Steep bank slope from road to stream. Falls more than 6 feet at 10 feet away from road.

**Distance to Stream:** Distance in feet from the side of the road to the stream. Streams can be any size or even dry!

- >100’ (0): Stream stays at least 100 feet away from road.
- 50’-100’ (3): Average parallel distance from road to stream is between 50 and 100 feet.
- <50’ / crossing (5): Average parallel distance to stream is less than 50 feet or road crosses stream.

**Outlets to Stream:** Location of outlet discharge relative to stream.

- None (0): Significant buffer or filter exists between outlets and stream. No channels are cut to stream.
- Near stream (3): Outlets discharge near stream. Runoff and sediment reach stream without proper filtration.
- Directly to stream (5): Outlets cut channel to stream or enter stream directly from road.

**Outlet Bleeder Stability:** Stability of ditch outlets. Consider slope, flow volume, vegetation, etc,

- Stable (0): Outlet is not eroding. Water enters broader vegetation area with minimal flow velocity.
- Moderate (3): Small channels being cut. Some erosion is visible. Lack of vegetation or rock cover.
- Unstable (5): Noticeable gully with severe erosion and material missing compared to surrounding area.

**Road Ditch Stability:** Stability of ditches on side of road. Consider road slope, # of outlets, ditch material, etc.

- Stable (0): Adequate or no ditches. Minimal erosion. Ditch bottom stable, fine material / vegetation present.
- Fair (3): Minor erosion problems. Some movement of silt and sand. No major downcutting.
- Poor (7): Some erosion with downcutting and evidence of movement of larger size particles.
- Unstable (10): Channel cut and evidence of high velocity flow. Large material (>2") is moved in ditch.

**Road Bank Stability:** Stability of bank on uphill side of road. Consider slope and vegetative or rock cover.

- Stable (0): Minimal erosion. Low to moderate slope, good cover (i.e. <30% slope with 60%+ cover).
- Fair (3): Some erosion potential. Moderate slope with some cover (i.e. 10% - 60% slope with 50% cover).
- Poor (7): Bank is eroding. Low to moderate slope with little cover (i.e. 20% - 60% slope with <40% cover).
- Unstable (10): Obvious bank erosion. Steep slope with little cover (i.e. >30% slope with <30% cover).

**Average Canopy Cover:** Relative amount of shading on road during summer conditions.

- Moderate (0): Road partially (~50%) shaded.
- Minimal (3): Little to no tree cover. Road has minimal shade.
- Heavy (5): Majority of road is shaded.