

Bivalve Aquaculture Gear & Biofouling Control

Rhode Island



Summary

RI NRCS is offering a renewed practice for shellfish growers in 2024 called **Bivalve Aquaculture Gear and Biofouling Control**.

This practice is used to cycle new aquaculture gear with existing production gear in waters used for aquaculture production where gear biofouling occurs. The farmed shellfish are transferred from the biofouled gear to the clean gear and returned to the water. The biofouled gear is removed from the farm site and taken on land to be cleaned using environmentally appropriate biofoul control methods including air drying, brine dip, vinegar dip, freshwater dip, sweeping, power washing, or a combination of these methods.

Background

Biofouled gear that is cleaned in place - in the water at the farm site - causes nutrient loading and potential aquatic nuisance species release. Implementation of this practice eliminates the influx of biofouling material to the marine environment from gear cleaning.

Biofouling on aquaculture gear reduces water supply and food sources for shellfish, endangering shellfish health and growth. Increased drag resulting from biofouling can also increase the risk of gear escaping into the marine environment, and escaped gear can entangle and harm marine wildlife.

Practice Specifications

This practice could be applied on any bivalve aquaculture operation that is using gear, such as oysters, clams, scallops, and

mussels, and is appropriate for bottom culture or floating bags and cages.

Cleaning and storing of the biofouled gear will take place at a terrestrial location where cleaning activities will not negatively impact surface or groundwater, and at a location suitable for the size and intensity of the aquaculture operation.



The return of fouling organisms and macroalgae into surface waters will be avoided.

The practice covers the cost of labor required to cycle and clean gear and to dispose of waste gear. Payment reimbursements are intended to defray the costs of increased labor above normal operating procedures and recordkeeping.

Growers will submit records of biofouling control activities, as well as ensure that they are properly disposing of waste/damaged gear on land in a timely manner, at an appropriate facility, and in a manner that does not cause environmental degradation.

Purpose

- Reduce the adverse impacts of shellfish aquaculture operations and gear on natural resources,
- Improve dependable water quantity and quality to support shellfish production, and
- Improve adequate food quantity and quality to support shellfish production.

