Industry:

Shellfish Aquaculture (Atlantic Region)

State of Readiness Assessment:

Total Score =

A-

Industry Overview:

- The Atlantic shellfish aquaculture industry is made up primarily of independent growers. Vertical integration within the industry is common within the mussel industry.
- Production is primarily mussels followed by oysters. Smaller quantities of clams and scallops are commercially farmed.
- PEI produces approximately 80% of the cultured shellfish for the Atlantic region and 85% of all mussels in Canada.
- Most product is sold on the commodity market.
- Extensive pooling of product may occur at the hatchery, nursery and farm as a result of grading/sorting activities. The amount of product pooling associated with grading/sorting makes the mapping of identity relationships extremely difficult.
- The farm-to-processor link has a level of traceability associated with compliance with CSSP and QMP regulations.
- Industry associations – Aquaculture Association of Nova Scotia (AANS) ; PEI Aquaculture Alliance (PEIAA); New Brunswick Professional Shellfish Growers Association (NBPSGA); Newfoundland Aquaculture Industry Association (NAIA) & Canadian Aquaculture Industry Alliance (CAIA).

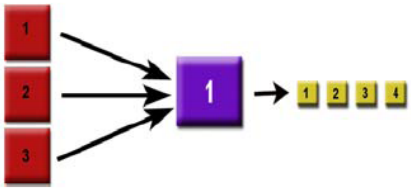
Supply Chain Pathways

Hatchery> Truck> Nursery> Truck> Farm> Truck> Processor

Hatchery> Truck > Nursery> Boat> Farm> Truck> Processor

Unit Transformations

Units may undergo multiple pooling and subdivisions between hatchery and processor



Market(s):

- Market is primarily for fresh domestic sale and fresh exports to the US Pacific Northwest. Some product is exported to the EU.
- The main traceability regulations of concern, in order of importance are CSSP/NSSP, COOL and the US Bioterrorism Act.

CSSP=Canadian Shellfish Sanitation Program QMP=Quality Management Program

Product and Business Data Availability: **Score = 1**

Traceability requirements are currently available through the following systems.

Hatchery	Nursery	Transporter	Farm
Invoices	Invoices	Bill of Lading	Invoices
Shipping documents	Shipping documents		Shipping documents
Sales Records	Sales Records		Sales Records
			Vp Program Bill of Lading
			CSSP tag

What product or business data is missing?

Place of dispatch, CSSP area designation, disease records/history.

Is the data electronically accessible to the supply chain?

No. Paper records are maintained by supply chain partners. The accessibility of information upstream from the farm-processor link may be much more difficult to efficiently access.

Is the data verifiable?

Growing water classification and PSP status are verifiable through CFIA. There is no 3rd party verification of other data elements.

Product Identifiers: **Score = 1.5**

Unique trade and/or logistic unit identifiers are not used.

Data Transfer and Information Mapping: **Score = 1.5**

Current data systems are paper based with data transferred to the buyer through harvest tags as required by CSSP and QMP Programs. The level of data transfer that exists upstream form the farm is limited to paper records (invoices, bills of lading etc.) passed from one business to the next.

Industry Leadership: **Score = 1.5**

Shellfish growers the Atlantic region are represented by industry associations that differ by province. They are then collectively represented by the CAIA.

Processor Level Constraints **Score = 1**

None

Factors impeding ability to meet traceability:

- Electronic information systems in which traceability information could be stored are not common among shellfish growers.
- Hatchery to farm record keeping practices are poor.

Factors aiding ability to meet traceability:

- CAIA recognizes the necessity to achieve a 'Tracefish' level of traceability to ensure market access. Traceability is one of the pillars of its Brand Canada marketing strategy.
- Most of the required traceability information is collected through CSSP and QMP programs.

Opportunities:

Goal 1 - Traceability to a container (sack, bag) level.

- Identify batches and label products with trade and logistic unit identifiers
- The upstream supply chain may not currently be in compliance with the record keeping and labeling requirements of the US COOL. Given the importance of the US market, an initiative should be undertaken to ensure compliance through improved traceability and labeling.
- To comply with the requirements of EC regulation 2003/804, the shellfish industry is required to implement a surveillance and recording system for documenting/verifying the incidence of mortality and disease on farms.
- Given the significant level of product sorting and pooling, protocols for mapping the relationships between input units and pooled units should be developed.
- Traceability would be beneficial as a production/marketing tool.