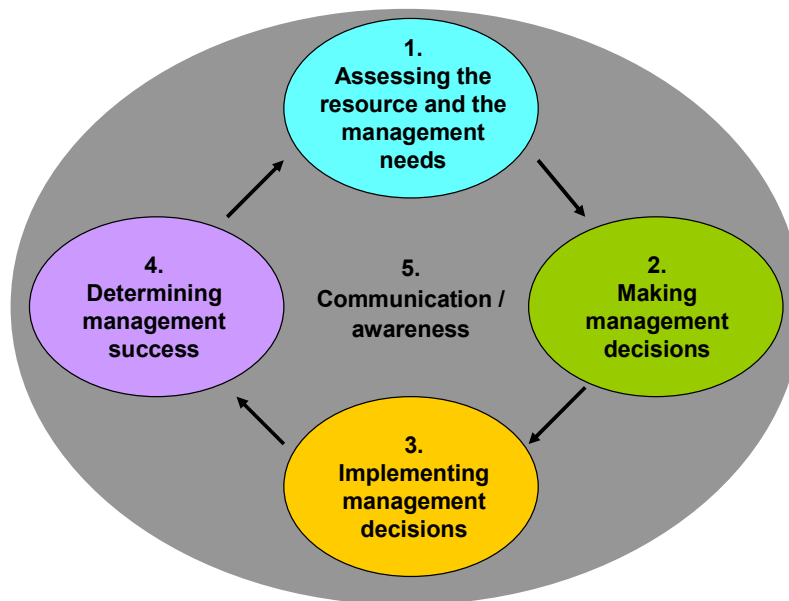

Executive Summary

The Pacific Fisheries Resource Conservation Council (the Council) hired the ESSA project team to explore the scope and potential of “traditional ecological knowledge”, “local ecological knowledge” and “fishers’ knowledge” for expanding and strengthening Pacific salmon management. This report describes the methodology for the project, what was learned, and recommendations for how these lessons can be used to improve Pacific salmon management. Much of what was learned, and the recommendations, also apply more broadly to management of fisheries in general as well as other natural resources.

The project had three main phases: collection and review of the literature, analysis of selected case studies, and development of an implementation strategy. Criteria were developed to help select the case studies included in this report:

- Aquatic Management Board (West Coast Vancouver Island)
- Northern Co-management Boards
- Copper River Watershed Management
- Endangered Status Assessments in Canada

A generic management functions framework was developed to help organize the research and the results. It provided a structure that applied regardless of what resources the case studies pertained to, thereby helping to determine how best to transfer the lessons to Pacific fisheries management.

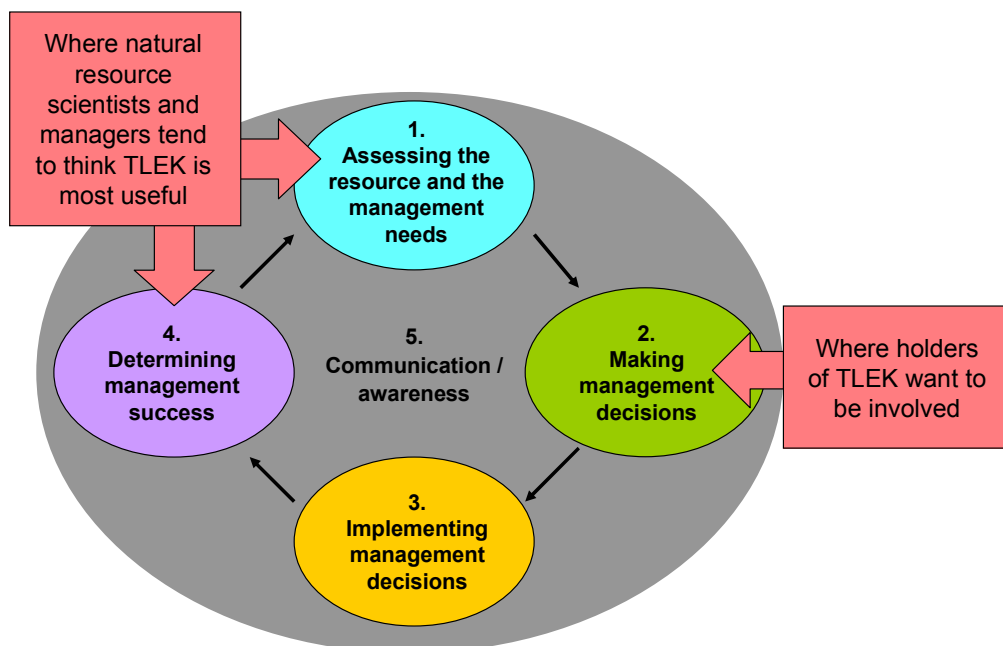


While there is no universally accepted definition of traditional ecological knowledge (TEK), common themes among the definitions used in the literature include the notion that it develops over a long period of time, that it is experience-based, and that it has important socio-cultural and biological dimensions. The intent of the project was to encompass knowledge with these characteristics as well as knowledge that may accrue over a lifetime but not necessarily across generations, whether held by Indigenous or non-Indigenous peoples. This report uses the term “**traditional and local ecological knowledge**” (TLEK) to refer to knowledge described in the literature as TEK, local ecological knowledge (LEK) and fishers’ ecological knowledge (FEK).

There are good ecological, economic and legal reasons for using TLEK in natural resource management. There are also many challenges relating to issues of culture, jurisdiction, institutional structure, perceived credibility and value, world view, and power. These are summarized, and collectively provide both the rationale for using TLEK in fisheries management and a preview of some of what must be considered when trying to do so.

The case studies provided a number of insights and lessons. From these, and the other literature reviewed for this project, two main messages emerged:

- The real question that is facing fisheries managers is not *how can we use traditional and local knowledge*, but *how can we include traditional and local knowledge-holders?*
- Successful involvement of holders of TLEK requires their inclusion in decision-making.



The implications of this for Fisheries and Oceans Canada (DFO) are discussed, and four recommendations are provided for moving forward:

1. Increase awareness among DFO staff (and staff of other fisheries management organizations) at all levels of the organization about what TLEK is and what values, nuances and principles they should be aware of when trying to include TLEK in meaningful ways in salmon management.
2. Determine how committed DFO is to including TLEK in salmon management, articulate this in a policy that makes the intent very clear for staff and other management participants, and then ensure the policy is both supported and followed.
3. Undertake a co-management pilot, focused on salmon, within a single watershed.
4. Perform a comprehensive survey of past/present watershed management initiatives in BC, the Yukon and Washington State that used/are using TLEK to better manage their natural resources, particularly salmon. Select several of these for more in-depth examination to

further elucidate specific lessons transferable to other areas or aspects of Pacific salmon management

Some simple principles emerged that would greatly enable the inclusion of TLEK in natural resource management, including but not restricted to fisheries management:

- Explicitly acknowledge the existence of TLEK.
- Explicitly acknowledge the value of TLEK to resource management.
- Understand the value of TLEK to the knowledge-holders.
- Do not use TLEK in isolation from the knowledge-holders.
- If TLEK disagrees with scientific information, investigate why.

Additional insights for fisheries managers are also provided.