Irrigation Regulating Reservoir: Table 1 Summary of Effects to Atlantic Salmon

Practice Information

The purpose of an Irrigation Regulating Reservoir is to collect and store water for a relatively short period of time in order to improve irrigation water management by regulating fluctuating flows in streams, canals, or from pumping plants, provide storage for tailwater recovery and reuse, and improve offsite water quality.

Planning consideration is given to short-term and construction-related effects; effects on the water budget, including effects on downstream flows or aquifers that would affect other water uses or have undesirable environmental, social or economic effects; erosion, sediment, soluble contaminants and contaminants attached to sediment in runoff; water temperature changes downstream that could affect aquatic and wildlife communities; wetlands or water-related wildlife habitats; and cultural resources.

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.3 Decrease in Wetlands/other lands	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: restriction of habitat and ability to spawn	Ponds are sited off-channel and isolated from streams.	No adverse effect
D.4 Decrease in downstream flow	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: decrease in stream flow due to retention of water due to storage	Water Supply Control Measures: Irrigation Water Management applied as needed for site specific conditions as per MeDEP Low Flow Rule Compliance	No adverse effect
D.5 Increase in soil erosion	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: short term increase in turbidity or streambed sedimentation during construction; potential increase in BOD	Erosion & Sediment Control Measures: Critical Area Planting, installed as needed for site specific conditions	No adverse effect

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I.5 Decrease in wetland ecological functions	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: restriction of habitat and ability to spawn	Reservoirs are sited off-channel and isolated from streams.	No adverse effect
I.6 Decrease in chemical transformations, groundwater recharge, and other functions	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: impaired quality of aquatic habitat.	Reservoirs are sited off-channel and isolated from streams.	No adverse effect
I.7 Decrease and increase in fish and wildlife habitat	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	none	No adverse effect
I.9 Increase in contaminants, pathogens, sediments to receiving waters	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: short term increase in turbidity or streambed sedimentation during construction; potential increase in BOD	Erosion & Sediment Control Measures: Critical Area Planting, installed as needed for site specific conditions	No adverse effect
I.11 Decrease in other water uses downstream	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect due to full mitigation of all adverse effects	none	No adverse effect

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C.2 Increase and decrease 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