Erosion Control Outfall Location Guidance

Last updated 11/17/2021

- **Disclaimers:**
  - This guidance pertains only to erosion control plans prepared for the Georgia Department of Transportation. Do not use the guidance within this document for any other purposes. Additionally, do not use this document for plan presentation guidance.
  - This document does not supersede the GAR100002 permit or the GSWCC Manual for Erosion and Sediment Control in Georgia (current edition).

- **Definitions from GAR100002:**
  
  28. “Outfall” means the location where stormwater, in a discernible, confined and discrete conveyance, leaves a facility or construction site or, if there is a receiving water on site, becomes a point source discharging into that receiving water.

  - Notice the emphasis on using the conveyance (pipe, ditch, etc.) to locate the outfall.
  - Also notice that if there’s a receiving water on site, the outfall is where the flow discharges into that receiving water.

  35. “Receiving Water(s)” means all perennial and intermittent waters of the State into which the runoff of stormwater from a construction activity will actually discharge, either directly or indirectly.

  - Notice that receiving waters include perennial and intermittent waters of the State but do not include ephemeral streams, or wetlands. Open waters are also considered to be receiving waters.

- **Practical guidance:**
  
  - An outfall should not be depicted flowing into perimeter silt fence because concentrated flow should not go through silt fence and flow at an outfall is concentrated.
  
  - When assessing whether a location is in concentrated flow or sheet flow, think about if the water will be concentrated enough for sampling. Can water be collected with a jar placed in the flow path?
  
  - From an erosion control perspective, an outfall needs to be related to a structure (pipe, ditch, etc.). If the flow is concentrated in a ditch, then the ditch line needs to extend all the way to the R/W line or the receiving water in order for the outfall to be at the R/W line or the receiving water.
  
  - Drop inlets are not outfalls unless the pipe is conveying a receiving water.
  
  - If discharging directly to a receiving water, the outfall is at the location the flow discharges to the receiving water, not the receiving water itself unless the receiving water begins on site.
  
  - If a concentrated flow path leaves the R/W on the project then re-enters the R/W on the project, the location where the flow first leaves the R/W is an outfall. If there is an area of land disturbance which drains to the flow path downstream of the first outfall, there is likely a second outfall where the flow path exits the R/W for a second time or enters a receiving water. See example 9.
Examples:

Notes:
- Each of these examples is from final phase plans.
- The images for the examples in this guidance document are from the 54 series so that plan elements can be seen more clearly. Outfalls in erosion control plans should be shown on the 53 series.
- R/W stands for Right of Way.

1. In this example the outfall is located at the yellow circle. The outfall is the location where water leaves the ditch and crosses the R/W limit. Notice how there is no outfall at the drop inlet going into the pipe as there is no receiving water in the pipe. Notice how the outfall is not located at the end of pipe or riprap because there is a ditch that extends to the R/W limit. Also notice how in the outfall is at the Required R/W limit rather than the existing R/W limit.
In this example there are four outfalls represented by yellow circles. Do not consider a receiving water to be an outfall unless the receiving water begins on site. This receiving water begins upstream of the project. For each of the outfalls in the example, the outfall is where the discharge leaves a ditch and enters the receiving water. Notice that the outfalls are not located on the receiving water itself.
In this example the outfall is located at the yellow circle. Although wetland #10 is on both sides of the road, there are no receiving waters on site in this area. Therefore, the outfall is the location where water leaves the pipe and crosses the R/W limit.
In this example the outfall is located at the yellow circle. The outfall is the location where water leaves the pipe and crosses the R/W limit. Notice how there is no outfall at the inlet of the pipe as there is no receiving water in the pipe.
In this example the outfall is located at the yellow circle. Although wetland #20A is on one side of the road, a wetland is not a receiving water. In this example the receiving water is intermittent stream #21 which begins on site. Therefore, the outfall is the location where water discharges from the culvert into intermittent stream #21. It is recommended not to choose the location where a receiving water begins on site for sampling.
In this example there are two outfalls represented by yellow circles. Notice how the outfalls are located at the limit of construction although the existing pipes continue within the R/W past the limit of construction. The portion of the project in this example is on a side road so there is no project limit label on this side road. However, if this example were on the mainline there would be a project limit and the outfall would be at the project limit if the flow does not leave the R/W or enter a receiving water prior to the project limit.
The empty yellow circle in this example is not an outfall because there is no concentrated flow path shown connecting C-30B to intermittent stream #35. If this is not a location of sheet flow, show a ditch line all the way to a receiving water or the R/W.
This is the same location as example 7, however now a ditch line is shown connecting C-30B to the yellow circle so the yellow circle is an outfall.
This is the same location as examples 7 and 8. However, in this example the ditch from C-30B leaves and re-enters the R/W prior to discharging into intermittent stream #35. Since there is land disturbance draining to the left yellow circle which does not drain to the right yellow circle, both yellow circles are outfalls.
In this example there are three outfalls, one at each yellow circle. There are outfalls where the flow from ditches enter the open water. It is recommended not to choose open waters for sampling. There is an outfall where the discharge leaves the R/W.