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Designing data collection for decision-making: shaping the coastal First Nations regional monitoring system to meet the needs of the Nations

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Designing Data Collection for Decision-Making:
Shaping the Coastal First Nations Regional Monitoring System to meet the needs of the Nations

Erica Olson
April 6, 2018
REGIONAL MONITORING SYSTEM

GOALS

REGIONAL STANDARDIZED DATA COLLECTION

COLLABORATION BETWEEN NATIONS

GUARDIAN WATCHMEN CAPACITY, LEGITIMACY, AUTHORITY

ENGAGEMENT WITH RESOURCE USERS

ISSUES Indicator

METHODS & PROTOCOLS

DATA COLLECTION

DATABASE
2013 – RMS evaluation
Recommendation: redevelop the RMS to ensure it meets the needs of the Nations at multiple scales

2015 – Began RMS redevelopment
RMS Redevelopment Process

- Community interviews
- Inventory of coastal monitoring activities and uses of data
  - Identification of potential RMS monitoring activities
- Perspectives on RMS moving forward
  - Development of scoping framework
- Advisory committee workshop
- Refinement of monitoring activities
- RMS components, protocols and recommendations
- Redeveloped RMS
- Monitoring expert interviews
Inventory of coastal monitoring activities and uses of data

- Document review
- Interviews
- Documented information on monitoring activities currently done and desired
Inventory of coastal monitoring activities and uses of data

For each monitoring activity

- Data type
- Why are data useful?
- Who wants data collected?
- Who collects data and how do they do it?
- Data collection protocols used
- Who uses data and how?
- Barriers to data collection
- Priority rank compared to other monitoring activities
- Ability to share data with other Nations
# Inventory of coastal monitoring activities and uses of data

<table>
<thead>
<tr>
<th>Monitoring activity</th>
<th>Description of activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marine &amp; Freshwater</strong></td>
<td></td>
</tr>
<tr>
<td>Human Use</td>
<td></td>
</tr>
<tr>
<td>Ecological Status</td>
<td></td>
</tr>
<tr>
<td><strong>Land</strong></td>
<td></td>
</tr>
<tr>
<td>Human Use</td>
<td></td>
</tr>
<tr>
<td>Ecological Status</td>
<td></td>
</tr>
</tbody>
</table>

- Valued components
- Decision-making processes
RMS Redevelopment Process

Community interviews

Inventory of coastal monitoring activities and uses of data

Identification of potential RMS monitoring activities

Perspectives on RMS moving forward

Development of scoping framework

Refinement of monitoring activities

RMS components, protocols and recommendations

Redeveloped RMS

Advisory committee workshop

Monitoring expert interviews

Identification of potential RMS monitoring activities

Development of scoping framework
Scoping Framework

Purpose:

To organize current and desired monitoring activities based on whether the RMS is the appropriate tool for supporting them.
Scoping Framework

9 Criteria:

Feasibility and suitability

- Barriers
- Suitability
- Internal Capacity
- Collaboration

Scientific basis of information

- Value of information

Relevance

- Importance
- Time horizon
- Spatial coverage
Each Nation:

MONITORING ACTIVITIES OF NATIONS

BARRIERS
Can barriers to data collection (unrelated to capacity) be easily overcome in the near term?

SUITABILITY
Is your Nation best suited to undertake this monitoring activity (e.g., not already being done by another organization or if it is data are not freely available)?

IMPORTANCE
Is the monitoring activity and resulting data related to things that matter to your Nation (fundamental objectives, valued components, or decisions that need to be made)?

VALUE OF INFORMATION
Are the data that result from this monitoring activity valuable for decision-making within your Nation’s stewardship office (need to know versus nice to know)?

CAPACITY
Is there sufficient capacity within your Nation to conduct this monitoring activity?

COLLABORATION
Are there benefits to collaborating with other Nations or organizations to conduct this monitoring activity and/or use the resulting data?

SPATIAL COVERAGE
Are the data associated with this monitoring activity more valuable if collected over an area larger than your Nation’s territory?

PRIVACY
Is it ok to share the data that result from this monitoring activity with other Nations?

TIME HORIZON
Does this monitoring activity need to occur over a longer time frame to be most useful (>5 yrs)?

Activity/data with longer time horizon
High regional relevance
Activity/data with shorter time horizon
High regional relevance

Activity/data with longer time horizon
High Nation-level relevance
Activity/data with shorter time horizon
High Nation-level relevance

Out of Scope
Low relevance
Activity with limited capacity for data collection

High Regional
High Nation-level
Scoping Framework - Results

Across Nations:

In scope – high regional relevance
• All Nations
• Most Nations
• Some Nations

In scope – high Nation-level relevance
• All Nations
• Most Nations
• Some Nations

In scope – low relevance
• Most Nations
• Some Nations
RMS Redevelopment Process

1. Inventory of coastal monitoring activities and uses of data
2. Identification of potential RMS monitoring activities
3. Perspectives on RMS moving forward
4. Development of scoping framework
5. Refinement of monitoring activities
6. RMS components, protocols and recommendations
7. Redeveloped RMS

- Community interviews
- Advisory committee workshop
- Monitoring expert interviews

Workshop
Workshop

**Purpose:**

- Advisory committee review of scoping framework and monitoring activities identified
- Understand commonalities across Nations around monitoring activities of high relevance to the RMS
- Identify list of RMS monitoring activities around which to conduct additional research and develop monitoring recommendations
Workshop

Sessions:

• Visions for the RMS into the future
• Common motivations for, and interests in, monitoring across Nations
Workshop

Sessions:

• Visions for the RMS into the future
• Common motivations for, and interests in, monitoring across Nations
• Sub-groups to identify top ten monitoring activities
  – Both groups: Dungeness crab, Invasive species, Wildlife sightings, etc.
  – One group: Climate indicators, Herring, etc.
Redevelopment Process

- Community interviews
  - Inventory of coastal monitoring activities and uses of data
    - Identification of potential RMS monitoring activities
    - Perspectives on RMS moving forward
  - Perspective on RMS moving forward
  - Advisory committee workshop

- Monitoring expert interviews
  - Refinement of monitoring activities
  - RMS components, protocols and recommendations
  - Redeveloped RMS
Monitoring Cards

Each card:

- Description of monitoring activity, why important to Nations, and question(s) card is aimed at answering
- Indicators and metrics
- Decision-making and planning processes
- Methodology considerations
- Data analysis and reporting considerations
- Implications for stewardship office departments or programs
- Linkages to established programs and potential collaborators
- DMS considerations
- References
Redevelopment Process

Community interviews → Inventory of coastal monitoring activities and uses of data → Identification of potential RMS monitoring activities → Refinement of monitoring activities → RMS components, protocols and recommendations → Redeveloped RMS

Perspectives on RMS moving forward → Development of scoping framework

Advisory committee workshop

Monitoring expert interviews
Acknowledgements

- RMS Advisory Committee, including members of:
  - Haida Nation Stewardship Department
  - Metlakatla Stewardship Society
  - Kitasoo/Xai'xais Integrated Resource Authority
  - Heiltsuk Integrated Resource Management Department
  - Wuikinuxv Stewardship Office
  - Nuxalk Stewardship Office
  - Nanwakolas Tribal Council
- All who participated in interviews
- Coastal Stewardship Network staff
Thank you!

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