## A GROWING INTEREST IN SEAWEEDS – INDUSTRY AND COASTAL COMMUNITY ENGAGEMENT TO SUPPORT COMMERCIALIZATION OPPORTUITIES IN COASTAL BRITISH COLUMBIA, CANADA

Stephen F. Cross\* and Allison Byrne

Centre for Applied Research Technology & Innovation
North Island College
Campbell River, British Columbia
Canada V8L 1Y1 Stephen.Cross@nic.bc.ca

Seaweed production continues to grow in the global arena, with a >5% increase annually. Yet despite a clear market demand for a broad range of seaweed products (food, alginates, bioethanol, antiviral agents, fertilizers, etc.), and a coastal environment that supports one of the greatest diversity of species in the world, very little movement has been realized with respect to the development of a seaweed aquaculture sector in western Canada – why? Integrated Multi-Trophic Aquaculture (IMTA) research has delimited the spatial extent of the wastes generated from fish farm operations, revealing that the use of extractive species such as seaweeds offers an opportunity to capitalize on these inorganic wastes and could generate a substantial revenue stream given the high demand and market value of such products. Furthermore, the inorganic fraction has a much broader spatial impact downstream of a fish farm, and these wastes represent a clear commercial opportunity for co-culture while offering important ecosystem services. The use of seaweeds in adapting to climate change offer additional ecosystem services for the coastal environment – the

potential for mitigating ocean acidification impacts to shellfish, carbon sequestering, and/or habitat rejuvenation.

This presentation describes a 5year applied research program we initiated to facilitate commercialization of seaweed aquaculture in coastal British Columbia, the and unique industry and coastal community (aboriginal peoples) partnership that has come together in support of this effort. It provides some preliminary performance results and the options for business development.

