Typical Design of a Single-post Culvert Inlet Trash Rack

Cross section view

D - Culvert diameter
D* - If the culvert is designed for the 100-year peak storm flow, the trash rack height above the streambed should equal D.

If the culvert is undersized, then the trash rack needs to be extended vertically above the streambed to match or exceed the expected headwall height.

Plan view

Notes:
1. Many materials can be used for a single-post trash rack including old railroad track, galvanized pipe, and fence posts.
2. The diameter of single-post trash racks should be sized based on the size of expected woody debris. As a basic rule of thumb, the diameter of the trash rack should be equal to the diameter of the expected woody debris up to 4 inches.