

# Capturing social values in the seafood sector: New tools for new times





#### Values & Eco-system Services

Values are criteria to assess

- Benefits from services
- Well-being

Issues in capturing and deploying

- Incommensurate
- Complex
- Context specific

#### Our Study

Applied
Empirical
Illustrates value structures
and value complexity
Shows Q-method as a practical
tool to capture values and
facilitate discussion

## Context Campbell River, BC





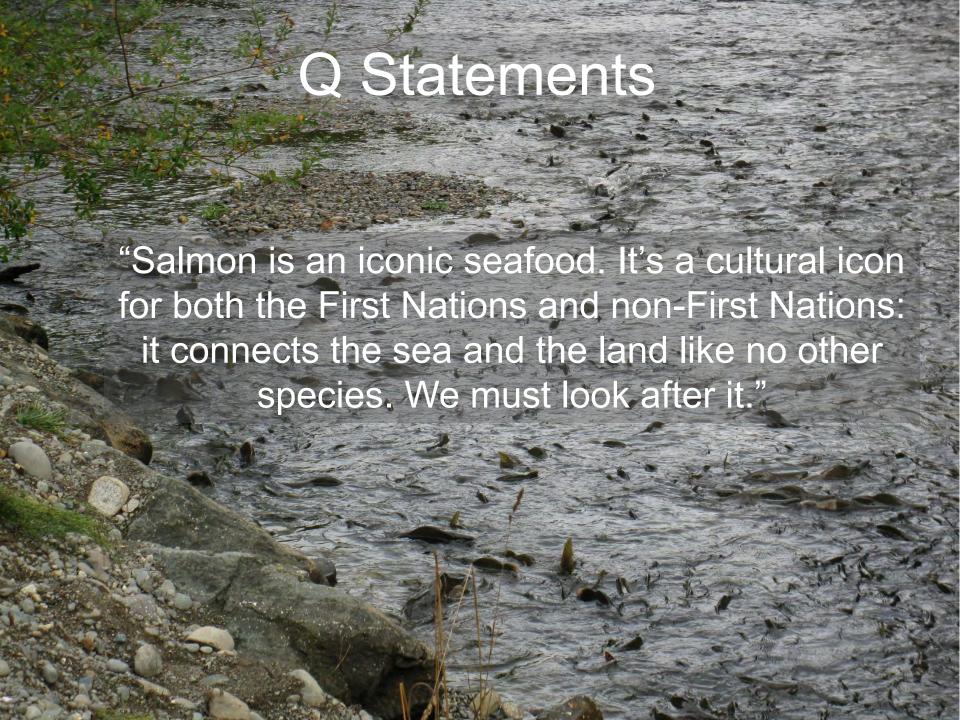
"Examines an individual's subjective understanding of their world"

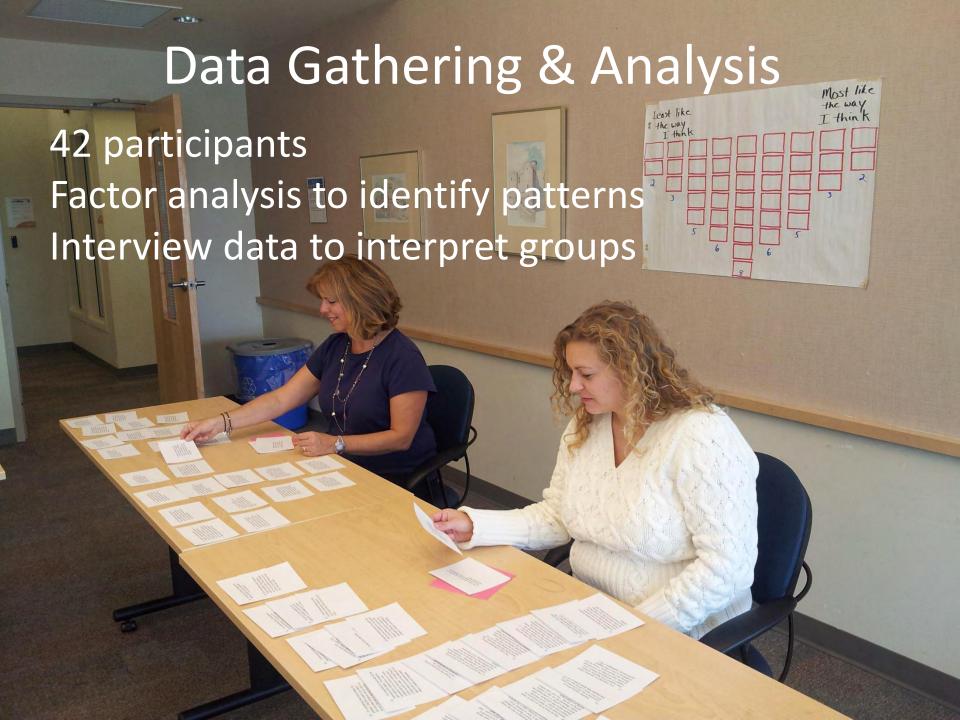




"The ocean is what sustains coastal communities, it is the lifeblood of the coast. If we don't maintain a healthy, productive ocean, communities along the coast will suffer and just fade."







#### Results: Five Groups











#### **Composition of Groups**











12 people

Finfish & Shellfish Aquaculture

Federal & Local Regulation

Seafood Research 8 people

First Nation Commercial & Food Fishing

Finfish & Shellfish Aquaculture

Recreational Fishing

9 people

Finfish Aquaculture

Seafood Processing

Seafood Retail/ Restaurant

Recreational Fishing

3 people

Commercial Fishing

First Nation Food Fishing

5 people

Seafood

Processing

Shellfish

Aquaculture

Recreational

Fishing

Seafood Retail/ Restaurant

### What is Important

| Collaborative<br>Pragmatists | Local<br>Guardians               | Science&<br>Innovation              | Cautious<br>Traditionalists | Prosperity<br>Promoters             |
|------------------------------|----------------------------------|-------------------------------------|-----------------------------|-------------------------------------|
| Collaboration*               | Interconnection ocean/community* | Science based decisions             | Healthy fishery/community   | Prosperity*                         |
| Science based decisions      | First Nations right to access*   | Enhance production thru aquaculture | Cultural role of salmon     | Enhance production thru aquaculture |
| Trust regulations*           | Pre-caution/<br>Learning         | Pre-caution/<br>Learning            | Recreation*                 | Security thru aquaculture           |
| Balanced use                 | Local decisions                  | Global sharing                      | Balanced use                | Balanced use                        |
| Stewardship                  | Stewardship                      | Sustainable aquaculture*            | Experience of nature/wild   | Experience of nature/wild           |

<sup>\*</sup> Indicates significant difference from other groups

#### **Greatest Divergence**



#### **Implications**

Evidence of common/divergent values
Implications for all eco-system benefits
and services

Q-method has potential for input to management processes

- common vocabulary
- new groupings
- points of disagreement
- possibilities for dialogue





| Sub-sector                                 | Number of participants |  |
|--|------------------------|--|
| Commercial Fishing                         | 3                      |  |
| Rec Fishing Service                        | 2                      |  |
| Fin fish Aquaculture                       | 11                     |  |
| Shellfish Aquaculture                      | 2                      |  |
| Aquaculture Supplier                       | 2                      |  |
| Aquaculture Researcher (finfish/shellfish) | 5                      |  |
| First Nation Fisher                        | 4                      |  |
| Recreational fishing                       | 2                      |  |
| Regulation                                 | 5                      |  |
| Processing                                 | 3                      |  |
| Restuarants                                | 2                      |  |
| Seafood Research                           | 1                      |  |
| Total                                      | 42                     |  |
| Male                                       | 26                     |  |
| Female                                     | 16                     |  |
|  |                        |  |



#### Social values = good or important

Behaviour



Beliefs, Interests, Attitudes

**Assigned Values** 

Value

System

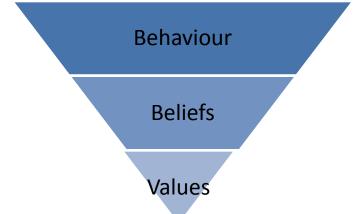
Held Values



#### Research Questions

What values do people in the seafood sector share?

How do their values influence their objectives for marine management?



#### Q Method

"Examines an individual's subjective understanding of their world"

- Multi-method, multi metric
- Small number of participants
- Uses the "words" of those involved



#### Data Gathering and Analysis

- 300+ statements
- 40 representative statements.
  - The ocean seems to be very resilient, it seems to be able to take a beating and rejuvenate itself.
  - We have to think of future generations and make sure there is going to be opportunities for them.
     That we're not using the ocean resource up or harming it.
- 42 respondents
- Identify patterns via factor analysis.
- Interpret patterns via interview data.



#### Representative Statements

It is important to maintain activities and individuals that have a connection to the ocean; farming shellfish or running a whale watching operation, it is an opportunity to be in a marine-based industry.

We have to figure out different methods to feed ourselves. Jacques Cousteau said in his wisdom, the future is farming the ocean. We have to find a way to do it sustainably.



#### Representative Statements

The ocean is what sustains coastal communities, it is the lifeblood of the coast. If we don't maintain a healthy, productive ocean, communities along the coast will suffer and just fade.

Shellfish aquaculture is providing employment. It's the people that work in the seafood industry that are keeping places like this open, the couple of local stores, the gas bar, all that is open because of those jobs.

#### What is Important

| Collaborative Pragmatists | Local<br>Guardians               | Science&<br>Innovation              | Cautious<br>Traditionalists | Prosperity<br>Promoters             |
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#### Social Values & Seafood

- Seafood significant to coastal communities
- Socio-economic more economic
- Conflict over objectives
- Understanding of values that underlie objectives may increase understanding of how benefits are derived and improve management processes



### Social values = good/important

Behaviour



Beliefs, Interests, Attitudes

**Assigned Values** 

Value System

Held Values



#### Values & Eco-system Services

- Values are criteria to assess
  - All services and benefits from the environment
  - Well-being
- Issues in capturing and deploying
  - Incommensurate
  - Complex
  - Context specific



#### Our Study

- Applied
- Empirical
- Illustrates value structures & complexity
- Identifies agreement/disagreement
- Shows Q-method as a practical tool to capture values and facilitate discussion



#### **Implications**

- There are common values, but they are not sectoral
- Q-method has potential as an input to management processes
  - Uses and provides common vocabulary
  - De-constructs traditional constituencies
  - Opens possibilities for dialogue
  - Crystalizes points of disagreement
  - People enjoy doing it



#### Challenges

- Q-method does not support inferences about populations
- Judgment
  - Framing issue,
  - Selecting statements and participants
  - Interpreting results
- One sector, one coastal community



#### Conclusion

- Empirical evidence of common and divergent values in a coastal context
- Results show that value groupings exist but they are not sectoral
- Q method offers a way to operationalize values in management processes – open up the dialogue

