

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

Practice Information

The purpose of Irrigation Storage Reservoirs is to conserve water by holding it in storage until it is used to meet crop irrigation requirements, and on cranberries for flooding and debris flushing. It is used on cropland where there is insufficient water supply to meet the irrigation requirements for part or all of the irrigation season, where water is available for storage from surface runoff, stream flow, or a subsurface source, and where a suitable site is available for the reservoir. Planning consideration is given to short-term and construction-related effects; effects on the water budget; 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: decrease in surface or groundwater due to increased losses from evaporation, transpiration	Wetland mitigation as needed per Clean Water Act completed prior to wetland alteration as per ACOE Programmatic General and DEP Natural Resource Permits	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	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	Ponds are sited off-channel and isolated from streams.	No adverse effect
I.6 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.8 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.9 Increase in water lost to evaporation	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May Adversely Affect: decrease in surface or groundwater due to increased losses from evaporation, transpiration	Water Supply Control Measures: Irrigation Water Management applied as needed for site specific conditions	No adverse effect
I.10 Decrease in other water uses downstream	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

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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