

**2021 ROCKWEED (*Ascophyllum nodosum*)
HARVEST PLAN
FOR COBSCOOK BAY
WASHINGTON COUNTY, MAINE**

Submitted to:

**MAINE DEPARTMENT OF MARINE RESOURCES
Augusta, Maine**

Submitted by:

**Gulf of Maine, Inc.
736 Leighton Point Road
Pembroke, Maine 04666
(207)-726-4620**

February 20, 2021

Introduction

In accordance with Sec. 1. MRSA § 6802 8., Gulf of Maine, Inc. submits this harvest plan for the purpose of identifying the company's objectives and methods for the harvest of rockweed (*Ascophyllum nodosum*) in Cobscook Bay for the year of 2021.

Gulf of Maine, Inc. sources and sells a variety of marine based products that originate here in the waters of Cobscook Bay. Since 2003 we have served research, education, aquarium, food, agriculture, cosmetic, pharmaceutical, manufacturing, & craft markets across North America.

Gulf of Maine, Inc. has secured excellent, value added markets for seaweed products. Since the Covid -19 pandemic started these markets are exploding. This is good news for our local working waterfront and is creating opportunity here in Downeast Maine. We have been selling seaweeds as food, fertilizer, and science specimens since 2003 when we started business in Pembroke on the shores of Cobscook Bay. We are the **only** seaweed company that actually is owned and operated by residents of Washington County in the town of Pembroke on the mouth of the Pennamaquan River estuary.

Biomass Assessment

In 2021, Gulf of Maine, Inc. plans to harvest 17% or less of the total harvestable biomass from the sectors allotted to us, as allowed by Sec. 1. MRSA § 6802 10.

The annual harvestable biomass for the sectors in which Gulf of Maine, Inc. will conduct our harvesting operations is determined using information supplied to us by Seth Barker, formerly with the Maine Department of Marine Resources. Seth Barker, using satellite imagery, is able to calculate, in square meters, the total area of the rockweed beds in each sector. These numbers are then revised to exclude all the conservation area designated as "no harvest" zones. Gulf of Maine, Inc. will then take the revised square meter numbers, convert them into square footage, and calculate the total harvestable biomass in each sector using the pounds of rockweed per square foot numbers generated by sampling each sector. Sampling consists of laying a one hundred foot transect at random, laying down a yard square frame every twenty five feet along this line, cutting and weighing the "harvestable" rockweed within the frame (above 16 inches or lowest lateral branch), and then calculating a pounds per square foot figure. The annual harvestable biomass figures are then determined by multiplying the total harvestable biomass by the 17% per year allowable harvest.

Harvest Areas and Quantities

Gulf of Maine, Inc. is interested in the sectors for harvesting that are most accessible from their base of operations at 736 Leighton Pt. Rd. in Pembroke. These sectors (in order of preference) would be A-22, A-23, A-21, & A-20. For safety sake, these sectors are mostly in the *LEE* of the prevailing North west winds during the summer harvest season and so would be the safest areas where we can harvest our weed and make it back home in our 24' Carolina skiff without unnecessarily endangering ourselves. We feel that we should be given the priority for access to our closest rockweed sectors.

Gulf of Maine, Inc., in 2021, plans to harvest no more than 17% of the harvestable biomass contained in our sectors. Biomass estimates, if not already done, will be completed once sectors are allotted and before harvesting. Since Gulf of Maine, Inc. is located on Cobscook Bay they are able to hand harvest year round on the good weather days and this will allow us to reach our quota for the 2021 harvest year. Data from the 2020 available biomass figures and or new transect data will be used to determine harvestable biomass levels for the 2021 season in advance of any harvest.

Harvest Records and Audit Trail

Only Tim Sheehan, and his direct family members will be harvesting the rockweed in the allotted sectors. Gulf of Maine, Inc. will maintain daily harvest records in their offices for the 2021 season

These records will ensure a simple and timely third party verification of harvest numbers.

Methods of Harvest

Gulf of Maine, Inc. plans to harvest rockweed in Cobscook Bay using:

1. Maine designed cutting blade on a hand rake, used effectively in Maine for over twenty years.

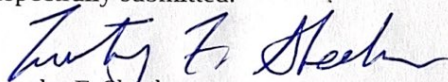
Bycatch Management

Harvest efforts will be used to return all visible by-catch to the waters of Cobscook Bay as soon as possible. Random sampling will be done on boat loads of rockweed, Samples will be looked at for the presence of invertebrate and algal species. Records of by-catch observed will be kept at Gulf of Maine, Inc. As a marine biologist, Tim is very experienced in the identification, habits, and life histories of the myriad of marine life that could be found in the rockweed canopy

Harvester Training

Tim Sheehan has hand harvested rockweed for 20 years as a biologist, and licensed seaweed harvester and past manager of rockweed harvests for Acadian Seaplants, Ltd. in past years. Any assistants will be trained accordingly by Mr. Sheehan.

Respectfully submitted:



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