

Sprinkler Irrigation System: Table 1 Summary of Effects to Atlantic Salmon

Practice Information

Sprinkler irrigation systems are used to achieve one or more of the following purposes:

Efficient and uniform application of irrigation water to maintain adequate soil water for plant growth and production without causing excessive water loss, erosion, or water quality impairment;

- Control of and/or modification of climate;
- Application of chemicals, nutrients and/or waste water;
- Reduction of particulate matter emissions to improve air quality.

Common sprinkler systems applied in New England include fixed solid-set, big gun, periodic move, and traveling sprinkler systems. Application rate and depth of application are based on the specific soils and crops. Runoff, translocation, and deep percolation are minimized. Distribution patterns, spacing and operating pressure control the application rate. Systems used for chemigation or fertigation must meet industry accepted washoff and total rinse-out times.



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 water use	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: decrease in surface or groundwater due to increased use of water for irrigation	Water Supply Control Measures: Irrigation Water Management applied as needed for site specific conditions	No adverse effect
D.2 Increase in water delivery to crop	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect	None	No adverse effect
I.1 Decrease in water for other uses	Eggs & Larvae, Juveniles, Adults, Spawning Adults	May adversely affect: decrease in surface or groundwater due to increased use of water for irrigation	Water Supply Control Measures: Irrigation Water Management applied as needed for site specific conditions	No adverse effect

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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.8 Increase in agrichemical use efficiency	Eggs & Larvae, Juveniles, Adults, Spawning Adults	No effect	None	No adverse effect
C.1 Decrease and 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.3 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	none	No adverse effect