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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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Speaker
Erica Olson, Brendan Connors, Lara Hoshizaki, Jana Kotaska, Darcy Pickard, Marc Nelitz, Amy Groesbeck, Jordan Benner, Katherine Kellock, and Anton Pitts

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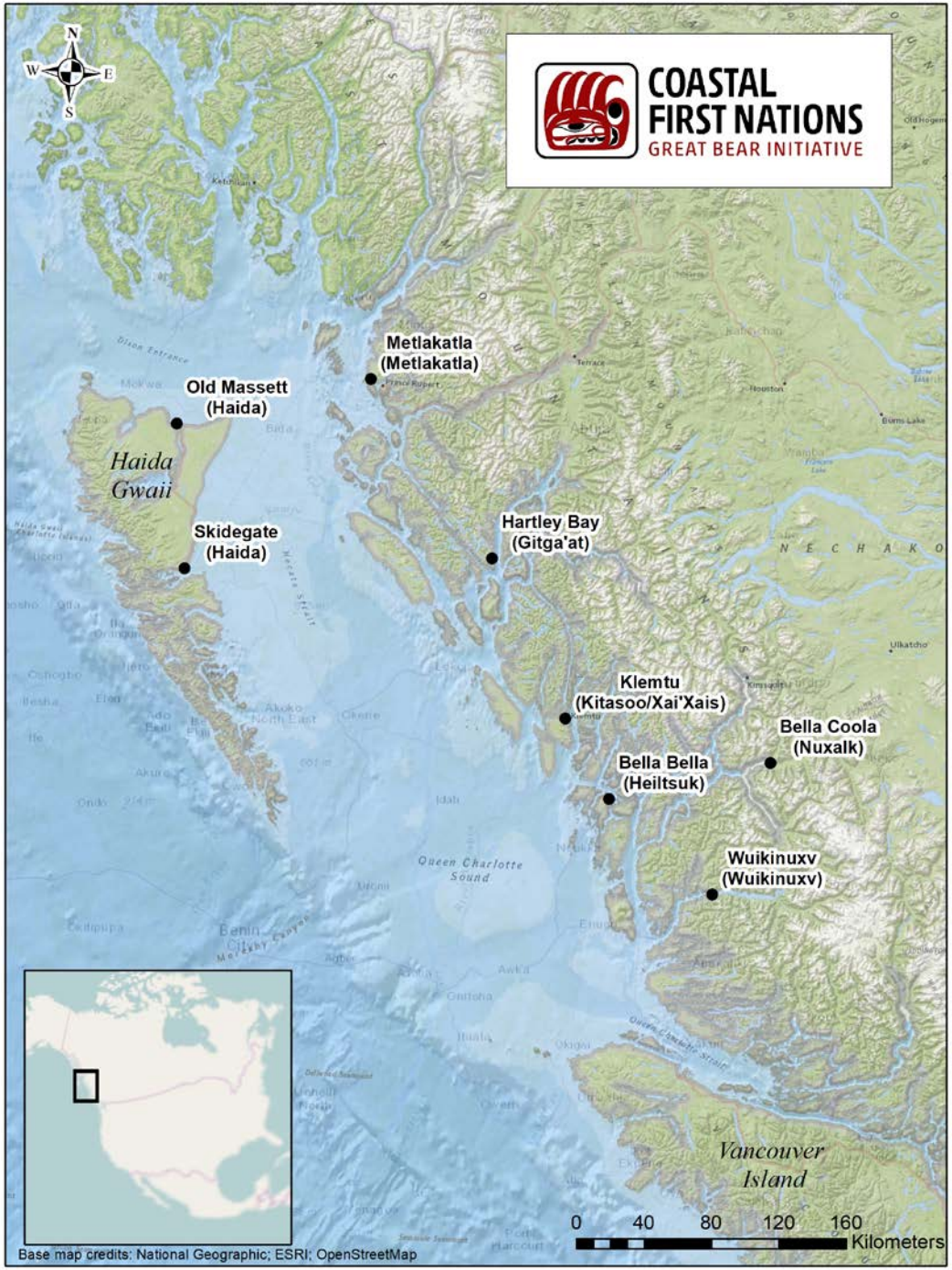
Designing Data Collection for Decision-Making:

Shaping the Coastal First Nations Regional Monitoring System to meet the needs of the Nations

Erica Olson
April 6, 2018

COASTAL FIRST NATIONS
GREAT BEAR INITIATIVE

ESSA


COASTAL FIRST NATIONS
GREAT BEAR INITIATIVE
N
W
E
S
Metlakatla (Metlakatla)
Old Massett (Haida)
Haida Gwaii
Skidegate (Haida)
Hartley Bay (Gitga'at)
Klemtu (Kitasoo/Xai'Xais)
Bella Coola (Nuxalk)
Bella Bella (Heiltsuk)
Wuikinuxv (Wuikinuxv)
Queen Charlotte Sound
Vancouver Island
0 40 80 120 160
Kilometers
Base map credits: National Geographic; ESRI; OpenStreetMap

REGIONAL MONITORING SYSTEM

GOALS

REGIONAL STANDARDIZED DATA COLLECTION

COLLABORATION BETWEEN NATIONS

GUARDIAN WATCHMEN CAPACITY, LEGITIMACY, AUTHORITY

ENGAGEMENT WITH RESOURCE USERS

EDUCATION & OUTREACH

COMPLIANCE MONITORING

DATA COLLECTION

DATABASE

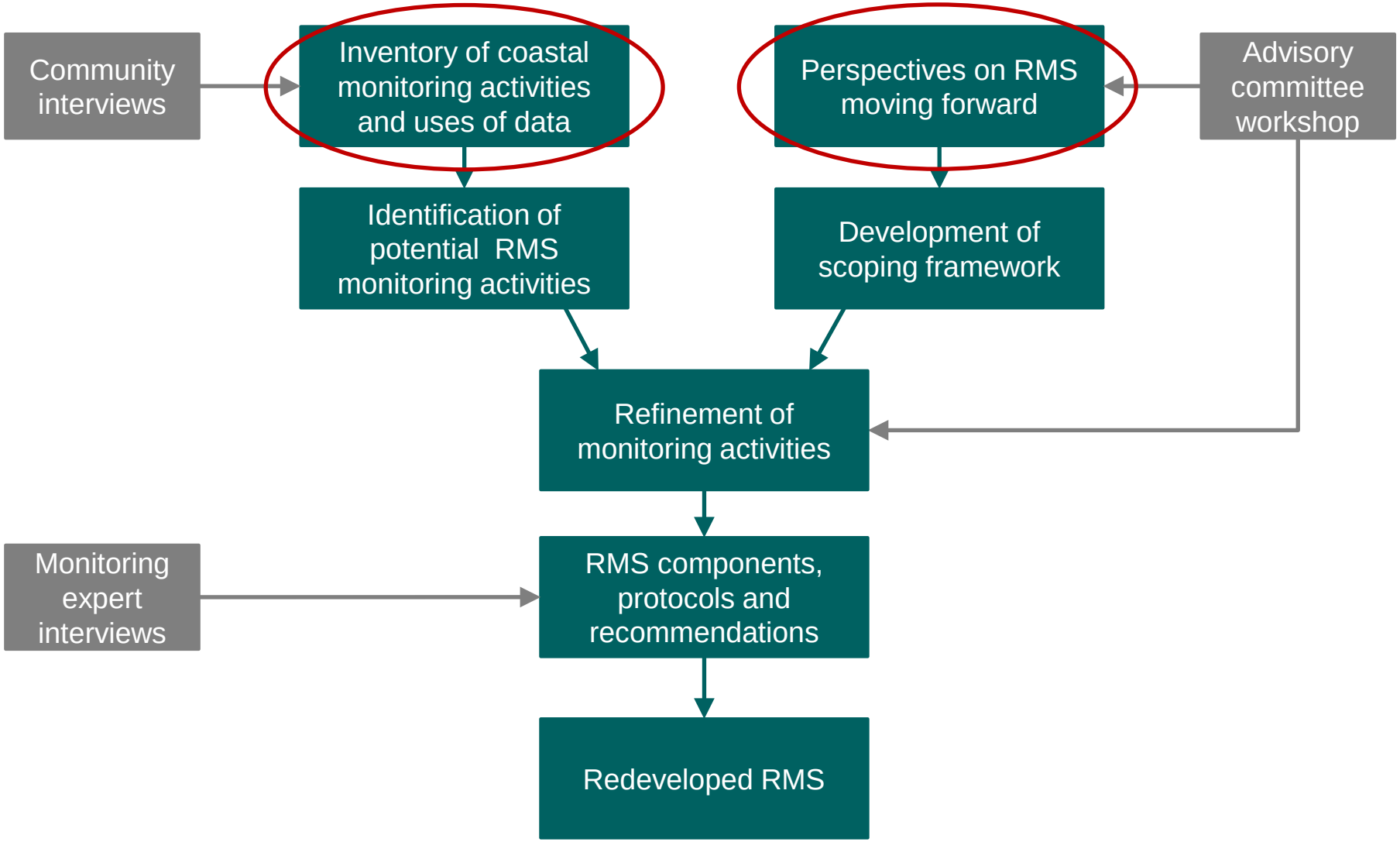
REGIONAL MONITORING SYSTEM

2013 – RMS evaluation

Recommendation: redevelop the RMS to ensure it meets the needs of the Nations at multiple scales

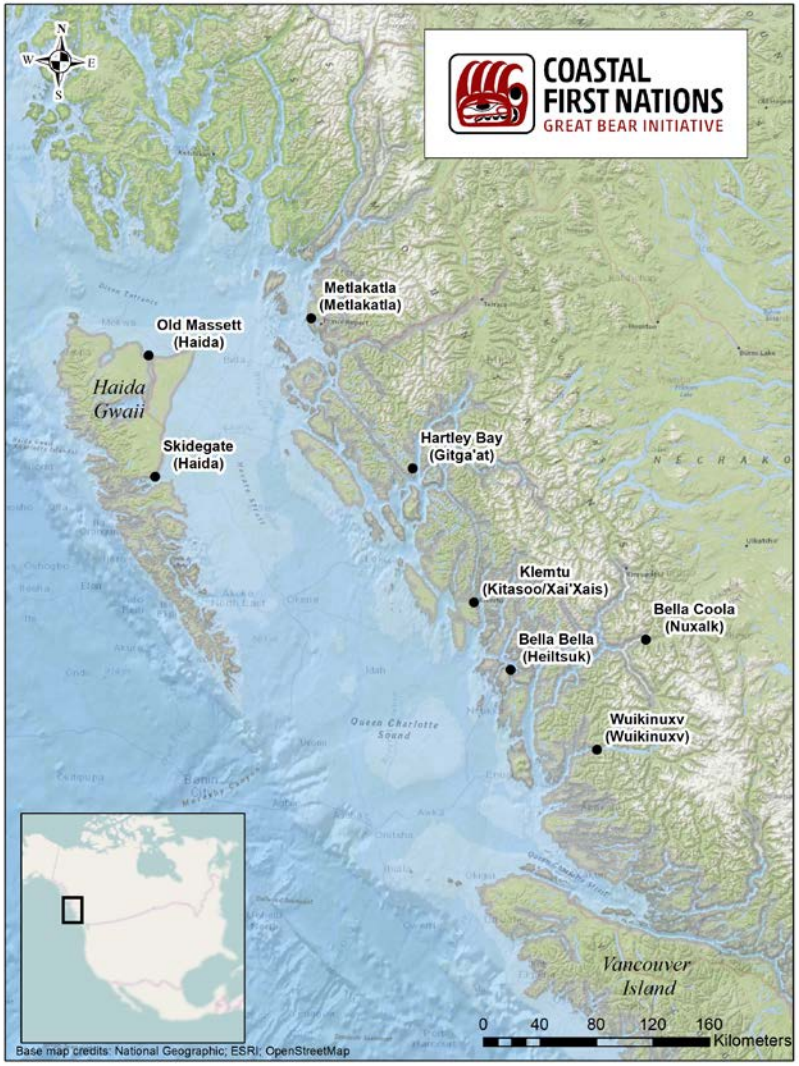
2015 – Began RMS redevelopment

RMS Redevelopment Process



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

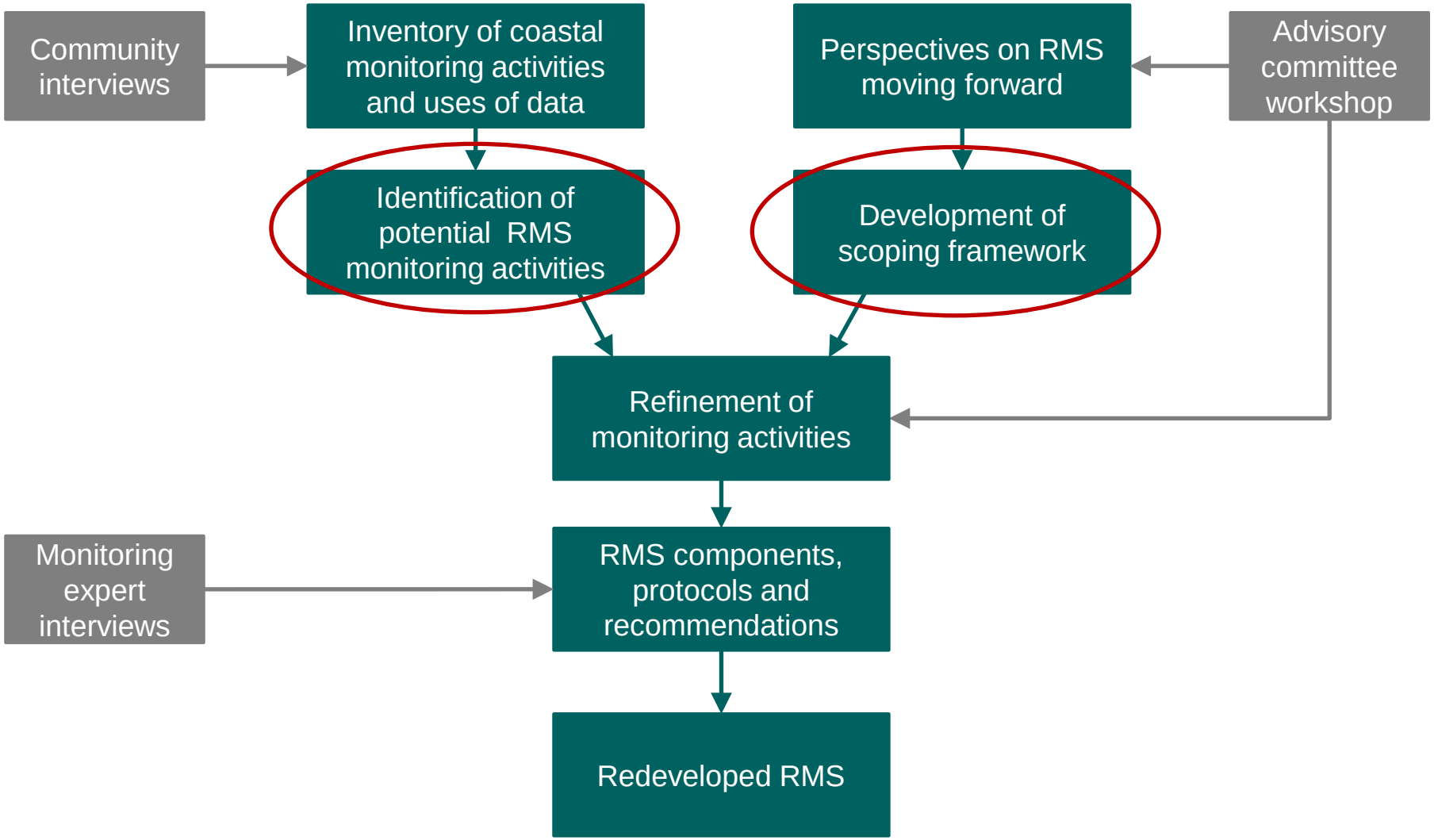
- Data type
- Why are data useful?
- Who wants data collected?
- Who collects data and how do they do it?
- Data collection protocols used
- Who uses data and how?
- Barriers to data collection
- Priority rank compared to other monitoring activities
- Ability to share data with other Nations

Inventory of coastal monitoring activities and uses of data

		Monitoring activity	Description of activity
Marine & Freshwater	Ecological Status		
	Human Use		
All	Ecological Status		
	Human Use		
Land	Ecological Status		
	Human Use		

- Valued components
- Decision-making processes

RMS Redevelopment Process



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

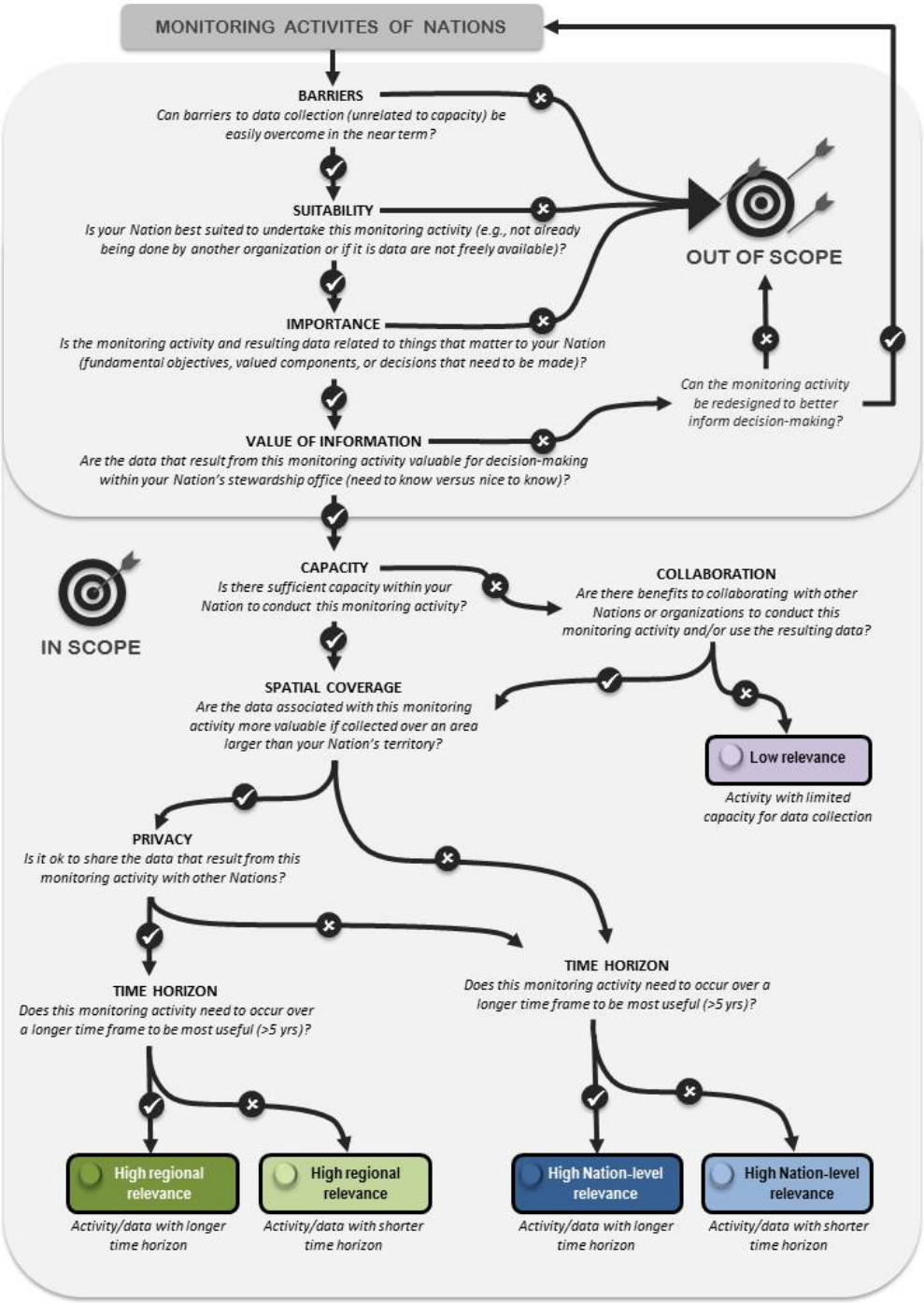
- Barriers
- Suitability
- Internal Capacity
- Collaboration

Scientific basis of information

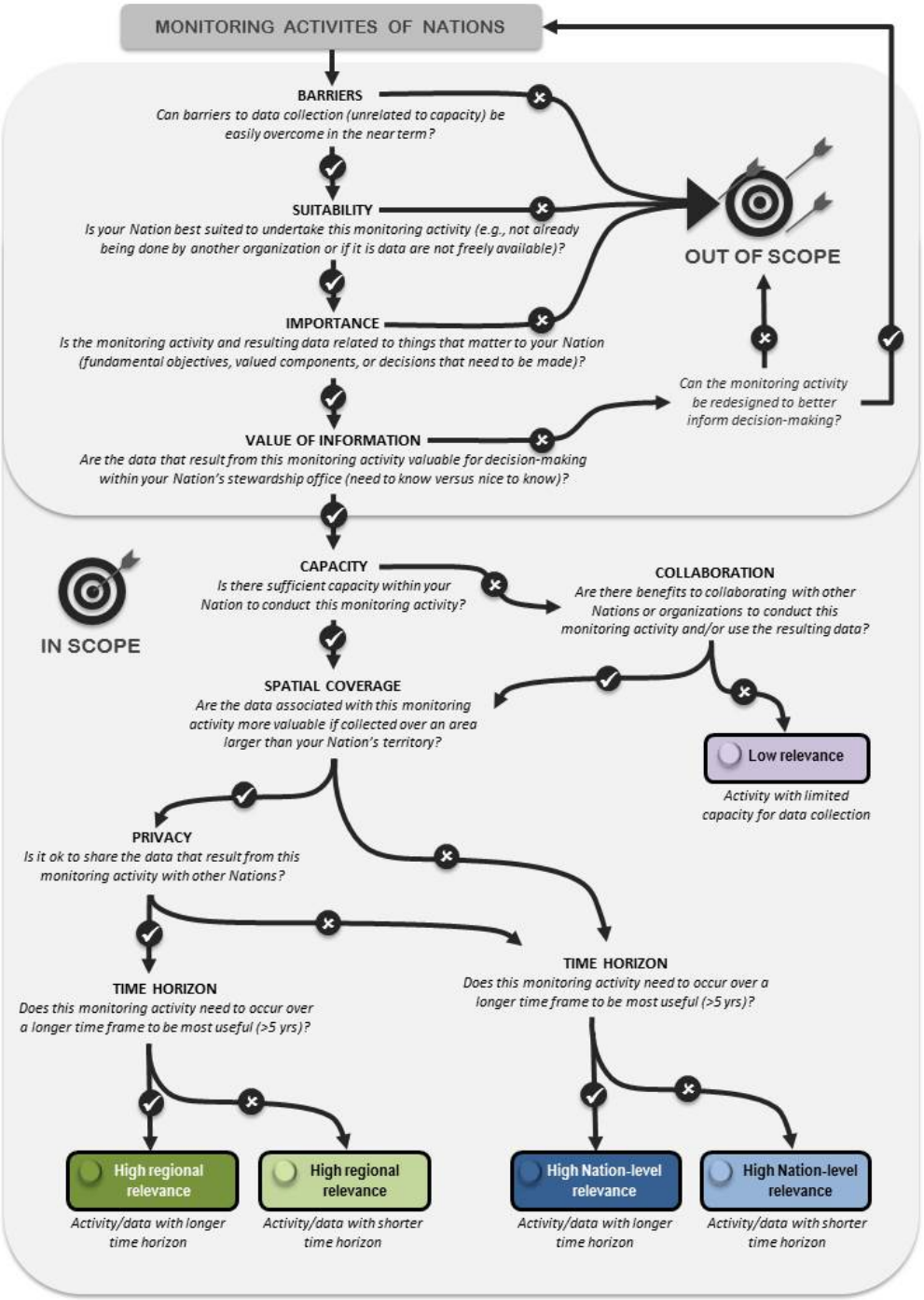
- Value of information

Relevance

- Importance
- Time horizon
- Spatial coverage


MONITORING ACTIVITES 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)?
OUT OF SCOPE
Can the monitoring activity be redesigned to better inform decision-making?
IN SCOPE
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?
Low relevance
Activity with limited capacity for data collection
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)?
TIME HORIZON
Does this monitoring activity need to occur over a longer time frame to be most useful (>5 yrs)?
High regional relevance
Activity/data with longer time horizon
High regional relevance
Activity/data with shorter time horizon
High Nation-level relevance
Activity/data with longer time horizon
High Nation-level relevance
Activity/data with shorter time horizon

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

Out of Scope

Low

High Regional

High Nation-level

Scoping Framework - Results

Across Nations:

In scope – high regional relevance

- All Nations
- Most Nations
- Some Nations

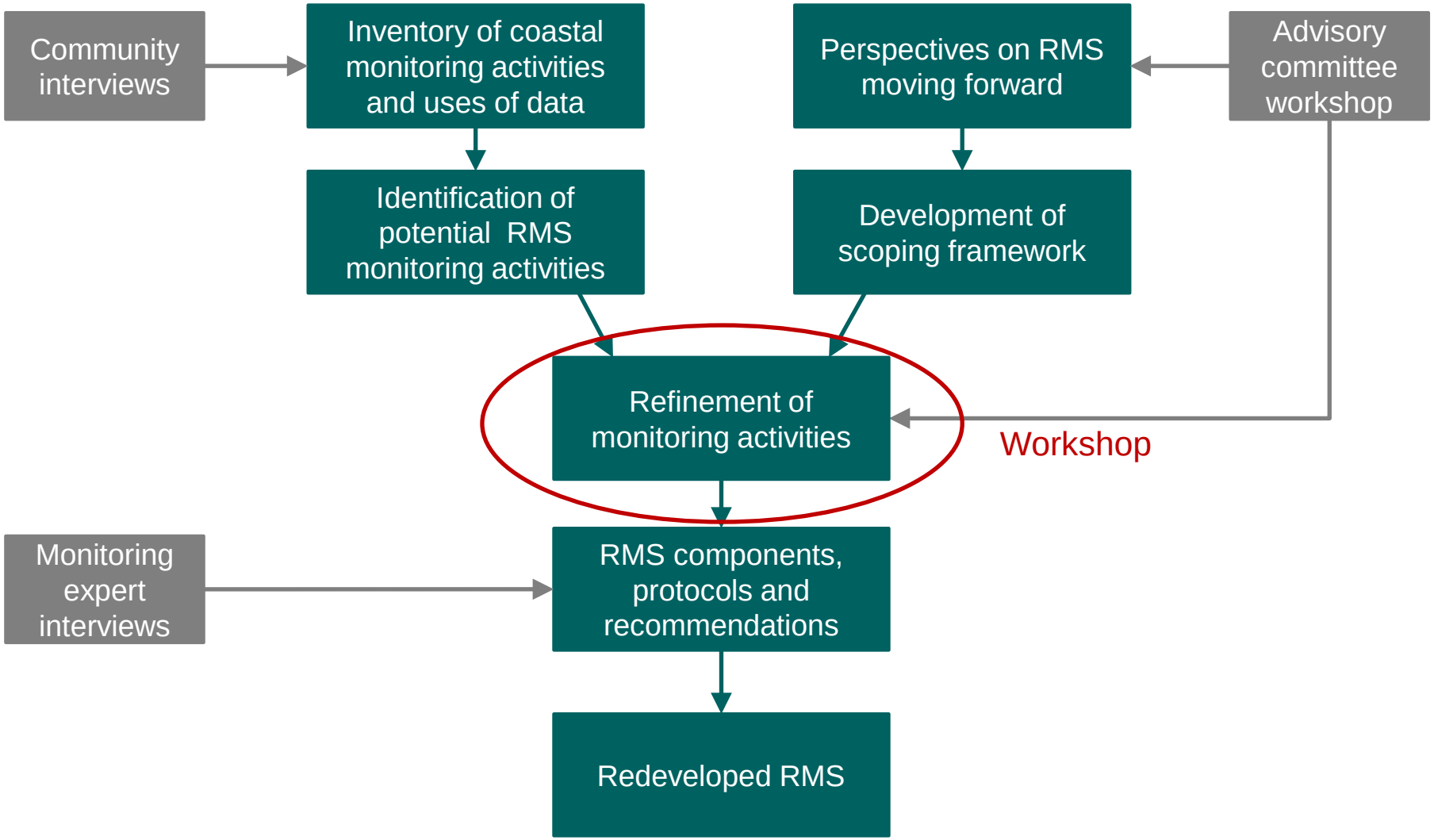
In scope – high Nation-level relevance

- All Nations
- Most Nations
- Some Nations

In scope – low relevance

- Most Nations
- Some Nations

RMS Redevelopment Process



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:

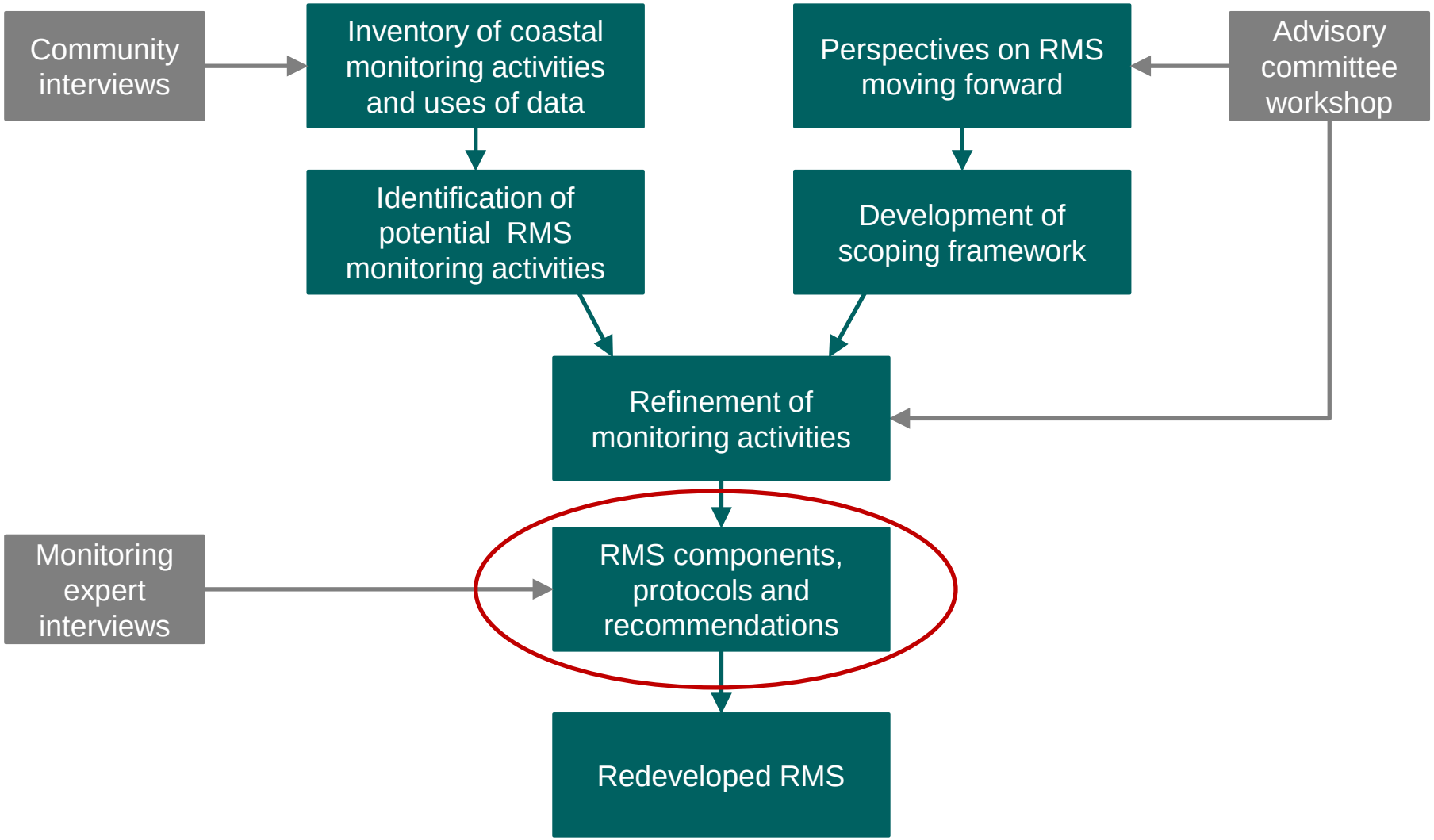
- Visions for the RMS into the future
- Common motivations for, and interests in, monitoring across Nations

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.

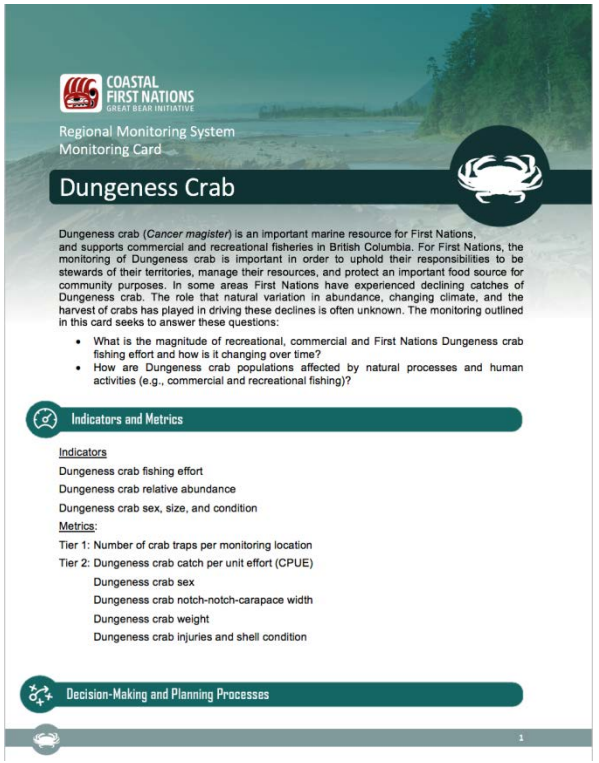
Redevelopment Process



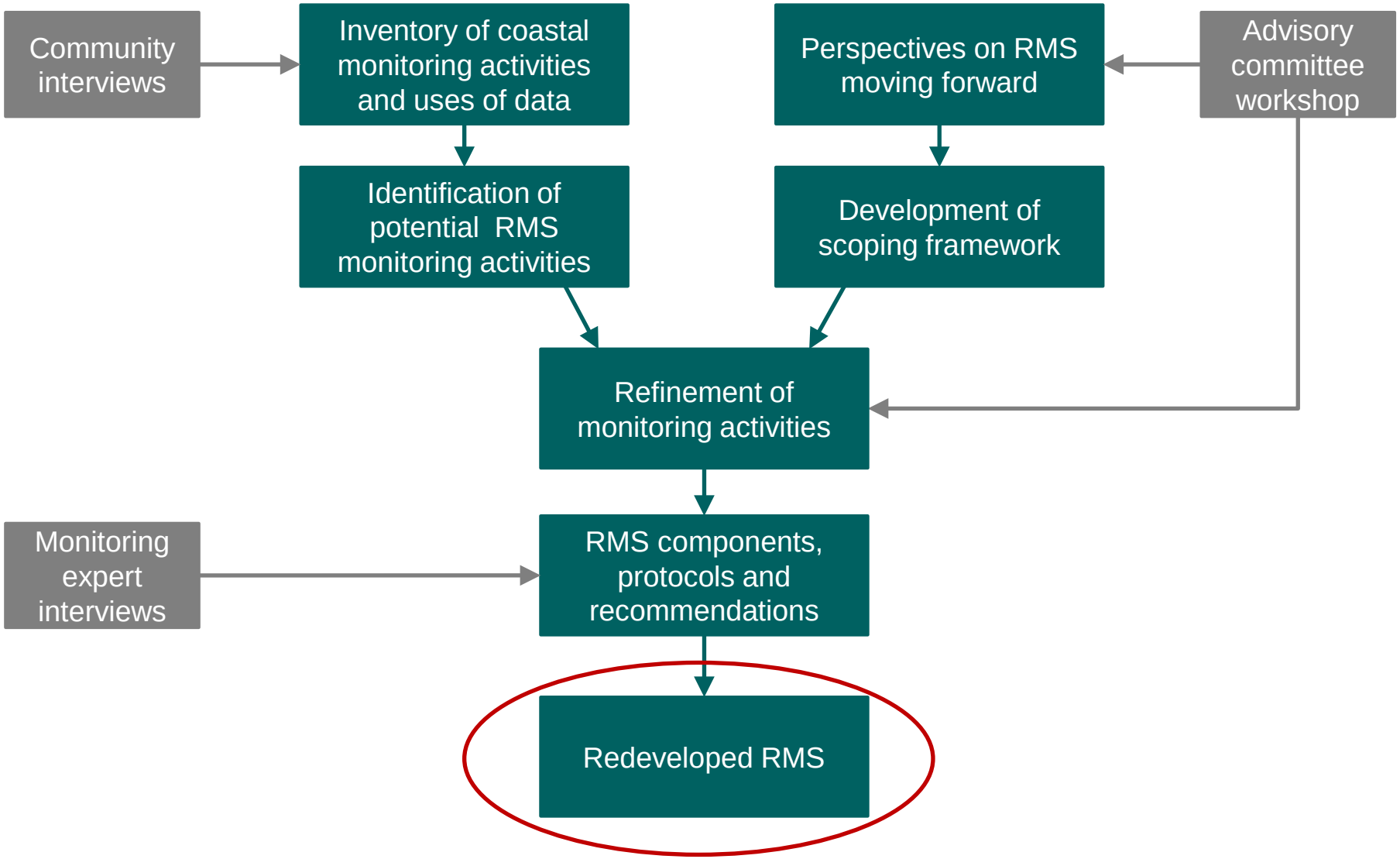
Monitoring Cards

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



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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