Lined Waterway or Outlet: Table 1 Summary of Effects to Atlantic Salmon

Practice Information

Lined waterways or outlets are constructed to convey runoff in areas having concentrated runoff, steep grades, wetness, prolonged base flow, seepage or piping and where lining is needed to control erosion. Lined waterways can be used where limited space is available for the design width, which requires higher velocities and lining. Lined waterways can also be used where soils are highly erosive or other soil or climatic conditions preclude using vegetation only.

Important wildlife habitat, such as woody cover or wetlands, should be avoided or protected if possible when siting the lined waterway. If trees and shrubs are incorporated, they should be retained or planted in the periphery of the grassed portion of the lined waterways so they do not interfere with hydraulic functions and roots do not damage the lined portion of the waterway. Mid- or tall bunch grasses and perennial forbs may also be planted along waterway margins to improve wildlife habitat. Waterways with these wildlife features are more beneficial when connecting other habitat types; e.g., riparian areas, wooded tracts and wetlands.

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.5 Decrease in runoff velocity	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: Detention ponds to minimize peak flow events, Critical Area Plantings installed as needed for site specific conditions.	No adverse effect
D.6 Increase and decrease in infiltration	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect: limited emplacement of lined waterways limited to steep slopes with negligible infiltration	None	No adverse effect
D.7 Decrease in ephemeral and classic gully erosion	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	None	No adverse effect

Lined Waterway or Outlet: 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):
I.7 Increase and decrease in contaminants, pathogens, sediments to receiving waters	Eggs & Larvae, Juveniles, Adults, Spawning Adults	Long-term potential for surface water pollution from applied agrichemicals on coarse textured, shallow soils or other sensitive areas.	Surface Water Pollution Control Measures: Nutrient Management and Pest Management of agrichemical use and application to reduce to minimize adverse impacts by evaluation of runoff/infiltration hazards from agrichemicals.	No adverse effect
I.8 Decrease in maintenance of drainage ditches and other structures	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	None	No adverse effect
C.2 Increase in habitat suitability, health for humans, domestic and wild animals	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	None	No adverse effect
C.5 Increase and decrease in water quality and aquatic habitats	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	Surface Water Pollution Control Measures: Nutrient Management and Pest Management of agrichemical use and application to reduce to minimize adverse impacts by evaluation of runoff/infiltration hazards from agrichemicals.	No adverse effect