

# Surface Drain - Field Ditch: Table 1 Summary of Effects to Atlantic Salmon

## Practice Information

The purpose of this practice is to:

- Drain surface depressions;
- Collect or intercept excess surface water, such as sheet flow from natural and graded land surfaces or channel flow from furrows, and carry it to an outlet; or
- Collect excess subsurface water and carry it to an outlet.

Applicable sites are flat or nearly flat and have soils that are slowly permeable or otherwise collect water. Adequate outlets for the disposal of drainage waters are required. This practice applies to small drainage ditches within a field, but not to main or lateral ditches, or grassed waterways. Compliance with Federal, State, and local laws and regulations is required.



Network Diagram Effect Number	Life cycle affected:	Effect on Essential Fish Habitat (EFH):	Essential Fish Habitat Conservation Measures (CMs):	Effect on EFH (with CMs):
D.1 Increase in soil erosion potential (construction, spoil, berms)	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May Adversely Affect: Short-term potential for pollutant delivery during construction and/or whenever area is used by machinery	Erosion and Sediment Control Measures, Streambank and Shoreline Protection, Filter Strip installed to reduce dissolved contaminant and sediment loadings in runoff	No adverse effect
D.2 Increase in surface water runoff	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May Adversely Affect: increased peak flows result in increased suspended sediment from gully and streambank erosion	Runoff Control Measures: Flow from field ditches returned using low gradients to minimize cumulative effects to peak flow events,	No adverse effect
D.3 Decrease in subsurface water level	Eggs & Larvae, Juveniles, Adults, Spawning Adults	None, limited emplacement of field ditches; drainage area not a significant portion of stream flow volumes	Runoff Control Measures: Flow from field ditches returned to existing drainage to minimize cumulative effects to peak flow events,	No adverse effect

## Surface Drain - Field Ditch: Table 1 Summary of Effects to Atlantic Salmon

<b>Network Diagram Effect Number</b>	<b>Life cycle affected:</b>	<b>Effect on Essential Fish Habitat (EFH):</b>	<b>Essential Fish Habitat Conservation Measures (CMs):</b>	<b>Effect on EFH (with CMs):</b>
I.1 Increase in off-site surface water	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	Runoff Control Measures: Flow from field ditches returned using low gradients to minimize cumulative effects to peak flow events,	No adverse effect
I.2 Increase in soil erosion	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May Adversely Affect: Long-term potential for pollutant delivery during high channel flow events	Erosion and Sediment Control Measures, Streambank and Shoreline Protection, Filter Strip installed to reduce dissolved contaminant and sediment loadings in runoff; Minimize crossing use during high flow	No adverse effect
I.3 Decrease and increase in contaminants, pathogens, sediments to receiving waters	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	Erosion and Sediment Control Measures, Streambank and Shoreline Protection, Filter Strip installed to reduce dissolved contaminant and sediment loadings in runoff; Minimize crossing use during high flow	No adverse effect
I.4 Increase in degradation of pesticide residues	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect	None	No adverse effect
C.1 Decrease and increase in quality of surface waters and aquatic habitats	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	Erosion and Sediment Control Measures, Streambank and Shoreline Protection, Filter Strip installed to reduce dissolved contaminant and sediment loadings in runoff; Minimize crossing use during high flow	No adverse effect

## Surface Drain - Field Ditch: Table 1 Summary of Effects to Atlantic Salmon

Network Diagram Effect Number	Life cycle affected:	Effect on Essential Fish Habitat (EFH):	Essential Fish Habitat Conservation Measures (CMs):	Effect on EFH (with CMs):
C.2 Decrease and increase in fishable and swimmable waters; health and safety issues for humans, domestic and wild animals	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	Erosion and Sediment Control Measures, Streambank and Shoreline Protection, Filter Strip installed to reduce dissolved contaminant and sediment loadings in runoff; Minimize crossing use during high flow	No adverse effect