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**SUBMISSION TO THE
NUNAVUT WILDLIFE MANAGEMENT BOARD
AND NUNAVIK MARINE REGION WILDLIFE BOARD**

FOR

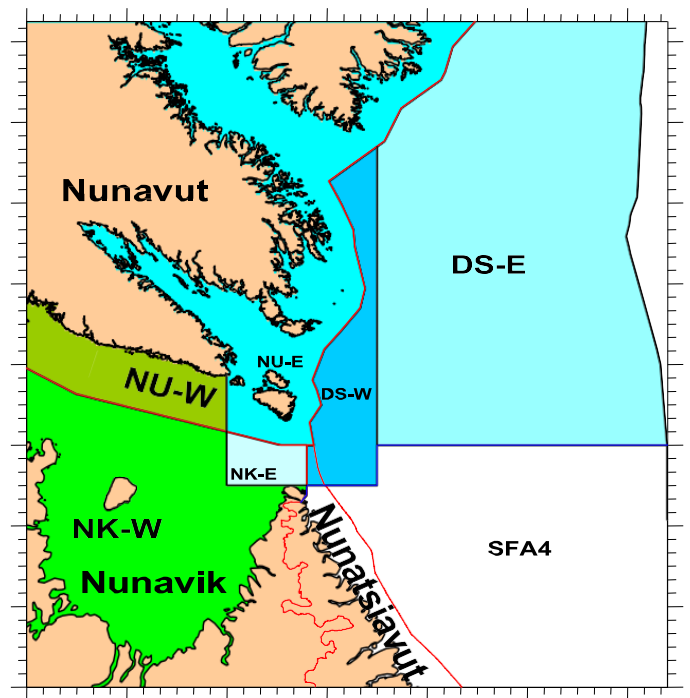
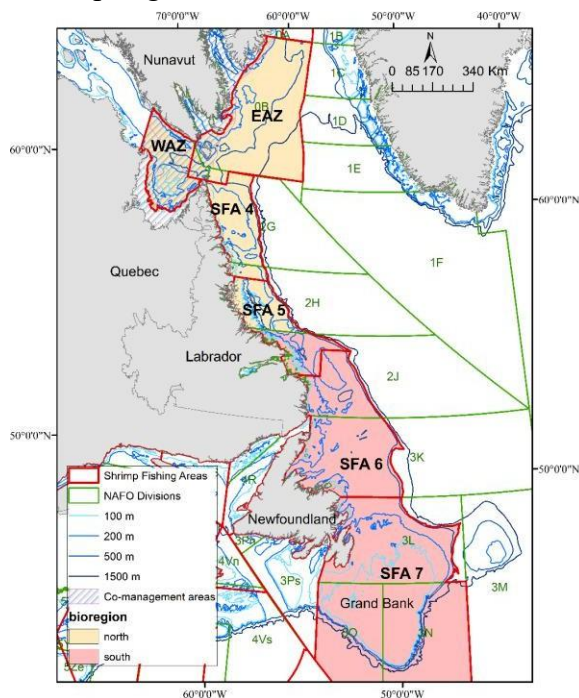
Information:

Decision: X

Recommendation: X

Issue: Precautionary Approach Framework for Northern shrimp (*Pandalus borealis*)

Map Left: Yellow – North Stock Assessment Region; Red – South Stock Assessment Region
Map Right: Blue – Eastern Assessment Zone; Green – Western Assessment Zone



Northern shrimp (*Pandalus borealis*)

Background

The Nunavut Wildlife Management Board and Nunavik Marine Region Wildlife Board (the Boards) previously approved Precautionary Approach Frameworks for Northern shrimp (*Pandalus borealis*) in the Western Assessment Zone and Eastern Assessment Zone in 2024. Since then, the Department of Fisheries and Oceans (DFO) has developed a new understanding of how Northern shrimp populations are structured. Rather than assessing Northern shrimp in the Eastern and Western Assessment Zones separately, since 2025 DFO considers them part of a larger biological population, namely the North Stock Assessment Region (map at Appendix 1), which also includes shrimp fishing area 4 and the northern portion of shrimp fishing area 5.

DFO has adopted a new scientific model that uses information from a wide variety of sources to provide an estimate of stock biomass, population growth, natural mortality and harvest rates in the North Stock Assessment Region (Appendix 2). Separate from the population model, a biomass index value is produced using the annual survey data for use in setting harvest levels. Together this information supports more robust and risk-based fisheries management, and is the basis of the proposed Precautionary Approach Framework.

The primary components of the Precautionary Approach Framework are: **Reference points** to define stock status zones (Healthy, Cautious and Critical) and **Harvest Decision Rules**.

The Limit Reference Point, which delineates the Cautious and Critical zones, as well as the proposed Upper Stock Reference point, delineating the Cautious and Healthy zones, are based on the new scientific model and were developed through a Canadian Science Advisory Secretariat peer review process led by DFO Science in 2024 (Appendix 2). The model will be updated every three years during a full stock assessment, which will update the stock status (whether the stock is placed in the Healthy, Cautious, or Critical Zone), Limit Reference Point, and proposed Upper Stock Reference point. The biomass index value, which is produced using survey data, will be updated every year and is used to determine total allowable catch based on the Harvest Decision Rule.

Since 2024, DFO, industry, Indigenous organizations, provincial governments, co-management partners, and technical experts worked together to develop a Management Strategy Evaluation process for Northern shrimp. This Management Strategy Evaluation tested different management options (Harvest Decision Rules) using computer simulations to identify approaches that best balance conservation of the stock and stable fishing opportunities for industry in the North Stock Assessment Region. The Management Strategy Evaluation framework and supporting science were peer-reviewed through the Canadian Science Advisory Secretariat in December 2025 (Appendix 3).

A new Harvest Decision Rule, to determine the harvest limit for the North Stock Assessment Region shrimp population, was endorsed by the Northern Shrimp Advisory Committee and

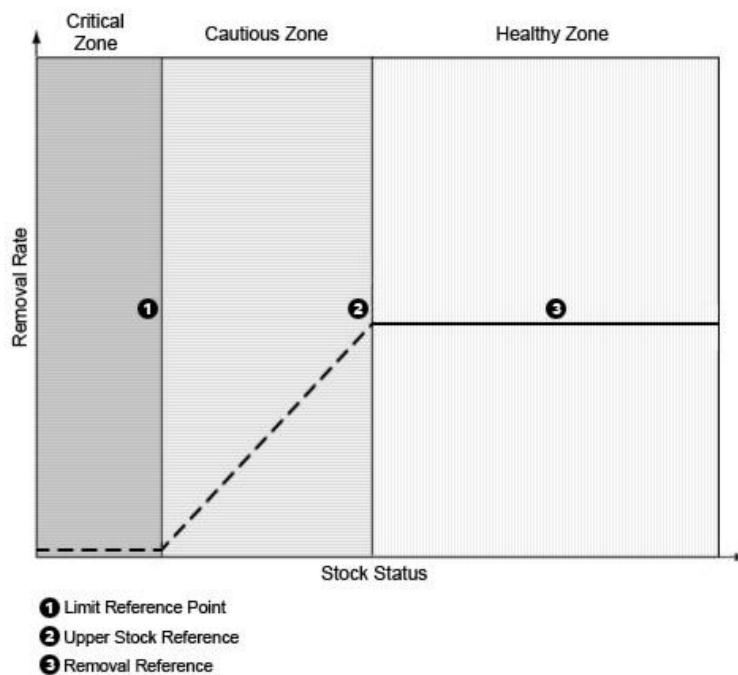
used to inform the 2026-27 total allowable catch levels for the other management areas in the North Stock Assessment Region, as well as DFO's recommendations to the Boards for decisions and recommendations on 2026-27 total allowable catch levels for the Eastern and Western Assessment Zones. The new Harvest Decision Rule will be formally reviewed in 2028 as part of the next full stock assessment.

The Boards' joint decisions and recommendations for the 2026-27 total allowable catches in the Eastern and Western Assessment Zones followed the Harvest Decision Rules previously approved in 2024, but encouraged DFO to submit a separate proposal for the approval of a new Precautionary Approach Framework. The purpose of this briefing note is to seek Board decisions and recommendations, as appropriate, to adopt a new Precautionary Approach Framework for Northern shrimp in the North Stock Assessment Region to guide fisheries management decision making, beginning in the 2027-28 fishing season.

Reference Points

The Limit Reference Point, which defines the boundary between the Cautious and Critical Zones, was established through the scientific peer-review process. The Upper Stock Reference, which defines the boundary between the Healthy and Cautious Zones, is a proposed reference point that is ultimately a management decision. A graphical depiction of the Precautionary Approach framework is shown in Figure 1.

Figure 1. Illustrative example of reference points and stock status zones of the Precautionary Approach framework.



The previous stock assessment frameworks for Northern Shrimp in the Eastern and Western Assessment Zone management areas were based on a biomass index for each management area, which represented only a portion of the absolute biomass of each stock at a single point in time. Under the new stock assessment framework, the scientific model provides an estimate (not an index) of the shrimp population size that scientists believe can support the largest long-term sustainable fishery (see Appendix 2 for more details). This estimated value, referred to as the “biomass target”, is based on biological factors including shrimp growth, reproduction, and natural mortality, and is used to calculate the reference points.

Shrimp biomass in the North Stock Assessment Region has never been observed at levels as low as the newly established Limit Reference Point. As a result, there is uncertainty about how the stock would respond if it declined into the Critical Zone or how quickly it could recover. To account for this uncertainty, and because shrimp are an important food source for many marine species, the Limit Reference Point was set at 50% of the biomass target. Setting the Limit Reference Point at the 50% level provides an additional conservation buffer than the commonly used default of 40% of the biomass target (Table 1). The proposed USR at 80% of the biomass target (Table 1) is intended to trigger management action earlier if the stock begins to decline. Unlike fixed biomass numbers that were part of the previous Precautionary Approach Frameworks for the Eastern and Western Assessment Zones, the reference points for the North Stock Assessment Region may change following each full stock assessment because they are recalculated using the newest scientific information and a new estimate of the biomass target. Additional details on reference points are provide in the peer reviewed Science Advisory Report in Appendix 2.

Table 1. Reference points for *Pandalus borealis* in the North Stock Assessment Region.

Reference Point	Description
Limit Reference Point	50% of the biomass target
Upper Stock Reference	<i>Proposed</i> at 80% of the biomass target

Harvest Decision Rules

The Harvest Decision Rule uses the biomass index produced from the annual survey data and control points (upper and lower) to determine how much shrimp can be harvested in the North Stock Assessment Region each year. Reference points (and stock status) can only be compared to the full stock biomass from the scientific model, while control points can be compared to the annual biomass index. Control points are linked to the reference points and are estimated during the full assessment every three years. Being above the upper control point functions similar to being in the Healthy Zone, between the upper and lower control points is similar to the Cautious Zone, and below the lower control point is similar to the Critical Zone. The biomass index and placement relative to the control points is calculated every year.

Between 2024 and 2026, DFO, industry, Indigenous organizations, co-management partners, provincial governments, and technical experts tested various Harvest Decision Rules for the

North Stock Assessment Region through a Management Strategy Evaluation process. The objective was to identify an approach that balances conservation with stable fishing opportunities.

The recommended Harvest Decision Rule is based on the previously used 2-step Harvest Decision Rule, previously approved by the Boards in 2024, with some additional elements. The recommended HDR uses:

- a target harvest rate of 20% when the stock is above the upper control point;
- lower harvest rates if stock conditions decline;
- a maximum annual change of 25% to the total allowable catch; and
- a four-year phase-in period (from 2026-27 to 2029-30).

The maximum annual change of 25% of the total allowable catch is a limit of 25% that prevents sudden changes in total allowable catches. It provides greater stability for industry while still allowing management to respond to changes in stock conditions given that the stock can fluctuate from year to year. Without limits in place, year-to-year total allowable catches could increase or decrease sharply, creating uncertainty for harvesters, processors, and communities.

The four-year phase-in period is intended to gradually transition the fishery from the old approach to the new one given that the new harvest decision rule uses a different stock assessment model. This avoids abrupt changes in total allowable catches that could occur when moving to a new management system and allows participants time to adjust. The phase-in does not change the long-term outcome, but provides a more gradual and predictable transition, which would result in full implementation of the proposed harvest decision rule starting in 2030.

The four year phase-in and 25% limit on changes to total allowable catches are additional safeguards that were not included in the previous Harvest Decision Rule. A detailed explanation and example of how the Harvest Decision Rule works is provided in Appendix 4.

Consultation

The proposed Precautionary Approach framework was developed through extensive collaboration with representatives from DFO, industry, Indigenous organizations, provincial governments, co-management boards, and technical experts from 2024 to 2026. Staff from both Boards attended key discussions. Nunavut and Nunavik industry (and/or representatives thereof) participated in both consultation opportunities.

In January and March 2026, the Northern Shrimp Advisory Committee reviewed the proposed Upper Stock Reference point and the Harvest Decision Rule for the North Stock Assessment Region, endorsing the following:

- the proposed Upper Stock Reference at 80% of the biomass target;
- the harvest decision rule with a 20% harvest rate 25% maximum annual TAC change, and a four-year phase-in period.

A summary of discussion is at Appendix 5

The Harvest Decision Rule for the North Stock Assessment Region that was endorsed by the Northern Shrimp Advisory Committee uses a harvest rate above maximum sustainable yield. Science advice indicated that a lower harvest rate would be consistent with maximum sustainable yield and would reduce the risk of the stock entering the Cautious or Critical Zones. However, participants concluded that the selected approach represented an acceptable balance between conservation objectives, harvesting opportunities, and economic stability.

As part of Management Strategy Evaluation implementation, DFO will develop a protocol to define conditions under which the Management Strategy Evaluation approach may no longer be appropriate. In addition, the performance of the selected Harvest Decision Rule will be formally reviewed in 2028 to evaluate how well the Harvest Decision Rule is meeting conservation, yield, and stability considerations.

Recommendation

DFO recommends that the Boards adopt the Precautionary Approach Framework presented herein for Northern shrimp in the North Stock Assessment Region. Adoption of this Precautionary Approach Framework constitutes an amendment to the Integrated Fisheries Management Plan, and would include adoption of the reference points and the Harvest Decision Rule for Northern shrimp in the North Stock Assessment Region:

- Limit Reference Point at 50% of the biomass target;
- proposed Upper Stock Reference at 80% of the biomass target; and,
- Harvest Decision Rule with a 20% harvest rate, 25% maximum annual change in total allowable catch, and a four-year phase-in period.

Summary of the Request

DFO is seeking from the Boards:

1. Decisions to adopt the proposed Precautionary Approach Framework for Northern shrimp in the Nunavut/Nunavik East and Nunavut/Nunavik West management units within the Nunavut Settlement Area and Nunavik Marine Region, respectively.
2. Recommendations to adopt the proposed Precautionary Approach Framework for Northern shrimp in waters adjacent to the Nunavut Settlement Area and Nunavik Marine Region.

DFO recognizes that the Precautionary Approach Framework(s) serves to guide fisheries management decision making using a precautionary approach, and that Minister and co-management partner discretion would remain in annual decision making (e.g. setting of Total Allowable Catch levels).

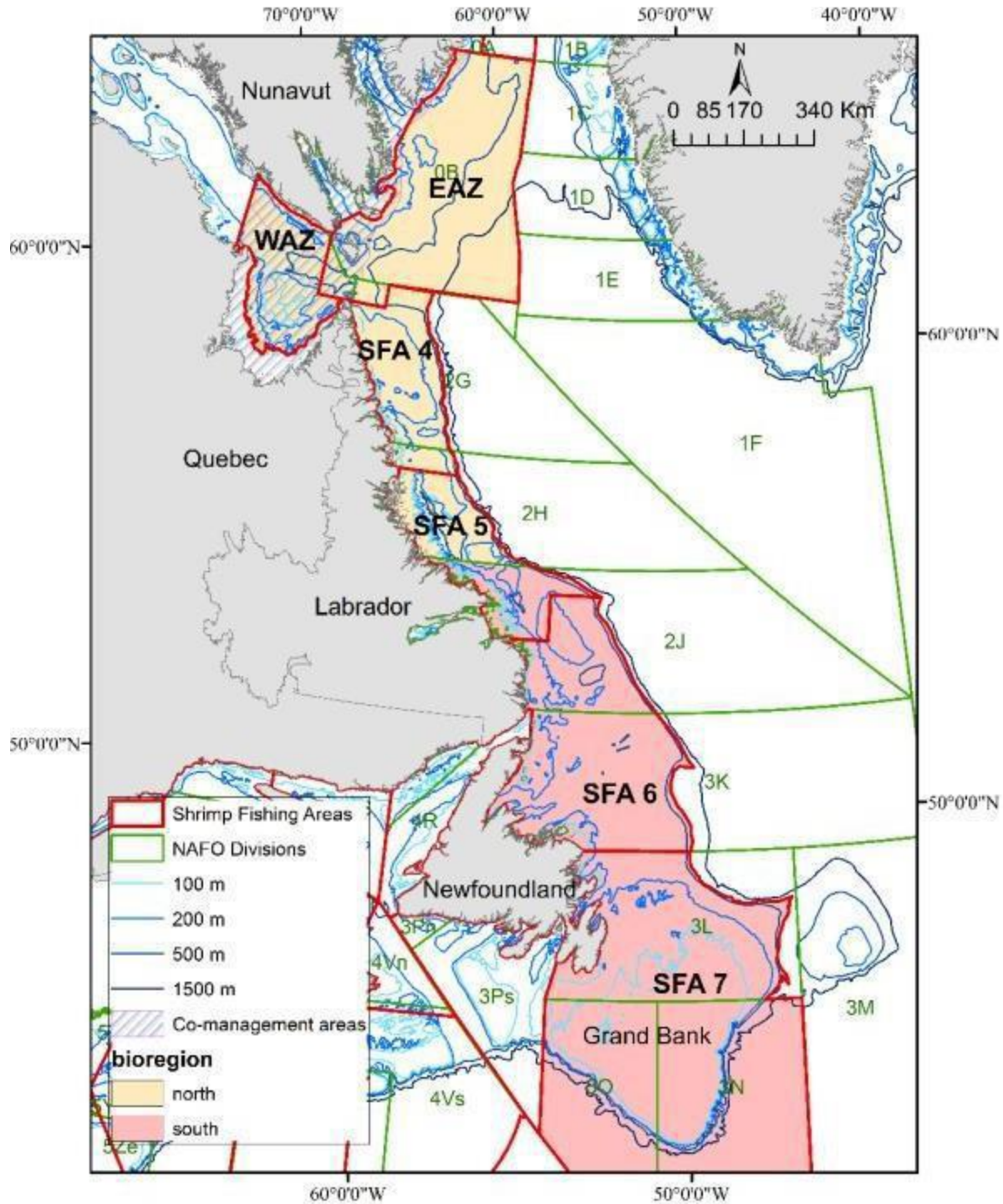
Prepared by: Liliya Baranova, Fisheries Resource Management, Fisheries and Oceans Canada

Date: September 16, 2026

Appendix 1

Map of the North and South Stock Assessment Regions

Yellow – North Stock Assessment Region; Red – South Stock Assessment Region





Fisheries and Oceans
Canada

Pêches et Océans
Canada

Ecosystems and
Oceans Science

Sciences des écosystèmes
et des océans

Newfoundland and Labrador Region
Arctic Region

Canadian Science Advisory Secretariat
Science Advisory Report 2026/033

DEVELOPMENT OF A PRECAUTIONARY APPROACH FRAMEWORK FOR NORTHERN SHRIMP (*PANDALUS BOREALIS*) IN SHRIMP FISHING AREAS 4–7, EASTERN ASSESSMENT ZONE, AND WESTERN ASSESSMENT ZONE



Northern Shrimp (Pandalus borealis; Fisheries and Oceans Canada [DFO]).

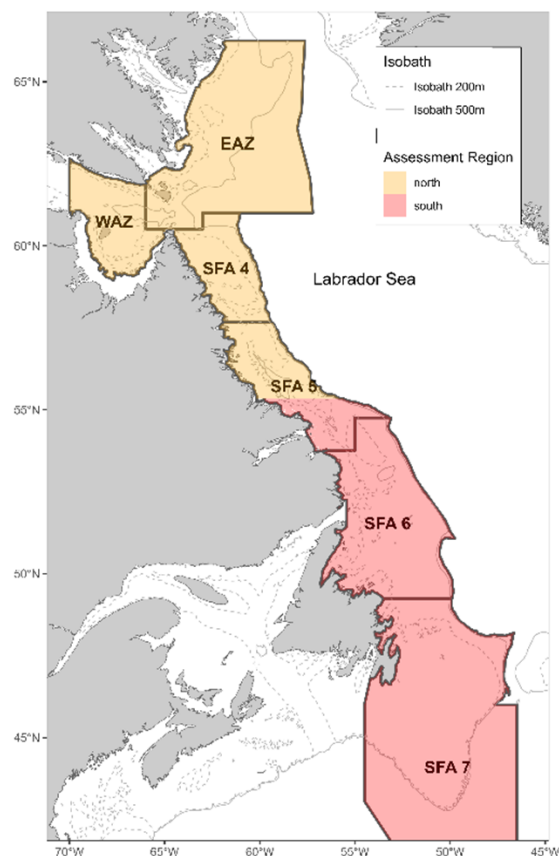


Figure 1. Map showing six current shrimp fishing areas (SFAs) (Eastern Assessment Zone [EAZ], Western Assessment Zone [WAZ], SFAs 4–7) and two new stock assessment regions (north and south) used in the assessment framework.

CONTEXT

It is recognized that Northern Shrimp (*Pandalus borealis*) are distributed broadly over the Northwest Atlantic Ocean, including Shrimp Fishing Areas (SFAs) 4–7, Eastern Assessment

Zone (EAZ) and Western Assessment Zone (WAZ), and that these areas are connected through larval dispersal. For each SFA and assessment zone, stock advice has been based on qualitative evaluations of biomass indices in relation to historical levels and provided in the context of the Precautionary Approach (PA) Framework. However, the biological population is recognized to be distributed over a larger region than the management scale. A population model is needed to align the assessment with the biological population and incorporate environmental and ecosystem understanding into the assessment. Development of a population assessment model for Northern Shrimp facilitates quantitative risk-based science advice, allowing fisheries managers to consider projected changes in stock abundance and yield under alternative management measures considered in the decision-making process. A population assessment model and revised limit reference points (LRPs) also inform future work to update the PA Frameworks in place for Northern Shrimp in SFAs 4–7, EAZ, and WAZ, including harvest decision rules and upper stock reference points (USRs).

For this reason, a multi-regional (Arctic and Newfoundland & Labrador regions) PA Framework meeting was required to peer-review a population model for Northern Shrimp, incorporating information from the species' broader geographic range within current management areas of the EAZ, WAZ, and SFAs 4–7.

This Science Advisory Report is from the multi-regional peer review of December 9–13, 2024, on the Development of a Precautionary Approach Framework for Northern Shrimp (*Pandalus borealis*) in Shrimp Fishing Areas 4–7, Eastern Assessment Zone, and Western Assessment Zone. Additional publications from this meeting will be posted on the [Fisheries and Oceans Canada \(DFO\) Science Advisory Schedule](#) as they become available.

SUMMARY

- A new understanding of Northern Shrimp population structure, based upon their distribution, dispersal, and life history traits, was adopted. Therefore, the spatial scale of assessment for Northern Shrimp has changed from six to two stock assessment regions (SAR) - North (NSAR) and South (SSAR) - divided by the boundary between Northwest Atlantic Fisheries Organization (NAFO) Divisions 2H and 2J.
- A Bayesian size-structured stock assessment modeling framework was adopted that incorporates fishery and biomass indices from spatiotemporal modeling and size composition to estimate trends in Northern Shrimp biomass, recruitment, natural mortality rates, and exploitation rates for each stock assessment region.
- Model results highlight groundfish predation as an important driver of Northern Shrimp natural mortality in the SSAR, but the role of predation as a driver of population dynamics in the NSAR is unclear. Predation effects are currently represented in the model via time-varying natural mortality.
- A biomass at maximum sustainable yield (B_{msy}) proxy value for each stock assessment region was calculated as 40% of unfished biomass (i.e., $B_{msy-proxy} = B_0 \times 0.4$).
- A Limit Reference Point (LRP) for each stock assessment region was adopted as $0.5 \times B_{msy-proxy}$.
- An Upper Stock Reference point (USR) of 80% of the $B_{msy-proxy}$ was recommended for each stock assessment region.
- Reference point calculations reflect estimated natural mortality and sex-transition rates from the most recent eight years (i.e., approximately one Northern Shrimp generation).

INTRODUCTION

Northern Shrimp (*Pandalus borealis*) are distributed broadly over the Northwest Atlantic Ocean, including Shrimp Fishing Areas (SFAs; Figure 1) 4–7, the Eastern Assessment Zone (EAZ) and the Western Assessment Zone (WAZ), and these areas are connected through larval dispersal. For each SFA and assessment zone, stock advice has historically been based on qualitative evaluations of biomass indices in relation to historic levels and provided in the context of the Precautionary Approach (PA) Framework (DFO 2024a, 2024b, 2024c, NAFO 2024). However, the biological population is recognized to be larger than the management scale (Baker et al. 2025). To align the assessment with the biological population and facilitate incorporation of environmental and ecosystem variables into the assessment, a population model is needed. Development of a stock assessment model for Northern Shrimp will facilitate provision of risk-based science advice, allowing fisheries managers to consider projected changes in stock abundance and the potential impacts of various management measures in the decision-making process.

For this reason, a multi-regional (DFO's Arctic and Newfoundland & Labrador Regions) PA Framework meeting was held to peer-review a population model for Northern Shrimp that encompasses the current management areas of the EAZ, WAZ, and SFAs 4–7, and incorporates information from the species' broader geographic range.

ANALYSIS

New stock structure

Northern Shrimp has been managed as a series of separate stocks with the general assumption that each stock is supported by local recruitment with an unknown level of connectivity between areas. The magnitude of movement or connectivity between areas was unquantified, but recognized as a significant source of uncertainty in stock assessments (e.g., DFO 2024a). Misalignment between the biological population and assessment and management processes creates unquantified uncertainty which increases the risk associated with management decisions.

To address this ongoing source of uncertainty, spatiotemporal models were used to identify patterns in stock structure, specifically patterns in population density, sex ratio, and female length (Baker et al. 2025). These results were combined with recent genomic and larval dispersal data to quantify Northern Shrimp population structure across SFAs 4–7, the EAZ and the WAZ. Two data clusters were identified throughout the time series, which separated Northern Shrimp into North and South stock assessment areas (NSAR and SSAR). The results were presented as a foundation for developing a new Northern Shrimp stock assessment framework for two stock assessment regions (NSAR and SSAR) to replace the current matrix of six assessment areas (SFAs 4–7, the EAZ and the WAZ). The two regions are divided by the line located at the boundary between Northwest Atlantic Fisheries Organization (NAFO) Divisions 2H and 2J.

Ecosystem Information

Northern Shrimp is a forage species that is consumed by Atlantic Cod (*Gadus morhua*), Greenland Halibut (*Reinhardtius hippoglossoides*), redfish (*Sebastes* spp.), and other fishes, birds, and marine mammals. Dramatic changes (regime shifts) in marine ecosystems and communities (Koen-Alonso and Cuff 2018) have altered predator-prey dynamics, with the Newfoundland and Labrador marine community changing from a groundfish-dominated

community to a shellfish-dominated community in the 1990s. Ecosystem productivity has also changed over time; the Northern Shrimp population, particularly in the SSAR, has recently been transitioning to having lower recruitment and/or higher mortality in response to changes in the ecosystem.

To incorporate the effects of predation into Northern Shrimp stock assessments, diet data from predators caught during DFO research vessel surveys, including Atlantic Cod and Greenland Halibut, were examined. Atlantic Cod and Greenland Halibut diet appeared to reliably track Northern Shrimp biomass, with Atlantic Cod showing a better fit.

New model

A new population model for Northern Shrimp was reviewed. The new population model incorporated information from the species' broader geographic range, adopting the NSAR and SSAR identified through recent spatiotemporal and genomic analyses (Baker et al. 2025) in place of the six current assessment areas (SFAs 4–7, EAZ, and WAZ). A size-structured population model was developed using the Spatially Integrated Statistical Catch at Length/Size (SISCALS) model. SISCALS computes growth, survival, and sex transition and other characteristics on a quarterly time step (i.e., four times per year). The effect of incorporating quarterly or annual sex transitions was explored but there was little difference in results between the two model configurations; therefore, sex transition only occurred once each year in the 4th quarter in the final model. Recruitment also occurred in a single quarter each year. Considering diet analysis results, predation effects were incorporated into the model by adding time-varying natural mortality.

The stock assessment model was designed to:

1. Estimate biomass, fishing mortality, natural mortality, growth, and recruitment for NSAR and SSAR, subject to the assumed structure for population dynamics and observation models;
2. Derive model-based reference points from alternative spawning potential ratio (SPR) options;
3. Establish Bayesian posterior probability distributions of current stock status with respect to SPR reference points;
4. Explore possible ecosystem drivers (e.g., predation, growth) of changes in productivity;
5. Establish a framework for testing harvest strategies and decision rules.

The model review included discussions of the relationship between model estimated biomass and biomass indices from surveys, shrimp growth, natural mortality, recruitment, larval dispersal, fishery-derived catch-per-unit-effort, and the male to female sex transition. Examining the model goodness of fit results, SISCALS successfully captured large-scale variations in stock biomass, particularly in the SSAR. Posterior plots of model parameters showed good model performance. The Atlantic Cod diet index was compared to model outcomes; the results overlapped fairly well, with evidence of a time lag in the trend residuals.

The SISCALS model estimated a high survey catchability in the NSAR, meaning that the spatiotemporal model survey index is potentially a positively biased estimate of shrimp abundance. This raised some concerns, as biased survey catchability could affect Science advice regarding harvest levels. After discussion, the conclusion was that the model interprets the trend in biomass in response to the catch and that catchability just scales the survey index to the underlying model biomass in order to compute the likelihood. The catch and survey trend, therefore, determine the productivity of the stock, not catchability. Therefore, overestimating

catchability would not affect the estimate of productivity. Nevertheless, there was also consensus to investigate the cause of the high catchability estimates as part of future research.

The model results were used to assess stock trends in each stock assessment region. Northern Shrimp biomass in the NSAR has been declining, the exploitation rate has been increasing, and fewer shrimp have been surviving to transition into females, which has reduced the spawning stock biomass. Biomass has also declined in the SSAR with a higher exploitation rate, low recent recruitment, and an increasing trend in natural mortality (although stable recently). In the SSAR, natural mortality was highly correlated with Atlantic Cod and redfish separately modelled biomass.

Reference points

Spawning Potential Ratio (SPR) was used to establish a B_{msy} -proxy and PA Framework reference points. Spawning Potential Ratio (SPR) represents the fraction of unfished spawning stock biomass (SSB) that is assumed to coincide with B_{msy} . A B_{msy} -proxy value for each SAR was calculated as 40% of unfished biomass (i.e., $B_{msy}\text{-proxy} = 0.4B_0$). A LRP for each stock assessment region was adopted as $0.5B_{msy}\text{-proxy}$; in determining an appropriate level for the LRP there was notable consideration of the biological capacity for Northern Shrimp population growth, tempered by the importance of Northern Shrimp as a forage species that directly supports key predators (i.e., Atlantic Cod, Greenland Halibut, redfish, marine mammals, seabirds) and is important for overall ecosystem health. An USR point of 80% of the B_{msy} -proxy was recommended for each SAR. Reference point calculations reflect estimated natural mortality and sex-transition rates from the most recent eight years (Expected to be approximately one Northern Shrimp generation).

Sources of Uncertainty

- Immigration of recruits from areas adjacent to the NSAR (e.g., SFAs 0 and 1, inshore waters within the Nunavut Settlement Area, West Greenland). Inclusion of “drift” in the model considers movement of shrimp from the NSAR to the SSAR but presently there is no direct inclusion of external inputs to the NSAR.
- Length frequencies are not standardized via the same spatiotemporal model as survey biomass indices.
- Predation by Atlantic Cod, Greenland Halibut, and redfish was considered during model development but ultimately there was concern that inclusion of predation requires a better understanding of the form of the relationship between predation and mortality (i.e., linear or functional response). The effect of predation on mortality needs to be further examined and should expand to include consideration of predation by marine mammals, seabirds and other fish species (e.g., grenadiers).
- Shrimp growth and mortality rates in the NSAR.
- Need to determine at what population level serious harm occurs to the stock. Data at present do not allow an analytical determination. This information is needed to develop a more informed LRP.

CONCLUSION

- A new understanding of Northern Shrimp population structure, based upon their distribution, dispersal, and life history traits, was adopted. Therefore, the spatial scale of assessment for

Northern Shrimp has changed from six to two stock assessment regions – NSAR and SSAR - divided by the boundary between NAFO Divisions 2H and 2J.

- A Bayesian size-structured stock assessment modeling framework was adopted that incorporates fishery and biomass indices from spatiotemporal modeling and size composition to estimate trends in Northern Shrimp biomass, recruitment, natural mortality rates, and exploitation rates for each SAR.
- Model results highlight groundfish predation as an important driver of Northern Shrimp natural mortality in the SSAR, but the role of predation as a driver of population dynamics in the NSAR is unclear. Predation effects are currently represented in the model via time-varying natural mortality.
- A B_{msy} -proxy value for each stock assessment region was calculated as 40% of unfished biomass (i.e., $B_{msy}\text{-proxy} = 0.4B_0$).
- A Limit Reference Point (LRP) for each stock assessment region was adopted as $0.5B_{msy}\text{-proxy}$.
- An Upper Stock Reference point (USR) of 80% of the $B_{msy}\text{-proxy}$ was recommended for each stock assessment region.
- Reference point calculations reflect estimated natural mortality and sex-transition rates from the most recent eight years (i.e., approximately one Northern Shrimp generation).

Research Recommendations

- Standardize survey length-composition data using a spatiotemporal model to reduce potential for natural mortality and catchability bias.
- Further analysis should be done to understand the potential bias caused by partial survey coverage and explore potential “fixes” to address any historical periods with low survey coverage. This includes impacts of partial survey coverage on estimated catchability and sex-transition and growth model bias due to morphological differences for EAZ shrimp.
- Explore alternative sampling design for biomass and length composition data from both fisheries and surveys to optimize information content while minimizing bias.
- Investigate relationships between shrimp population dynamics (e.g., mortality, growth, productivity, density dependence) and environmental and ecological factors, including sea ice cover, ocean currents, predation, and larval transport with consideration given to differences between the two stock assessment regions.
- Improve understanding of the effect of predation on shrimp population dynamics and the integration of predation into future versions of SISCALS, both in terms of natural mortality to inform the model, but also on predators’ dependence on shrimp to inform LRP revisions. Analyses may include the integration of additional data using predator stomach contents and consideration of predation by marine mammals, seabirds and other fish species (e.g., grenadiers).

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SOURCES OF INFORMATION

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NORTHERN SHRIMP (*PANDALUS BOREALIS*) IN THE NORTH AND SOUTH STOCK ASSESSMENT REGIONS - REVIEW OF MANAGEMENT STRATEGY EVALUATION (MSE) OPERATING MODEL AND CANDIDATE MANAGEMENT PROCEDURES



Northern Shrimp (*Pandalus borealis*) Photo:
Fisheries and Oceans Canada.

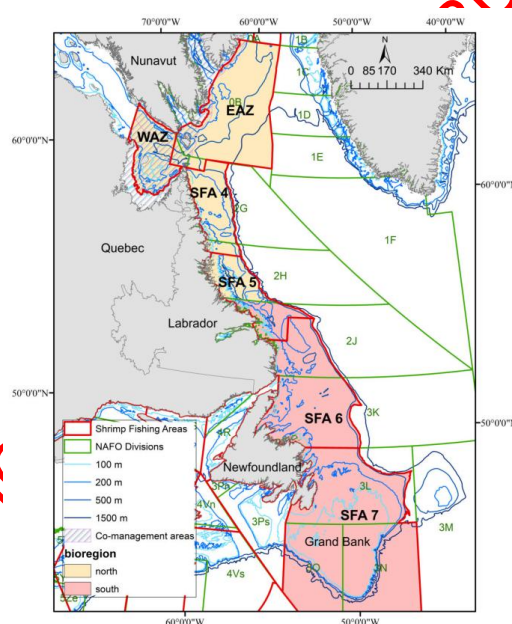


Figure 1. The spatial management areas for Canadian Northern Shrimp, including North (yellow) and South (red) Stock Assessment Regions.

CONTEXT

This Science Advisory Report is from the national peer review of December 2-5, 2025 on the Northern Shrimp - Review of Management Strategy Evaluation (MSE) Operating Model and Candidate Management Procedures. Additional publications from this meeting will be posted on the [Fisheries and Oceans Canada \(DFO\) Science Advisory Schedule](#) as they become available.

SUMMARY

- The spatially integrated statistical catch-at-length / size (SISCALS) assessment model, developed as part of the [December 2024 Northern Shrimp assessment framework](#), was adopted as the foundation for the operating models used in the Management Strategy Evaluation (MSE).

- For the North Stock Assessment Region, length composition data used in the operating models only includes years 2007-2024. Years prior to 2007 were removed to address the lack of Eastern Assessment Zone survey coverage in these early years.
- Operating models were developed to represent plausible stock dynamics and incorporate uncertainty in recruitment, growth, natural mortality, maturity, and survey indices.
- Two distinct recruitment regimes were identified during the 1996-2019 period and were used to form the two operating model recruitment scenarios used in this MSE:
 - A short time-series of recent low recruitments (the same period used in the [March 2025 assessment projections](#)); and,
 - The full time-series that had higher average recruitment with greater variability.
- MSE performance statistics were calculated using a weighted combination of results from each of the two operating models. In the North Stock Assessment Region, operating models were similar and therefore equally weighted (50% each). In the South Stock Assessment Region, the recent low recruitment regime was considered more plausible in the near-term and received a higher weighting (90%) than the full time-series (10%).
- Validation tests confirmed that the 28 harvest decision rules (HDRs) specified based on combinations of harvest control rule types, exploitation rate values, HDR phase-in periods, and maximum allowable Total Allowable Catch changes produced outputs as intended.
- All HDRs are constructed to be run annually using the previous year's Total Allowable Catch, fishable biomass index and spawning stock biomass index. At these annual time-steps, exceptional circumstances (to be developed) would also be examined.
- Twelve (12) performance metrics were used that fall into 3 categories (conservation, yield and stability). Metrics were calculated and applied across all HDRs; trade-off plots demonstrate conservation–yield–stability relationships, indicating that performance metrics are appropriate indicators of performance in relation to objectives.
- Operating model structure and performance metrics were reviewed to support the MSE process; the performance of HDRs for meeting management objectives was not reviewed. Nevertheless, the example HDRs displayed a wide range of performance across conservation, yield and stability metrics as well as stock assessment regions.
- Other uncertainties were identified that should be explored in the future for incorporation in the operating models. It is recommended that the expected performance of any adopted HDR be reviewed periodically (e.g., 3-4 years) as new operating models and performance measures arise unless a formal review is otherwise triggered by exceptional circumstances.

INTRODUCTION (OR BACKGROUND)

The provision of science advice for Northern Shrimp (*Pandalus borealis*) changed fundamentally following the adoption of a statistical model-based assessment framework for the species in December 2024 and a revised population structure from six stock assessment areas (Western Assessment Zone (WAZ), Eastern Assessment Zone (EAZ), Shrimp Fishing Areas (SFAs) 4-6, NAFO Divisions 3LNO) to two stock assessment regions (North Stock Assessment Region (NSAR) and South Stock Assessment Regions (SSAR)). Historically, science advice was provided at the same spatial scale as the management of the fishery; however, with the revised population structure, science advice is now provided for two stocks (NSAR and SSAR) that span six management areas.

Earlier in 2024, a two-step harvest decision rule (2SHDR) using survey data specific to each management area was adopted to calculate the total allowable catch (TAC) in the WAZ, EAZ and SFAs 4-6. The potential effectiveness of the 2SHDR was not tested in simulations because a model-based assessment framework did not yet exist for Northern Shrimp.

The new framework adopted in December 2024 uses a specially designed model for Northern Shrimp called the spatially integrated statistical catch-at-length / size (SISCALS) model. The framework provides model-based estimates of biomass, productivity and stock status with respect to biological reference points for the NSAR and SSAR. Further, alternative formulations of SISCALS are the basis of the operating model(s) used in simulation testing the potential effectiveness of candidate harvest decision rules (HDRs) within the management strategy evaluation (MSE) process for Northern Shrimp.

A Northern Shrimp Advisory Committee MSE Working Group comprised of DFO fishery managers, Northern Shrimp harvesters, provincial and co-management partner representatives, and scientists developed the context, preliminary objectives, and candidate HDRs of the MSE. The science advice herein supports this work by:

1. Ensuring that the operating model(s) used in the MSE align(s) with the modeling framework for Northern Shrimp that was adopted in December 2024 and used in the March 2025 assessment (i.e. the spatially integrated statistical catch-at-length / size (SISCALS) model);
2. Reviewing any changes or deviations in the framework adopted in December 2024 and providing a rationale for these changes;
3. Reviewing all candidate management procedures to ensure their code/design aligns with their intended function in the real world; and,
4. Reviewing the performance metrics calculations to ensure they are the most appropriate calculations to align with the MSE's objectives.

MSE Objectives

Seven (7) preliminary MSE objectives (3 primary and 4 secondary) are under consideration by the MSE Working Group.

ANALYSIS

Operating models

The statistical model used in the Northern Shrimp stock assessment framework (i.e., SISCALS, adopted in December 2024 and used in the March 2025 assessment) was incorporated as the basis for developing the operating model(s) for closed-loop simulations related to the MSE process.

Changes in data or structure from March 2025 assessment

The operating model(s)'s historical period (conditioning) was developed using an updated dataset compared to that used in the March 2025 assessment (Le Corre et al. *in prep.*¹). This updated dataset excludes NSAR shrimp length composition data before 2007, whereas the dataset used in March 2025 covered 1996-1999 and 2005-2024. This change is viewed as an improvement to the model and was made to address a lack of sampling across the full range of Northern Shrimp size classes before 2007 in the NSAR. In particular, before 2007 there were no usable survey data available in the EAZ (Figure 2), which created a potential bias in shrimp size and mortality because Northern Shrimp in the EAZ are larger than shrimp in the WAZ and SFA 4. This bias (*i.e.*, using the pre-2007 data, without EAZ representation) could skew the model(s)'s estimates of shrimp growth and mortality. While the data from 2007 onwards also has spatial gaps, those gaps were viewed as less problematic (*e.g.*, there is some missing survey coverage in the WAZ, but Northern Shrimp sizes in the WAZ span those observed in SFA 4 and the EAZ, thus this gap is unlikely to introduce bias). In the future, it may be possible to re-incorporate pre-2007 data for the NSAR within a standardization model to address incomplete spatial and temporal coverage across years. However, a standardization model for length composition data was not available at the time of this meeting.

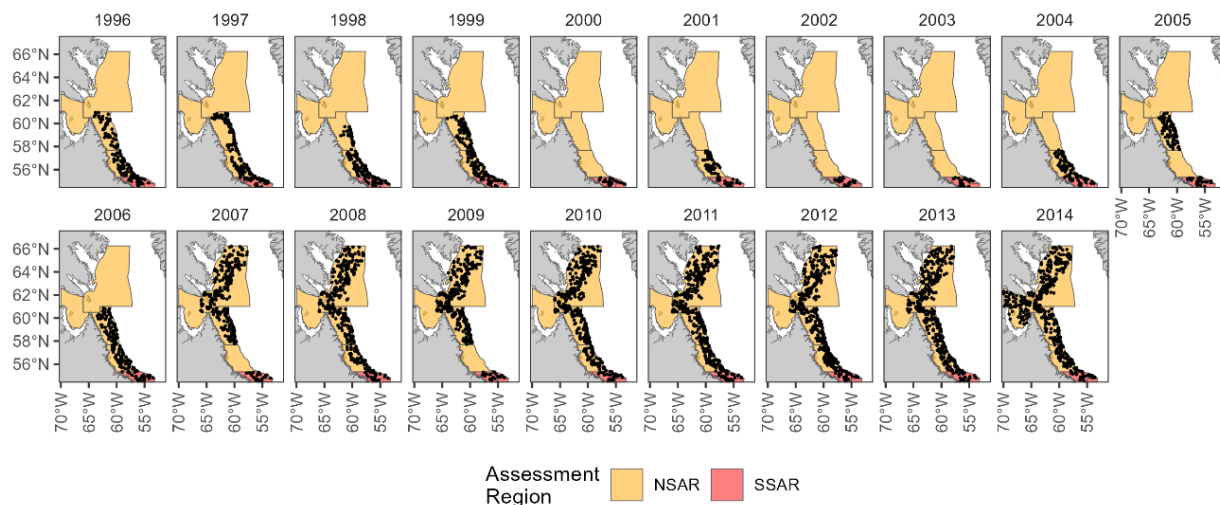


Figure 2. Survey coverage in the NSAR from 1996 to 2014, combining DFO and Northern Shrimp Research Foundation (NSRF) surveys, with each survey set represented by a black dot. In later years (2015 to 2024), survey coverage was complete, similar to 2014.

Operating Model Scenarios

Operating model (OM) scenarios in an MSE context represent plausible hypotheses about fishery and stock dynamics used to test HDRs. In general, OM's are designed to represent both

¹ Le Corre N., Baker K.D., Coffey W., Enright D., Walkusz W., Munro H., Belanger D., Coyne J., Koen-Alonso M., Malainy C., Sullivan D., and Atchison S. (*in preparation*). Assessment of Northern Shrimp (*Pandalus borealis*) in North and South Stock Assessment Regions in 2024. DFO Can. Sci. Advis. Sec. Res. Doc. 2026/nnn. iv + 81 p.

parameter uncertainty and structural uncertainty within stock assessments and management procedure simulations. Parameter uncertainty arises because the true values of model parameters are not known exactly and may include uncertainty in growth rates, natural mortality, maturity schedules, survey catchability, and stock–recruitment parameters such as unfished spawning biomass or spawner productivity in the stock–recruitment relationships. Structural uncertainty, by contrast, arises from uncertainty about the underlying processes and model assumptions used to represent the system. This may include uncertainty in stock–recruitment functional form (e.g., Beverton–Holt versus Ricker), spatial structure of the stock and connectivity between different components of the stock, time-varying productivity, or conflicting data sources.

For Northern Shrimp, future recruitment dynamics currently represent the primary structural uncertainty. Two alternative operating models are therefore used to represent plausible future productivity scenarios. Both are based on Beverton–Holt stock–recruitment relationships fitted to different periods of estimated recruitment:

1. A short time series (2009-2019), consistent with the recruitment regime underlying the March 2025 assessment projections; and,
2. The full estimated recruitment time series (1996-2019).

These alternative OMs are defined as follows:

1. BH-Long (long time-series; 1996-2019): SRR estimated from spawning biomass and recruitment estimates over the full assessment period (excluding 2020-2024). Captures the average productivity over multiple ecosystem states (*i.e.*, higher and lower productivity periods).
2. BH-Short (short time-series; 2009-2019): SRR estimated over the most recent 10-year period (excluding 2020-2024). Captures recent lower productivity, particularly for the SSAR.

The BH-Long and BH-Short scenarios bracket the range of productivity observed during the assessment period, but both include overly precise steepness estimates because the post-fitting approach ignores uncertainty in spawning biomass and recruitment estimates. This issue may be addressed in future assessments and OMs.

Note that recruitment estimates for 2020-2024 are not estimable from the data, so these are simulated from the BH-Short model (DFO 2025, *Le Corre et al., in prep.*).

Operating model weighting

The two operating model recruitment scenarios defined above aimed to represent possible future productivity states for Northern Shrimp. In the SSAR, the BH-Long and BH-Short scenarios implied very different recruitment regimes, mostly due to the change in productivity regime observed within the BH-Long period. The environment for shrimp is ever changing, however predation and the ecosystem are continuing to change and have clear directional movements that are thought to be continuing. Both operating models were retained but were assigned plausibility weights based on expert knowledge. In the SSAR, results from the two operating model scenarios were weighted at 90% for BH-Short and 10% for BH-Long when combining operating model results to generate the set of performance metrics for each HDR.

In the NSAR, recruitment productivity was mostly comparable under the BH-Long and BH-Short scenarios, therefore the contributions of the two operating models were given equal weighting (50%/50% weighting).

Performance Metrics

Performance metrics are statistics that summarize the expected behaviour of a candidate HDR over a specified period of time. They allow different candidate HDRs to be compared and to ascertain how well a candidate HDR aligns with the MSE's objectives. Performance metrics are particularly important in understanding the trade-offs between different dimensions of performance such as the trade-off between higher potential yield and lower probability of avoiding the limit reference point (LRP). Table 1 lists the performance metrics reviewed during the meeting along with their definition and how each metric is calculated.

Table 1. Performance metrics used in the Northern Shrimp MSE with definitions and more detailed information on how the statistics are calculated.

Performance Metrics	Objective Category	Definition	How it is Calculated
pLRP30	Conservation	Probability that spawning biomass remains above limit reference point over 30-year projection period.	- Count the number of years the spawning biomass is above the LRP over each 30-year projection. - Sum these counts across the 200 replicates. - pLRP30 is the sum from (b) divided by 6,000 (the total number of years across the 200 replicates; 30 years multiplied by 200 replicates = 6,000).
pLRP10	Conservation	Probability that spawning biomass remains above limit reference point over first 10 projection years.	- Count the number of years the spawning biomass is above the LRP over the first 10 years of each projection. - Sum these counts across the 200 replicates. - pLRP10 is the sum from (b) divided by 2,000 (the total number of years across the 200 replicates; 10 years multiplied by 200 replicates = 2,000).
pUSR30	Conservation	Probability that spawning biomass remains above upper stock reference over 30-year projection period.	- Count the number of years the spawning biomass is above the USR over each 30-year projection. - Sum these counts across the 200 replicates.

Performance Metrics	Objective Category	Definition	How it is Calculated
			c. pUSR30 is the sum from (b) divided by 6,000 (the total number of years across the 200 replicates; 30 years multiplied by 200 replicates = 6,000).
pUSR10	Conservation	Probability that spawning biomass remains above upper stock reference over first 10 projection years.	a. Count the number of years the spawning biomass is above the USR over the first 10 years of each projection. b. Sum these counts across the 200 replicates. c. pUSR10 is the sum from (b) divided by 2,000 (the total number of years across the 200 replicates; 10 years multiplied by 200 replicates = 2,000).
MAC10	Fishery Yield	Median of the average annual catch over first 10 projection years (short-term yield, kt).	a. Calculate the average annual catch over the first 10 years of the projection for each of the 200 replicates. b. List the 200 values from lowest to highest. c. MAC10 is the median, or number in the middle of the list.
MAC30	Fishery Yield	Median of the average annual catch over final 10 projection years (2045-2054; long-term yield, kt).	a. Calculate the average annual catch over the final 10 years of the projection for each of the 200 replicates. b. List the 200 values from lowest to highest. c. MAC30 is the median, or number in the middle of the list.
AAV10	Catch Stability	Median average annual variation in catch over first 10 projection years.	a. Calculate the absolute annual percentage change in catch for each of the first 10 projection years in a

Performance Metrics	Objective Category	Definition	How it is Calculated
			replicate (<i>i.e.</i>, the percent increase or decrease in catch compared to the previous year). b. Calculate the average of (a). c. List the 200 replicate averages from (b) lowest to highest. d. AAV10 is the median, or number in the middle of the list.
AAV95th	Catch Stability	95th percentile of average annual variation in the first 10 years or 95% of all values are smaller than this. Represents a relatively rare outcome, but indicates the range of possible average annual variations.	a. Calculate the absolute annual percentage change in catch for each of the first 10 projection years in a replicate (<i>i.e.</i>, the percent increase or decrease in catch compared to the previous year). b. Calculate the average of (a). c. List the 200 replicate averages from (b) lowest to highest. d. AAV95th is the 95th percentile of the list from (c) (<i>i.e.</i>, the 190th value).
C5th	Risk of low Catch	5th percentile of annual catches in first 10 projection years (lower bound of short-term yield, kt).	a. List the annual catch (lowest to highest) for all 200 replicates over first 10 projection years (2,000 values). b. C5th is the 5th percentile of the list from (a) (<i>i.e.</i>, the 100th value).

Candidate Management Procedures

Stock Status and Control Points

The assessment framework in December 2024 adopted limit reference points (LRPs) for both the NSAR and SSAR, and upper stock reference points (USR) were also recommended for both regions (DFO 2025). These LRPs and proposed USRs are based on the unfished spawning

biomass (SB) calculated within the stock assessment model (Figure 3A). These biological reference points are specifically used in the Performance Metrics calculations described above (e.g., pLRP and pUSR), and therefore play a role in comparing candidate HDRs. These are also the only reference points used to determine and report on stock status.

Biological reference points (LRPs and USRs) should not be confused with the control points used in candidate HDRs even though they share some similarities. The LRP and USRs are operating model biological reference points derived from SISCALS estimates of unfished spawning biomass and stock productivity. Because these quantities depend on estimated model states and parameters, they are not directly observable. Control points, by contrast, are specified values of the survey spawning biomass index (SB^* ; read “SB-star”), where the “*” denotes that these are actual observable indices used operationally within the HDR.

Within the operating model simulations, TACs in each year are determined by the HDR using simulated spawning biomass indices (SB^*) relative to predefined operational control points. The resulting catches influence future stock dynamics and subsequent SB^* levels, thereby creating the feedback mechanism used to evaluate HDR performance over time. Control points therefore define the SB^* thresholds where changes occur in the harvest control rule slope (Figure 3B).

Biomass indices for the fishable (FB^*) and spawning (SB^*) stocks are derived from the spatio-temporal model of annual survey data (DFO 2025) and are the main inputs to candidate HDRs.

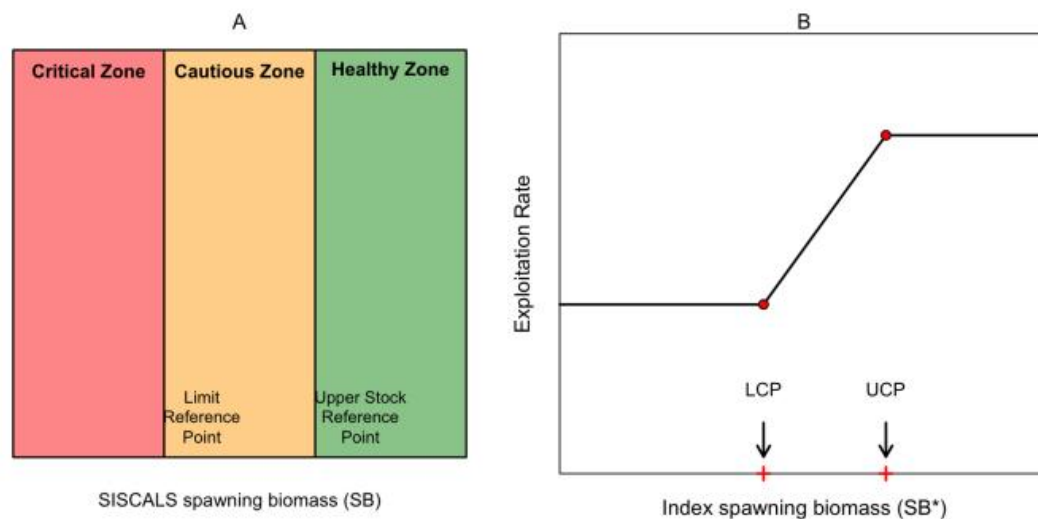


Figure 3. (A) Stock status zones (Critical, Cautious, and Healthy Zones) defined by the Limit Reference Point (LRP) and Upper Stock Reference (USR). These status zones are determined using the spawning biomass (SB) derived by the SISCALS assessment model (referred to as absolute values). (B) An example management procedure (HDR) showing the lower control point (LCP) and upper control point (UCP), which define thresholds where the HDR slope changes. The LCP and UCP are calculated based on the spawning biomass index (SB^*) derived from survey indices (referred to as relative indices).

Candidate Management Procedures

Three general forms of HDR were tested based on variations in control points and exploitation rates (Figure 3B). All three forms include two initial stages:

1. The HDR determines the exploitation rate based on SB^* (reminder: SB^* and FB^* are indices derived from the spatio-temporal modeling of survey data) relative to the lower and upper control points; and,

2. The resulting exploitation rate is multiplied by the fishable biomass index derived from survey indices (FB^*) to produce an initial catch limit or total allowable catch (TAC).

The “default DFO HDR” (also labelled defHDR in tables and figures) has a constant exploitation rate when above the upper control point. Below the upper control point, the exploitation rate linearly decreases with SB^* until reaching the lower control point, at which the exploitation rate is 0%. No exploitation occurs when SB^* is below the lower control point (Figure 4: top row).

The “base HDR” (labelled baseHDR in tables and figures) has a constant exploitation rate when above the upper control point. Below the upper control point, the exploitation rate linearly decreases with SB^* until reaching the lower control point, at which exploitation rate is 50% of the initial exploitation rate used when above the upper control point. Below the lower control point, the exploitation rate is 50% of the initial exploitation rate (Figure 4: middle row).

The “Half Leaf HDR” (labelled halfLeafLRP in tables and figures), which looks similar to half of a leaf torn in two along its midline, implements the half leaf design below the lower control point (Figure 4: bottom row). This HDR is implemented the same way as the baseHDR when SB^* is above the lower control point. When the SB^* is below the lower control point, and trending downwards, exploitation rates decline rapidly to zero by following the curve of the leaf. When the SB^* is trending upwards exploitation rates increase linearly until the lower control point is reached (Figure 4: bottom row).

Several adjustment mechanisms were layered on top of the baseHDR to control variability in TACs produced by the HDRs. The “2-stage HDR” (2SHDR) mimics the currently adopted HDR used in EAZ, WAZ, and SFAs 4-6. After generating an initial catch limit using the baseHDR the 2SHDR component smooths inter-annual TAC variation based on the direction of the fishable biomass index trend. When fishable biomass is increasing, the TAC is the maximum of (a) the average of the previous TAC and current initial catch limit (50% rule) or (b) the previous year’s initial catch limit (finish rule). When biomass is decreasing, the TAC is the minimum of these values. This provides balance between the TAC responding to short-term survey index trends and stable TACs.

Another adjustment to the HDRs, added to reduce the extent of inter-annual changes to the TACs, applies a flat 25% maximum inter-annual change in the TAC. This constrains year-to-year variation. This “25% maximum change in TAC” was an added option to the 2SHDR procedure.

A third type of adjustment included “phase-in periods” to provide gradual transitions from the current TAC to TACs determined solely by the HDR. Both three-year (3YrPhz) and four-year phase-in (4YrPhz) periods were tested. These are implemented by computing the final TAC as a weighted average of the 2024 TAC and the one derived from the HDR in that year. By the third year (or fourth year) the TAC is solely based on that calculated by the HDR. These phase-ins were added options to the 2SHDR procedure. The following are the weightings used for each phase-in length:

- 3YrPhz
 - Year 1 TAC = 66.7% 2024 TAC + 33.3% HDR TAC calculation
 - Year 2 TAC = 33.3% 2024 TAC + 66.7% HDR TAC calculation
 - Year 3 TAC = 0% 2024 TAC + 100% HDR TAC calculation
- 4YrPhz
 - Year 1 TAC = 75% 2024 TAC + 25% HDR TAC calculation
 - Year 2 TAC = 50% 2024 TAC + 50% HDR TAC calculation

- Year 3 TAC = 25% 2024 TAC + 75% HDR TAC calculation
- Year 4 TAC = 0% 2024 TAC + 100% HDR TAC calculation

All of these HDRs were reviewed and tested within the MS3 simulation package and via an independent MSE Excel spreadsheet to ensure that they were coded correctly, their mathematical formulae aligned with how they were being described, and that they were behaving as expected and described. A review of their particular performance with respect to fishery objectives was not within the terms of reference for this process.

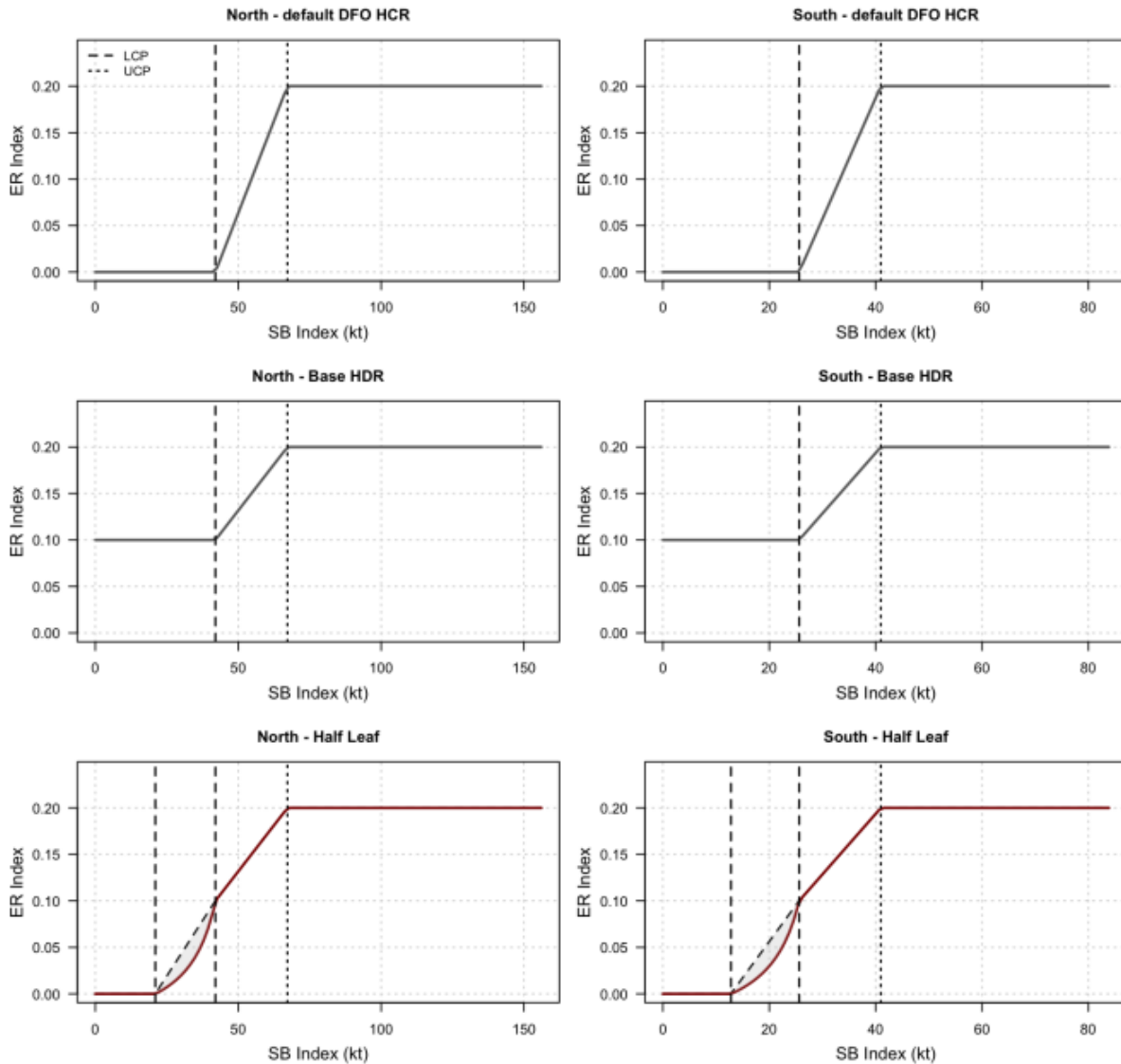


Figure 4. Harvest decision rules (HDRs) for Northern Shrimp management procedures showing the relationship between spawning biomass index (SB^* , x-axis) and exploitation rates (y-axis; above the upper control point exploitation rates between 10% and 25% were tested; 20% is shown for illustrative purposes only). Columns show North SAR (left) and South SAR (right). Rows show three HDR types: Default DFO HDR (top), Base HDR (middle), and Half-Leaf HDR (bottom). Vertical reference lines indicate control points: dashed line for the lower control point ($LCP = 0.5 \times SB^*_{Maximum Sustainable Yield (MSY)}$), dotted line for the upper control point ($UCP = 0.8 \times SB^*_{MSY}$), and lowest dashed line in half-leaf HDR as $0.25 \times SB^*_{MSY}$.

TAC Utilization in the Operating Models versus in Reality

The HDR simulations assume that the full TAC calculated by an HDR is removed each fishing season. This is no different from stock assessment projections where a fixed catch scenario is projected into the future, with each year removing the entire fixed value. It is clear from historical catch records that not all the Northern Shrimp management areas have their full TAC removed each year. While the entire TAC is regularly caught and removed each year in some areas, TACs are underutilized in other areas. Under-utilization arises for various reasons including for example, adverse weather, less favourable catch rates, targeting for quality and/or size, or logistical issues related to trip length and location.

The 5-year average utilization (i.e., proportion of TAC actually caught) rates calculated for each region using reported catch in 2017, 2018, 2019, 2022 and 2023 fishing years (2020 and 2021 were not used due to impacts from COVID-19) were 91% for the NSAR and 95% for the SSAR.

Sources of Uncertainty

Data Inputs in SISCALS

This section outlines key uncertainties associated with the data inputs used in SISCALS, which may in turn affect the operating models (OMs) derived from it. These uncertainties are not directly transferred in MSE outcomes, but may influence some of the inputs used within the MSE framework (e.g., catchability).

- **Survey Length Composition Data:** Survey biomass index data are standardized using spatiotemporal models to account for variability across space and time, but survey length composition data are not. Without standardization, regions not covered by surveys may be underrepresented, which can bias length-based indicators (e.g., size at 50% transition to female, growth estimates). Standardizing survey length composition data could also allow inclusion of pre-2007 observations in the North SAR time series for SISCALS and OM conditioning.
- **Commercial Length Composition Data:** Commercial length data can be biased by differences in fleet behavior, gear type (catchability), and uneven seasonal or spatial coverage, making them less representative of the true population structure. Spatiotemporal standardization of commercial length data would help correct these biases and improve the robustness of length-based indicators used in the stock assessment framework and OMs.
- **Additional Survey Data:**
 - Incorporating other survey data (e.g. European Union survey data covering NAFO Divisions 3LNO outside Canadian waters), which use slightly different protocols and provide limited coverage of the assessment region, could be beneficial. Testing robustness with and without these data would help clarify their potential benefit for improving survey index estimates.
 - The NSAR currently lacks key ecosystem and environmental data, including predation mortality indices, oceanographic information, and pelagic production metrics. These gaps limit the ability to include ecological drivers in assessments and hinder progress toward ecosystem-based fisheries management.

Catchability Parameter for Projections

Uncertainty in survey catchability is taken into account in the HDR projection by sampling from the joint posterior distribution of all estimated parameters from SISCALS. Therefore, although the survey catchability in each region is assumed known and constant for the lower control

point, upper control point, and FB calculations, the operating models simulate a very wide range of alternative values over the 200 simulation replicates. This range of catchability in the posterior samples provides some protection against mis-scaled TACs if true catchability differs from the median estimate. It is possible that survey catchability could vary over time via protocol adjustments or environmental factors but these were not considered in this work. Violation of catchability assumptions primarily affect the absolute scale of operating model biomass and catch projections, which should not affect the relative performance of HDRs against one another – the more important problem would be that performance of all HDRs would be biased with actual risk being more or less than projected depending on the direction of bias. Future MSE iterations could examine catchability in more detail via retrospective analysis and other techniques aimed at evaluating persistent bias in stock assessment model estimates.

Biological and Model Assumptions

Uncertainty also arises from assumptions about biological processes and how they are represented in the model. These include recruitment, growth, sex transition, and natural mortality, all of which are influenced by environmental conditions and biological complexity. Because these factors are difficult to estimate precisely, they introduce variability into HDR projections.

- **Recruitment:**

- **Trans-boundary Larval Connectivity:** Current assessments do not directly account for larval imports from West Greenland stocks, which may affect recruitment. Expanding the SISCALS framework to include Greenland spawning indices or developing a trans-boundary meta-population model would better reflect potential connectivity via larval dispersal patterns. SISCALS estimates annual deviations from the expected recruitment based on SB, which means that imports from West Greenland stocks could already be accounted for in the recruitment estimates; however, the future role of West Greenland stocks is treated as random around a constant average in projections.
- **Stock-Recruitment Relationships:** The SISCALS model used to estimate stock dynamics, catchability, recruitment, natural mortality and other parameters assumes constant average recruitment with annual deviations that are independent over years but correlated between NSAR and SSAR shrimp. This assumption helped make the original estimation more tractable as SISCALS was being developed. However, constant average recruitment is inappropriate for projecting stock dynamics for risk assessment. The stock-recruitment models BH-Long and BH-Short were estimated from SISCALS SB and recruitment estimates to better reflect potential future over-fishing risk. While these recruitment scenarios are sufficient for initial MSE screening, a revised SISCALS model should incorporate a Beverton–Holt stock–recruitment relationship within the model structure to better integrate uncertainty in model parameter estimates, recruitment dynamics, and associated biological reference points.

- **Growth and Transition:** Projected spawning biomass dynamics were sensitive to growth and the length at 50% transition (L50), particularly the latter as it directly affects SB. These are modelled independently in SISCALS, so future research could develop biologically plausible scenarios for projections of size-at-transition and growth parameters that would help explore a broader range of uncertainties and strengthen the science advice derived from HDR simulations.
- **Mortality:** Future natural mortality was simulated using a zero-trend random walk, maintaining the recent average and variability without persistent increases or decreases. This approach reflects the absence of reliable information on future ecosystem-driven

mortality shifts, as well as lack of a direct mechanistic link between ecosystem factors and mortality. Future research could develop methods to link mortality to predation, in particular, since there is a relatively high correlation between some predators on Northern Shrimp mortality in the SSAR.

CONCLUSIONS

Operating models

Two operating models were endorsed for use in this initial phase of the Northern Shrimp MSE; one based on the estimated stock recruitment relationship using the whole data-series (1996-2019) and the other using a shorter time period to estimate the stock recruitment relationship (2009-2019). Based on expert opinion the two operating models in the NSAR are equally weighted when calculating performance metrics because the two scenarios imply similar productivity over time. In the SSAR the operating model using the short time-series was given 90% weighting and the operating model using the whole time-series was given 10% weighting, because of the perception that the more recent recruitment levels were more likely to be persistent in the near term. Performance metrics calculated for each HDR represent the weighted combination of outputs from these two scenarios.

Performance Metrics

All performance metrics computations were reviewed and determined to be 100% accurate and consistent with their descriptions and intended use. A full list of these performance metrics including clear descriptions of what they represent can be found in Table 1.

Management Procedures

The reviews of the HDRs were conducted to ensure that they had been coded correctly, their mathematical formulae aligned with how they were being described, and that they were behaving as expected and described. They were not reviewed to consider how they performed compared to any MSE objectives for conservation, yield nor variability in catch.

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SOURCES OF INFORMATION

DFO. 2025. [Northern Shrimp \(*Pandalus borealis*\) in North and South Stock Assessment Regions in 2024](#). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2025/042.

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Appendix 4

To apply the harvest decision rule, control points (Lower Control Point and Upper Control Point) are used as proxies for Limit Reference and Upper Stock Reference points (and therefore the Healthy, Cautious and Critical zones). These control points are needed because the full stock assessment that estimates full stock size and status is only conducted every 3 years. Indices of abundance are updated every year and can be compared to the Lower and Upper Control Points. The harvest decision rule's harvest rate, which is used to calculate the initial harvest limit for the North Stock Assessment Region, is reduced linearly as the abundance indices decline below the Upper Control Point until reaching the Lower Control Point. Added to this are rules that reduce the variability in the calculated harvest limits year-to-year. Reduced variability is achieved through three steps: (1) only applying half of the increase/decrease in the harvest limit resulting from an increase/decrease in the index; (2) imposing a maximum 25% year-to-year change in harvest limit; (3) phasing in the harvest limit calculated by the harvest decision rule during the first 4 years of its implementation.

Table 2. Summary of the Harvest Decision Rule for *P. borealis* in the North Stock Assessment Region

Spawning Stock Biomass index	Harvest Decision Rule	
Above the Upper Control Point	The target harvest rate will be 20% of fishable biomass index.	Pursue 50% of the change between the initial total allowable catch calculation (i.e. applying the target harvest rate) and the previous year total allowable catch.
Between the Upper Control Point and Lower Control Point	- The target harvest rate will be scaled linearly (slope) from 20% of fishable biomass index at the Upper Control Point, to 10% of fishable biomass index at the Lower Control Point. - The maximum harvest rate will be 1.5x target (slope) harvest rate.	- In subsequent years, either finish the remainder of the total allowable catch change to the previous year's initial total allowable catch calculation, or pursue 50% of the change to the current year's initial total allowable catch calculation. - Consider whether fishable biomass is increasing (select higher total allowable catch) or decreasing (select lower total allowable catch) to guide management action. - Apply the 25% maximum change in Total Allowable Catch - Apply phase-in when setting the Total Allowable Catch for 2026-27, 2027-28, 2028-29, or 2029-30
At or below the Lower Control Point	- The maximum harvest rate will be 10% of fishable biomass index. - Apply the 25% maximum change in total allowable catch - Apply phase-in when setting the total allowable catch for 2026-27,	

Spawning Stock Biomass index	Harvest Decision Rule
	2027-28, 2028-29, or 2029-30

Detailed Explanation of Proposed Harvest Decision Rule for the North Stock Assessment Region

The Harvest Decision Rule adopted by the Northern Shrimp Advisory Committee was a variation of the Harvest Decision Rule previously in place used to calculate the 2025-26 total allowable catches for the Eastern and Western Assessment Zones. This new Harvest Decision Rule adds a 25 per cent maximum change in harvest limit year-to-year and a 4-year phase-in period (2026-27, 2027-28, 2028-29, 2029-30).

Detailed explanation of how the Harvest Decision Rule works:

Part 1: Exploitation rate (ER) is determined using updated Spawning Stock Biomass (SSB) index

- Compare SSB-index to the Lower control point (LCP) and upper control point (UCP)
- If above UCP, then ER = 20%
- If below LCP, then ER = maximum 10%
- If between LCP and UCP, then ER = $((\text{SSB-index} - \text{LCP}) / (\text{UCP} - \text{LCP})) * 10\% + 10\%$

-- If SSB-index < LCP then proceed to Part 6 otherwise continue to Part 2 --

Part 2: Calculate initial catch limit (ICL)

- The initial catch limit = NSAR Fishable Biomass (FB) index * ER (from part 1)

Part 3: Determine halfway point between ICL and previous year's TAC

- Previous year's TAC = TAC_{y-1}
- Halfway point = $((\text{ICL} - \text{TAC}_{y-1}) / 2) + \text{TAC}_{y-1}$

Part 4: Select between this year halfway point or last year's ICL

- If the FB-index increased from y-2 to y-1, then select the larger of the two TACs.
- If the FB-index decreased from y-2 to y-1, then select the smaller of the two TACs.

Part 5: check that the selected TAC from Part 4 does not result in a ER over 150% of the ER determined in Part 1.

- Calculate ER of selected TAC from Part 4 = TAC (from Part 4) / FB-index
- If ER is less than 150% of Part 1 ER, move to Part 6
- If ER is more than 150% of Part 1 ER, reduce TAC to 150% of Part 1 ER

Part 6: determine TAC to apply the "max change in TAC" and "phase-in" rules

- If SSB-index < LCP, then TAC = FB-index * 10%
- If SSB-index > LCP, then TAC = TAC determined in Part 5

Part 7: Apply the 25% maximum change in TAC rule

- If TAC in part 6 is great than 125% of TAC_{y-1}, then TAC_y = TAC_{y-1} * 1.25
- If TAC in part 6 is less than 75% of TAC_{y-1}, then TAC_y = TAC_{y-1} * 0.75

Part 8: Apply phase-in when setting the TAC for 2026-27, 2027-28, 2028-29, or 2029-30

- In 2026-27:
 - 75% of 2026-27 TAC based on 2025-26 TAC (41,128 t) = 30,846 t, plus
 - 25% of 2026-27 TAC based on TACy determined in Part 7 = $\text{TACy} * 0.25$
- In 2027-28:
 - 50% of 2027-28 TAC based on 2025-26 TAC (41,128 t) = 20,564 t, plus
 - 50% of 2027-28 TAC based on TACy determined in Part 7 = $\text{TACy} * 0.50$
- In 2028-29:
 - 25% of 2028-29 TAC based on 2025-26 TAC (41,128 t) = 10,282 t, plus
 - 75% of 2028-29 TAC based on TACy determined in Part 7 = $\text{TACy} * 0.75$
- In 2029-30:
 - 0% of 2029-30 TAC based on 2025-26 TAC (41,128 t) = 0 t, plus
 - 100% of 2029-30 TAC based on TACy determined in Part 7 = TACy

Appendix 5

Northern Shrimp Advisory Committee (NSAC)

March 25, 2026.

Welcome and Opening Remarks

Todd Williams, DFO Resource Management (RM), Ottawa, Chair, Northern Shrimp Advisory Committee (NSAC), outlined the Agenda for the meeting.

- Members did not voice any comments or concerns on the Agenda items

Science – Stock Updates

Stock updates were provided for Northern shrimp (*Pandalus borealis*) in the North and South Stock Assessment Regions (NSAR and SSAR) and Striped shrimp (*P. montagui*) in Shrimp Fishing Area (SFA) 4 and the Eastern and Western Assessment Zones (EAZ and WAZ).

Northern shrimp (*P. borealis*)

Nicolas Le Corre, DFO Science, Newfoundland and Labrador Region, presented an overview of the survey coverage, environmental and ecosystem conditions, and survey biomass indices that provided the basis for the March 2026 *P. borealis* stock update.

- The stock status for the NSAR and SSAR is only updated during full assessments; it is not possible to estimate stock status during interim-year updates.
- Fishable Biomass (FB) and Spawning Stock Biomass (SSB) survey indices, estimated using spatiotemporal models, are updated for use in the harvest decision rules that are being tested via Management Strategy Evaluation (MSE).
- Proportional breakdown of each assessment region's FB survey index into management areas is provided.
- The ocean climate in the NL Bioregion has shown decadal-scale cold and warm phases. The warm phase that started around 2020 continued in 2025.
- The biomass of key predatory fishes (Greenland Halibut, Atlantic Cod, and redfish) have increased in both assessment regions in the 2020s and remains high in 2025.
- Clearwater FNC requested the rationale for the warm water observed on the Labrador Shelf (3O), which is noteworthy because there are colder temperatures evident on the Eastern Scotian Shelf.
 - DFO Science suggested that it may be due to increased mixing of warm water from deeper off the ocean shelf.
- Ocean Choice International (OCI) indicated that warmer bottom ocean temperatures are occurring in other nearby areas (3N) and affecting other fisheries (i.e., yellowtail).
- Nunavut Fisheries Association (NFA) raised that comparing pre- (recent past) and post-collapse (current) biomass in the system is not a fair comparison; it is currently a shellfish dominant regime and it doesn't make sense to compare this to a groundfish dominated regime.
- Northern Coalition (NC) asked if the ecosystem is stabilizing at pre-collapse levels and if pre-collapse is referring to the early 1980s timeframe?
 - DFO Science indicated that pre-collapse refers to pre-1990s and there is uncertainty if the system will return to pre-collapse levels because of warming waters, etc.
- OCI noted that a more groundfish dominant ecosystem is returning, yet shrimp SSB and FB is increasing – what could be a rationale for this?
 - DFO Science indicated that it is difficult to decipher the effect of predation – there are multiple aspects at play.
 - Potential predator-prey index is reported and this doesn't mean that predators are present in the same location as the shrimp.
 - There's an abundance of small redfish in the North and it is challenging to determine how much shrimp they are consuming.

- Depends on fishing pressure.
- The Canadian Association of Prawn Producers (CAPP) noted that the biomass of shrimp in the deeper strata does not appear to be included in the ecosystem survey.
 - DFO Science responded that the survey covers 100m to 750m depth.

NSAR Indices and Trends

- The stock status was not updated in March 2026. The stock was estimated to be in the Healthy Zone when last fully assessed in March 2025.
- The SSB survey index in 2025 (150,000 t) increased from 2024 (142,900 t), and remains above the time-series average.
- The FB survey index in 2025 (231,000 t) increased from 2024 (186,300 t), but remains below the time-series average.
- In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series averages.

SSAR Indices and Trends

- The stock status was not updated in March 2026. The stock was estimated to be in the Healthy Zone when last fully assessed in March 2025.
- The SSB survey index in 2025 (73,400 t) increased from 2024 (55,500 t), but remains below the time-series average and is around the lowest level in the survey time series.
- The FB survey index in 2025 (114,500 t) increased from 2024 (90,900 t), but remains below the time-series average and is around the lowest level in the survey time series.
- In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series low levels.

FB Spatial Distribution

- The spatial distribution (proportion) of the FB survey index within each stock assessment region was provided to inform the relative distribution of the stock assessment region harvest level into the management areas (i.e., the SFAs).
- CAPP, NFA, and OCI requested clarification on the methodology used to calculate the FB proportions and for DFO to provide calculations (including amounts) of FB in each management area under the old methodology (OGMAP and STRAP) and the new methodology (spatiotemporal modeling) dating back to 2016.
 - DFO Science indicated that the entire survey timeseries data (1996-2025) was input into the spatio-temporal model to calculate the FB and proportions over the entire survey timeseries, but only the most recent years were shown. The FB proportions were requested by DFO RM.
 - DFO RM indicated that tables illustrating these calculations will be provided.

Striped shrimp (*P. montagui*)

Samantha Fulton, DFO Science, Arctic Region, presented an overview of the survey coverage and survey biomass indices that provided the basis for the March 2026 *P. montagui* stock update.

SFA 4

- Stock status is in the Healthy Zone.
- SSB index increased by 20% (to 30,000 t) from 2024.
- FB index increased by 19% (to 33,900 t) from 2024.

EAZ

- Stock status is in the Critical Zone.
- SSB decreased by 77% (to 3,045 t) from 2024.

- FB decreased by 79% (to 3,298 t) from 2024.

WAZ

- Stock status is in the Healthy Zone.
- SSB decreased by 16% (to 55,465 t) from 2024.
- FB index increased by 14% (to 82,646 t) from 2024.

Discussions on TAC and Management Measures

- NC remarked that the increase in the WAZ biomass is orders of magnitude higher than the biomass in EAZ, and these stock areas are likely not truly discrete; we are likely observing the biomass distribution at the moment it is surveyed, and the combined stock status as a whole may be relatively unchanged.
 - Noted that the relative shifts in stock biomass pose a challenge to developing management measures for these management areas and there was interest expressed in previous years to examine the stock in more holistic way.
 - From a science perspective, how significant should the EAZ stock assessment findings be as we approach management of the resource?
 - DFO Science responded that this year's survey catches of striped shrimp near Resolution Island were much lower relative to adjacent areas. Survey maps show that a concentration of biomass has moved from the EAZ to just over the WAZ management line.
 - Further, the SSB in EAZ is a relatively smaller value, so drops in percentage appear much worse than they actually are in absolute terms (tonnage amounts).
 - A one-year biomass decrease in the EAZ may not be of high concern from a science perspective in context of increases in adjacent regions, but is something to keep an eye on.
- NFA noted that there are several decreases in biomass followed by increases evident in the EAZ time series.
- NRL raised that the dividing line between EAZ and WAZ has been problematic for many years. The changes in stock status are largely driven by migrations in distribution between EAZ and WAZ which yield mathematical effects (artifacts) due to the dividing line.
 - Requested that a Working Group be struck to address this issue.

2026-27 Total Allowable Catches (TACs)

DFO RM presented TAC recommendation options for *P. borealis* and *P. montagui*.

Striped shrimp (*P. montagui*)

TAC recommendations for the Striped shrimp stocks followed application of the 2-step Harvest Decision Rule (HDR) accepted by NSAC in previous years. TAC discussions for the WAZ were reserved for the Indigenous meeting.

SFA 4

- Applying the 2-step = 5,828t (ER of 17.2%).
- Maintaining the 2025 = 4,033t (ER of 11.9%).
- CAPP supported maintaining the TAC at 4,033 t. No objections were raised.

EAZ

- A 10% exploitation rate (ER), as per following the HDRs, results in a TAC of 330t.
- NRL, NC, and CAPP noted that 330 t would pose challenges to the directed *P. borealis* stock in the EAZ and re-iterated their request for a Working Group to examine the EAZ-WAZ management area border.
 - There was general agreement among NSAC members that 330 t is not sufficient for cover *P. montagui* bycatch in the *P. borealis* fishery.

- CAPP proposed applying an adaptation of the 2-step function of the HDR, resulting in a TAC of 1,578t.
 - No objections by industry were raised. The Chair noted the preference for a variation in the application of the HDR for a TAC of 1,578t.
- DFO Science clarified that a 20% maximum ER would not be a major concern for them at this time, however, they could not support removals beyond this level.
 - The Precautionary Approach framework should be used in managing the stocks, and as such, registering the adjustments as an overallocation may be preferable in this regard (as opposed to the overallocation integrated within the TAC).
 -

Northern shrimp (*P. borealis*)

TAC recommendations for Northern shrimp were based on MSE-tested HDRs, applying a 4-year moving average of the FB spatial distribution, and a catch utilization adjustment.

NSAR Harvest Level

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- Harvest levels for variations of the shortlisted 2-Step HDRs with an ER of 20% and 17% were presented.
- NSAC members (NC, OCI, CAPP) supported retaining NSAC's previous recommendation (from January 20, 2026 meeting) for the HDR with a 20% ER, a maximum harvest level change of 25%, and a 4-year phase-in period (Max25_4-year_20%).
- Max25_4-year_20% results in a NSAR harvest level of 41,760 t.

SSAR Harvest Level

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- Harvest levels for variations of the shortlisted 2-Step HDRs with an ER of 10%, 12.5%, and 15% were presented.
- NSAC members (FFAW, CAPP) supported retaining NSAC's previous recommendation (from January 20, 2026 meeting) for the HDR with a 15% ER and a maximum harvest level change of 25% (Max25_15%).
- Max25_15% results in a SSAR harvest level of 15,780 t.

Management Area TACs

TACs were presented with the various shortlisted HDRs for the NSAR and SSAR. TACs with the NSAC-recommended HDR for the NSAR and SSAR noted above were as follows:

- WAZ: 4-year average of biomass (19.3%) of the NSAR harvest level = 8,060t.
- EAZ: 4-year average of biomass (23.1%) of the NSAR harvest level = 9,636t.
- SFA 4: 4-year average of biomass (35.3%) of the NSAR harvest level = 14,752t.
- SFA 5-North: 4-year average of biomass (22.3%) of the NSAR harvest level = 9,302t.
- SFA 5-South: 4-year average of biomass (7.2%) of the SSAR harvest level = 1,132t.
- SFA 5 (North and South combined): 10,434t
- SFA 6: 4-year average of biomass (82.3%) of the SSAR harvest level = 12,991t.
- 3L: 4-year average of biomass (10.4%) of the SSAR harvest level = 1,641t; Canadian domestic TAC for SFA 7 = 1,367t.
- 3NO: 4-year average of biomass (0.1%) of the SSAR harvest level = 16t.

Catch Utilization Adjustment

The industry proposal, tabled at the January 20, 2026 NSAC meeting, to add 5% of TAC to each management area in the NSAR was discussed.

- Since the January 20 meeting, views provided to the Department indicated limited benefits of the proposed 5% catch adjustment to Nunavut and Nunavik (NU and NK) entities. Land Claimants submitted a proposal for underutilized quota in the WAZ to benefit NU/NK entities in NU/NK-East and Davis Strait West (DSW), subject to co-management Board decisions.

Discussions on TAC and Management Measures

- NC asked why the new survey data was not integrated into the TAC_1 to TAC_5 projections? When will it be?
 - DFO Science responded that this data was not included in the MSE diagnostic performance statistics because the full MSE will not be run again until it is reviewed (i.e., 2028). However, the survey data was included in updating the biomass indices and determining the NSAR and SSAR harvest levels.
- OCI questioned why additional HDRs were tested after the past NSAC meeting, suggesting that it was not worth expending capital to add this calculation given that the improvements in LRP are minimal yet would have a significant impact on economics.
 - DFO RM responded that RM wanted to see the full profile of options for risk assessment purposes.
- CAPP indicated that the tests with the additional ERs have not changed their recommendation, noting that the 2025-26 ERI would be 17.8% if that TAC was fully caught, and that we're on track to be within the range for ER this year.
- FFAW re-iterated that their previous HDR recommendation with 15% ER still stands. The 0.2% difference in pLRP is an improvement, but has significant implications for inshore fleet amounting to ~\$3 million in reduced TAC.
 - Questioned if the HDR numbers for 12.5% ER will be included in the advice to the Minister as an option?
 - DFO Science responded that they recognize the socio-economics implications and that the choice is a management decision, but recommended exploring additional HDRs with lower ERs from a conservation perspective because those lower ERs would be more closely aligned with Umsy values; 15% ERI is almost 2x Umsy numbers. Further, the LRP is much lower than in the past, presenting increased uncertainty with how the stock would respond should it enter the Critical Zone.
- CAPP suggested that with an HDR selected, SFA-specific TAC recommendations are simply arithmetic. Indicated that they are comfortable with the TACs, though their support is conditional on having a method of catching the full harvest level.
 - NC and NFA supported this argument.
- Regarding the catch utilization adjustment, CAPP indicated that it should be included in the TAC (i.e., SFA harvest level + utilization adjustment), rather than an over-allocation which may raise concerns from an MSC perspective.
 - The catch utilization adjustment could be viewed as a way to help the actual removals be more akin to what the model assumes was removed.
 - NFA questioned if this approach would have any impacts to MSE or the model?
 - DFO Science noted that the MSE assumes that 100% of the HDR amount is removed.
- St. Anthony Basin Resources Inc. requested clarification on why the catch utilization adjustment is only for the NSAR and not the SSAR?
 - DFO RM responded that greater utilization is realized in the SSAR, but views regarding a proposal for the SSAR are welcomed.
 - Clearwater FNC noted that SSAR underutilization would likely occur in the future once SFA 7 is re-opened.
- DFO Science indicated concerns that the catch utilization adjustment could result in increased localized fishing pressure and that this adjustment should be recorded separately from the TAC for tracking purposes.

- CAPP re-iterated that the industry proposal continues to be that each SFA in the NSAR receives a 5% increase to the TAC from the MSE HDR output, and that every quota holder within each NSAR SFA receives a 5% increase, which should also apply to Davis Straight West.
 - NFA supported including the 5% adjustment in the TAC, but recognized the need to document how the resulting TACs were determined.
 - DFO RM suggested that TAC can be articulated as inclusive of the HDR output and catch utilization adjustment.

Other Updates

Electronic Video Monitoring (EVM) and Shore-based Reporting

DFO provided an update on the EVM and shore based reporting initiatives.

- EVM in the offshore fleet, which is voluntary, cannot be used while fishing inside the Nunavut and Nunavik Settlement Area waters. Using EVM would be subject to Board decisions to be used in the future.
- Similarly, EVM and the shore-based reporting do not apply for offloading in Greenland.
- The shore-based program will have mandatory and voluntary components:
 - Dockside carton counting (and weighing for industrial shrimp only) by independent service providers will be mandatory.
 - Package inspection to determine the “net frozen weight” of all product types will also be mandatory.
 - Further inspection to determine the net drained (or thawed) weight is optional.
- There will be a 1-year pilot phase for the shore-based program and the fleet will be given a 60-day notice prior to this program coming into effect.
- NRL supported that some aspects of the shore-based component are voluntary.
 - Clarified that industrial shrimp, which is a raw material sold as a raw material and at actual weight, wouldn't require sampling.
 - Noted that it is important that the requirement to provide a complete and accurate hail on a daily basis remains the licence conditions.
- NC expressed concern at the pace that the initiative is being implemented, given and outstanding questions and concerns.
 - Operational considerations as to how this is going to work and additional costs that may be incurred. Will there be incremental effort and time constraints?
 - Next steps are unclear – is further dialog with inspection companies planned?
 - Supports EVM, as long as there's no intent to make it mandatory.
 - Unclear when the specific implementation date will be. Does the term "pilot" extend to EVM? Requested that draft protocols and forms be distributed to NSAC so members can have opportunity to review.
- The Chair indicated that the pilot is for the shore based component, to indicate that there could be changes to the sampling requirements etc., and that “pilot” does not imply mandatory EVM in the future.
 - Further, the Chair committed to:
 - Focus on the implementation questions and ground truthing operational requirements with the service providers.
 - Send protocol documents to NSAC members for their review, and outline next steps in terms of engagement with service providers. Provide 60 days notice to NSAC once operational elements are developed.

Licence Conditions

DFO provided an update on the key changes in the 2026 conditions of licence.

- Added a requirement for licence holders with access to multiple quota types in Davis Straight West to record the allocation type being fished in the Comments section of the logbook.

- Added a requirement to report catches in SFA 5 to SFA 5 North or SFA 5 South in the Comments section of the logbook.
- Added requirement to report tows in SFA 5 that cross the line between SFA 5 North and SFA 5 South in the Comments section of the logbook.
- Added a new Schedule which outlines technical specification and conditions about the functioning and operation of the EVM system, noting that more specific requirements would be in the EVM protocol, which is being finalized and would be distributed.
- Added a new Schedule requiring those using EVM to hail out.

SFA 7

DFO provided an update on the potential re-opening of SFA 7.

- Regarding the 9.4% allocation to Prince Edward Island Atlantic Shrimp Company (PEIASC), the Minister was considering the potential for using that allocation for Section 10 purposes, and had requested PEIASC to provide information with respect to that.
- PEIASC chose not to submit an application, nor provide additional information related to the projects which had been funded through their allocation over the years, which DFO had offered to share with the NSAC memberships.
- The Minister is further contemplating what she would like to do with their allocation.
- The TAC for SFA 7 will be established along with SFAs 4-6, informed by the MSE-tested HDR. However, any decision to re-open SFA 7, and associated TAC, will be announced together with allocation decisions.
- The PEIASC clarified the position of the PEIASC and PEI Government on this matter.
 - While their allocation supported science research, it was never tied to scientific research, there have been all sorts of other projects supported over the years.
 - The PEIASC could mount a credible proposal, but they do believe their access to Northern shrimp in SFA 7 should not be subject to NSAC members support. It should be guaranteed by the Government of Canada, as re-iterated by PEI Minister Bell and Minister Hudson, who personally met with Minister Thompson.
 - PEIASC's and PEI Government's position is that if there is an allocation in SFA 7, PEI should continue to receive their 9.4% allocation.
 - Indicated they would be happy to share the PEIASC letter with the committee.

Section 10 for NSRF in SFA 4

- The Minister decided to allocate 1,500t for 2026-27 from the SFA 4 TAC, and that, from now on, the 1,500t will be distributed proportionately to all allocation holders in SFA 4 according to the sharing key.

Conservation and Protection (C&P)

- C&P provided an update on enforcement activities over the past year.

Safety at Sea

- Transport Canada presented information pertaining to safety at sea.

Participants

Sherry Glynn – Fish Food Allied Workers Union (FFAW)

Julian Ryan – 3K North, FFAW

Catherine Boyd, Dany Jabbour, and Jim Gibbons – Clearwater Seafoods

Bruce Chapman – Canadian Association of Prawn Producers

Carey Bonnell – Ocean Choice International

Michelle Moffat – MV Osprey

Brian McNamara, Brent McNamara, and Mark Quinlan – Newfound Resources Ltd.

Tony Wright – Makivvik Corporation

Alastair O'Reilly – Northern Coalition

Brynne Divine – Oceans North
Patrick Martin and Jerry Ward – Qikiqtaaluk Corporation / Qikiqtaaluk Fisheries Corporation
Derek Butler – Nunavut Fisheries Association
Christopher Mitchelmore – St. Anthony Basin Resources Inc.
Ron Johnson – Torngat Fish Producers Co-operative Society Ltd.
Emma-Rose Murphy – Nunatsiavut Government
Paul Loder and Peter Adams – Baffin Fisheries Cooperative
Ann-Julie Cote – Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec
Shawn Frank – Pikalujak Fisheries
Dave MacEwan – Government of Prince Edward Island
Lewis Creed – Prince Edward Island Atlantic Shrimp Company
Cyril Boudreau – Government of Nova Scotia Department of Fisheries and Aquaculture
Leigh Gustafson – Nunavut Wildlife Management Board (NWMB)
Keith Coady – Arctic Fishery Alliance
Ben Davis – Torngat Wildlife Plants and Fisheries Secretariat

Todd Williams – DFO Resource Management (RM) National Capital Region (NCR), Chair
Leigh Edgar – DFO RM NCR
Liliya Baranova – DFO RM NCR
Dirk Algera – DFO RM NCR
Brian Lester – DFO RM NCR
Nicholas Duprey – DFO Science NCR
Nicolas Rolland – DFO Science NCR
Nicolas Le Corre – DFO Science NL Region
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Wojciech Walkusz – DFO Science Arctic Region
Samantha Fulton – DFO Science Arctic Region
Matt Martens – DFO FM Arctic Region
Sandra Moore – DFO FM Arctic Region
Danielle Roy – DFO RM Gulf Region
Andrew Humber – DFO Conservation and Protection NL Region
Paul Glavine – Transport Canada

Northern Shrimp Advisory Committee - Indigenous Meeting – March 26, 2026

A virtual meeting of the Northern Shrimp Advisory Committee (NSAC) took place on March 25, 2026. The Department held a virtual post-meeting with Indigenous participants on March 26, 2026, which included representatives from:

- Nunavut Fisheries Association (NFA)
- Torngat Fish Producers Co-Op
- Qikiqtaaluk Corporation (QC) / Qikiqtaaluk Fisheries Corporation (QFC)
- Northern Coalition (NC)
- Canadian Association of Prawn Producers (CAPP)
- NunatuKavut Community Council (NCC)
- Ueushuk Fisheries
- Torngat Joint Fisheries Board
- Nunatsiavut Government (NG)
- Baffin Fisheries Coalition (BFC)
- Makivvik Corporation
- Newfoundland Resources Ltd (NRL)

The perspectives on science and management of *P. borealis* and *P. montagui* in the EAZ and WAZ in this document encompass views expressed at the Indigenous meeting; views at the broader NSAC meeting on March 25, 2026 are provided in a separate document.

Science – Stock Updates

DFO Science recapped the *P. borealis* and *P. montagui* stock updates presented at the NSAC main table.

- NFA asked if biomass trends for *P. montagui* in WAZ and EAZ could be assessed and reported similarly to SFA 4 *P. montagui* (i.e., a model-based assessment method)?
- DFO Science indicated that it is not possible to parse out the trends for *P. montagui* in WAZ and EAZ because they are encompassed within SFA 4, which uses the entire region to determine the spawning stock biomass trends.
 - The most effective way to address this would be to emulate what has been done for Northern shrimp – treat it as one biological stock.

2026-27 Total Allowable Catches (TACs)

DFO RM presented TAC recommendation options for *P. borealis* in the EAZ and WAZ, and for *P. montagui* in SFA 4, EAZ, and WAZ.

Striped shrimp (*P. montagui*)

TAC recommendations for the Striped shrimp stocks followed application of the 2-step Harvest Decision Rule (HDR) accepted by NSAC.

EAZ

- Stock status is in the Critical Zone.
- A 10% exploitation rate (ER), as per following the HDRs, results in a TAC of 330t.
- There was recognition of the movement of the stock across the EAZ and WAZ dividing line, which creates uncertainty and potential for fluctuations in the stock dynamics.
- NSAC recommended applying a modified 2-step HDR = 1,578t (ER of 47.8%) instead.
- Indigenous meeting participants supported the NSAC recommendation to apply the modified 2-step HDR, resulting in a TAC of 1,578t.

SFA 4

- Stock status is in the Healthy Zone.
- Applying the 2-step HDR = 5,828t (ER of 17.2%).
- Maintaining the 2025 TAC = 4,033t (ER of 11.9%) (recommended at NSAC).
- No objections were raised against the NSAC recommendation.

WAZ

- Stock status is in the Healthy Zone.
- Applying the 2-step HDR = 15,743t (ER of 19.0%)
- QC/QFC, Makivvik, NFA, BFC, and NC indicated their support for an ER of 20% or higher given the current Healthy status and the stock's past biomass trends that illustrate the stock is able to easily tolerate a 20%+ ER with no conservation risks.
 - Should take advantage of the stock being in the Healthy Zone while the opportunity exists.
- NRL raised that larger, older shrimp are increasingly accounting for more of the catches, which is very desirable from a marketing perspective.
 - It is possible that by setting conservative TACs, we're seeing the sizes of shrimp increase because they are surviving longer.
 - To maximize sustaining catching older, larger shrimp, it would be advantageous to know what the mortality-at-age rates are.
 - NC noted that the science update supports NRL's conclusions: fishable biomass has increased while spawning stock biomass has decreased, suggesting that there's more in the fishable biomass reaching the end of the life cycle.

Northern shrimp (*P. borealis*)

TAC recommendations for Northern shrimp in the EAZ and WAZ were consistent with the approach presented at NSAC.

EAZ

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- NSAC recommended applying the MSE-tested HDR selected for the NSAR and the 4-year average of biomass in EAZ = 9,636t .
- No objections were raised against the NSAC recommendation.

WAZ

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- NSAC recommended applying the MSE-tested HDR for the NSAR and the 4-year average of biomass in WAZ = 8,060t.
- No objections were raised against the NSAC recommendation.

Management MeasuresCatch Utilization Adjustment Proposals

- In response to the catch utilization adjustment proposed by CAPP at NSAC on January 20, Nunavut (NU) and Nunavik (NK) entities (Makivvik/NRL and NFA) requested an alternative catch utilization proposal for NU/NK to allow an additional 800t to be fished in EAZ (NU/NK E and DSW). This alternative proposal from NU/NK was discussed.
 - Department suggested that this 800t could be split by adding 200t to NU/NK-E and 600t to NU/NK-DSW, to be shared 50/50 between NU and NK.
- DFO Science requested clarification on when in the season the adjustment would be applied and whether the amount of removals already registered would be considered before the adjustment is

applied.

- DFO RM indicated that the proposed adjustments would be considered as part of the TAC for each management area, applied at the beginning of the season.
 - NFA raised that the NU/NK proposal would be a one-year trial, with potential adjustments made the following year.
- CAPP expressed support for the flexibilities and the NU/NK proposal in principle, but concern with allowing additional quota to be fished in EAZ without any transfer of the quota out of the WAZ, essentially resulting in overallocation in the EAZ.
- DFO Science asked whether the increased QC/QFC fishing capacity would mean that the TACs in WAZ and EAZ will become more fully utilized, and what that may mean regarding these catch utilization proposals.
 - NRL noted that even with the increased fishing capacity, the risk of fully utilizing the catch in these areas is very low.
- CAPP raised that the *P. borealis* and *P. montagu* biomass distributions may be shifting between EAZ and WAZ such that the decrease/increase in biomass in one area could be resulting in a corresponding decrease/increase in the other, highlighting the importance of accounting for adjustments between the two areas.
- DFO RM noted for awareness that applying the increases equally within the settlement areas would change the traditionally held 80:20 NU-NK sharing arrangement to 73:27.
 - NRL acknowledged that the minor change to 73:27 sharing was known among NU and NK interests when developing their catch utilization proposal.
- NFA raised that the NU/NK proposal is conceptually similar to the 5% proposal discussed at the NSAC table. The key difference is the amount of quota made available and potentially caught in the EAZ and WAZ.
- CAPP highlighted that allowing quota from one management area to be fished in another (i.e., WAZ quota fished in EAZ) conceptually departs from the 5% proposal and how the management of the fishery has operated to date, and could be considered precedential. Would others be allowed the flexibility to fish quota from one area in another area? Is the NU/NK proposal to be treated as an exception (i.e., one-off)?
 - DFO RM indicated the NU/NK proposal is similar in objective to the CAPP proposal.
 - Striving to provide flexibility without changing allocation keys, sharing arrangements, or opening up new access for entities that didn't have access previously.
- CAPP expressed that ad hoc operationalization and precedent-setting potential of the NU/NK proposal should be avoided. Further, a rationale for the amount in the NU/NK should be developed, so it is not arbitrarily selected. A unifying proposal that meets the flexibility objectives and melds consistency in the 5% and NU/NK proposals regarding rationale and approach should be developed.
 - NFA noted that the 5% proposal is also based on allowing uncaught quota in one area to be fished in another (i.e., Davis Strait East quota to be caught in SFA 4 and SFA 5).
 - NRL noted that the two proposals are the same in concept and complementary in terms of amounts. However, there needs to be consideration regarding the source of the underutilization and adjustments should equally benefit those entities from where it is occurring. To the extent it is sourced from land claims areas, land claimants should benefit accordingly.
- BFC indicated that land claim agreements are a critical component towards evaluating the catch adjustment proposals, and supported NRL's position regarding land claims beneficiaries.
 - The desire for flexibility stems from minimizing environmental (sea ice affecting northern companies to a greater extent) and operational (fleet availability) constraints.
 - Seeking flexibility not to be able to catch more quota necessarily, rather to be able to catch quota in more appropriate areas depending upon the time of year.
- CAPP noted that the 800t adjustment amounts to ~10% of the potential WAZ TAC, which is twice the percentage increase of the 5% proposal, and raises potential equity and conservation

concerns. Further, the EAZ contains commercial and land claims areas, so adjustment decisions in this area affects all harvesters.

- Reiterated that limits should be set on adjustment amounts for the NU/NK proposal.
- BFC indicated that the 5% proposal results in similar tonnage amounts being allocated to industry stakeholders in SFA 4 and 5-North relative to the NU/NK proposal.
- NC raised that the stocks are not biologically divided, this is only for management purposes to retain the existing allocation structures. In situations where there is no risk to the resource, maximum flexibility should be implemented to improve operational efficiencies without prejudice to the risk to people's respective shares.
- DFO Science noted concerns with both the 5% proposal and NU/NK proposal regarding uncertainty with resultant concentration of effort and increased fishing pressure in the NSAR management areas, especially in light of the other proposed flexibilities (e.g. carry forward) that may be operationalized, which will also result in increased pressure.
- The Chair noted the the committee's agreement on the desire to have a catch utilization adjustment included in the TAC. The Department will follow up in the coming days with further information and invite participants to submit views and potential alternative proposals that reconcile the two existing proposals.

Other Updates

Nunavut Fisheries Regulations (NFRs)

DFO provided an update on the NFRs, which are being co-developed with Indigenous partners.

- The Atlantic Fishery Regulations will no longer apply within the Nunavut Settlement Area and Nunavik Marine Region; key provisions will be “ported over” to avoid disruption. No anticipated changes to commercial shrimp fishing or licensing; existing licenses will continue to be valid.
- QC/QCF sought confirmation that NFRS would not affect existing commercial operations outside Nunavut (e.g., Ungava Bay) and whether communal fish plans could be used outside settlement areas.
- DFO clarified that communal plans apply only within settlement areas and that commercial fishing outside of settlement areas remains unchanged.

Electronic Video Monitoring (EVM) and Shore-based Reporting

DFO provided an update on the EVM and shore based reporting initiatives.

- EVM in the offshore fleet, which is voluntary, cannot be used while fishing inside the Nunavut and Nunavik Settlement Area waters. Using EVM would be subject to Board decisions to be used in the future.
- Similarly, EVM and the shore-based reporting do not apply for offloading in Greenland.
- The shore-based program will have mandatory and voluntary components:
 - Dockside carton counting (and weighing for industrial shrimp only) by independent service providers will be mandatory.
 - Package inspection to determine the “net frozen weight” of all product types will also be mandatory.
 - Further inspection to determine the net drained (or thawed) weight is optional.
- There will be a 1-year pilot phase for the shore-based program and the fleet will be given a 60-day notice prior to this program coming into effect.
- NRL noted that the term service providers need to be expanded beyond what been used in recent years to include offloading companies, independent contractors.

Licence Conditions

DFO provided an update on the key changes in the 2026 conditions of licence.

- Added a requirement for licence holders with access to multiple quota types in Davis Strait West to record the allocation type being fished in the Comments section of the logbook.
- Added a requirement to report catches in SFA 5 to SFA 5 North or SFA 5 South in the Comments section of the logbook.
- Added requirement to report tows in SFA 5 that cross the line between SFA 5 North and SFA 5

South in the Comments section of the logbook.

- Added a new Schedule which outlines technical specification and conditions about the functioning and operation of the EVM system, noting that more specific requirements would be in the EVM protocol, which is being finalized and would be distributed.
- Added a new Schedule requiring those using EVM to hail out.

SFA 7

DFO provided an update on the potential re-opening of SFA 7.

- Regarding the 9.4% allocation to Prince Edward Island Atlantic Shrimp Company (PEIASC), the Minister was considering the potential for using that allocation for Section 10 purposes, and had requested PEIASC to provide information with respect to that.
- PEIASC chose not to submit an application, nor provide additional information related to the projects which had been funded through their allocation over the years, which DFO had offered to share with the NSAC memberships.
- The Minister is further contemplating what she would like to do with their allocation.
- The TAC decision for SFA 7 will align with SFAs 4-6, however, the decision to re-open SFA 7 will align with allocation decisions.

Section 10 for NSRF in SFA 4

- The Minister decided to allocate 1,500t for 2026-27 from the SFA 4 TAC, and that, from now on, the 1,500t will be distributed proportionately to all allocation holders in SFA 4 according to the sharing key.

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Tallurutiup Imanga National Marine Conservation Area Interim Management Plan

Presentation for Nunavut
Wildlife Management Board
June 2026



Parks
Canada

Parcs
Canada

Tallurutiup Imanga NMCA Planning Committee



Justin Buller, Jovan Simic
Qikiqtani Inuit Association



Michele LeBlanc-Havard
Government of Nunavut



Laurent Jonart
Government of Canada
(Parks Canada)

Support

Andrew Orawiec
Transport Canada

Kevin Tallon
Fisheries and Oceans Canada

**Brigitte Bourdon, Karen Halley, Katriina
O’Kane, Allison Stoddart**
Parks Canada

**Lou-Ann Cornacchio, Jamessee Moulton,
Justin Hack**
Government of Nunavut

Purpose of presentation

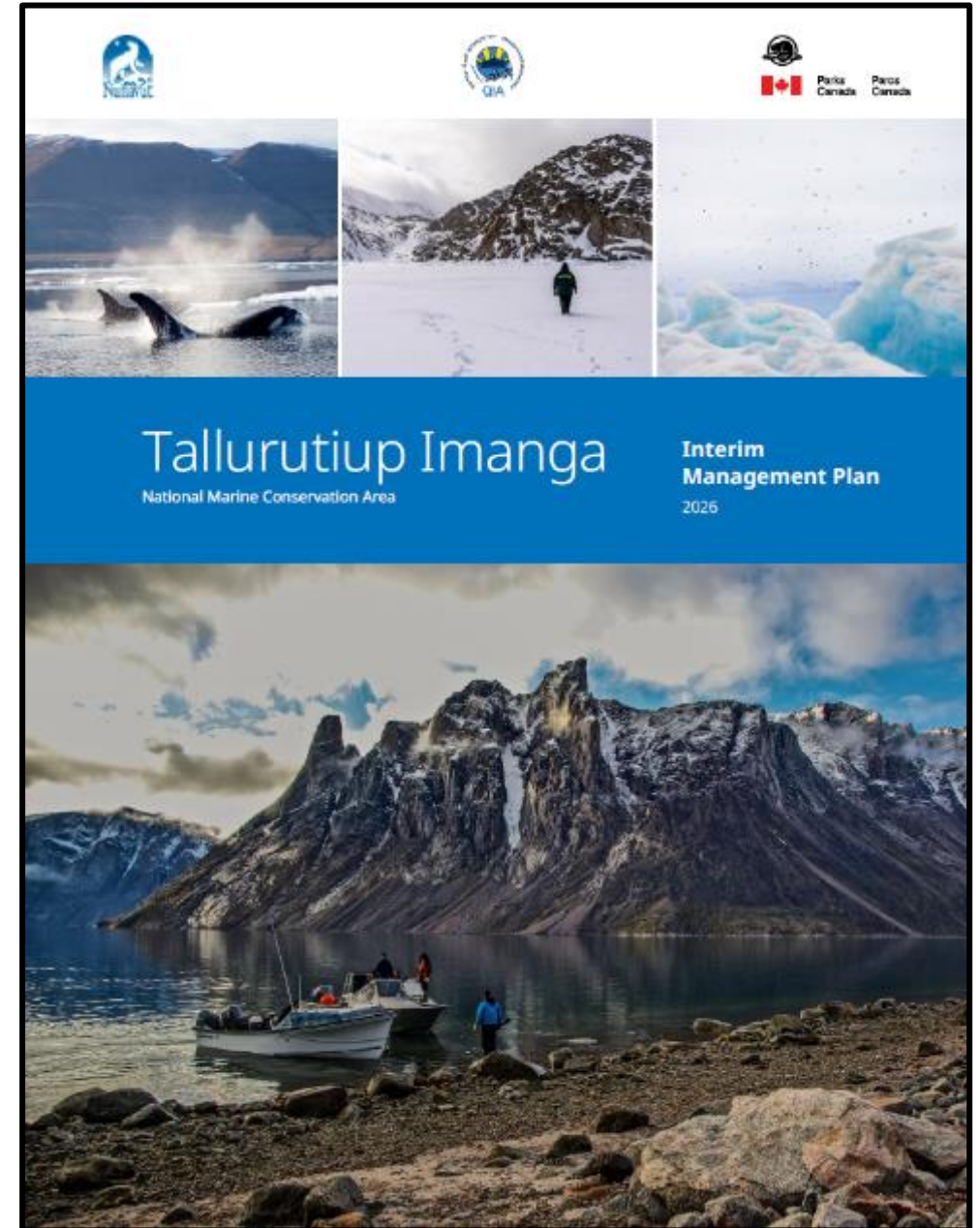
1. Introduction to NMCA's and Tallurutiup Imanga
2. Review the development and provide an overview of the interim management plan
3. Provide details on aspects of the plan that fall under the NWMB's mandate
4. Request approval for the plan



Issue

Seeking NWMB approval on:

- ☐ **the Interim Management Plan for Tallurutiup Imanga NMCA**
 - In accordance with Section 5.2.34 (c) of the NA
- ☐ **non-Inuit limitations on harvesting in certain areas of Tallurutiup Imanga NMCA**
 - In accordance with Section 5.6.48 of the NA



Introduction to National Marine Conservation Areas



Parks Canada's National Marine Conservation Areas (NMCAs)

- **Protect and conserve** representative marine areas for the **benefit, education and enjoyment of the people** living in Canada and the world
- Managed and used in a sustainable manner that **meets the needs of present and future generations** without compromising the structure and function of the ecosystems
- In NMCAs, DFO and Transport Canada retain their regulatory authorities, but within the context of the CNMCA Act

NMCA Management Goals

1. Protect marine ecosystems and biodiversity
2. Conserve cultural heritage
3. Manage use in an ecologically sustainable manner
4. Support Indigenous leadership in marine conservation
5. Contribute to the well-being of Indigenous peoples and coastal communities
6. Facilitate opportunities for meaningful visitor experiences
7. Enhance awareness and understanding of NMCA's
8. Advance effective collaboration for management



Activities in NMCA's

- Most activities allowed
e.g., fishing, tourism, shipping
 - So long as they are done in an ecologically sustainable manner and in alignment with the purpose and objectives of the NMCA
- Activities managed using zoning or other management tools
e.g., guidelines or best practices shared with users

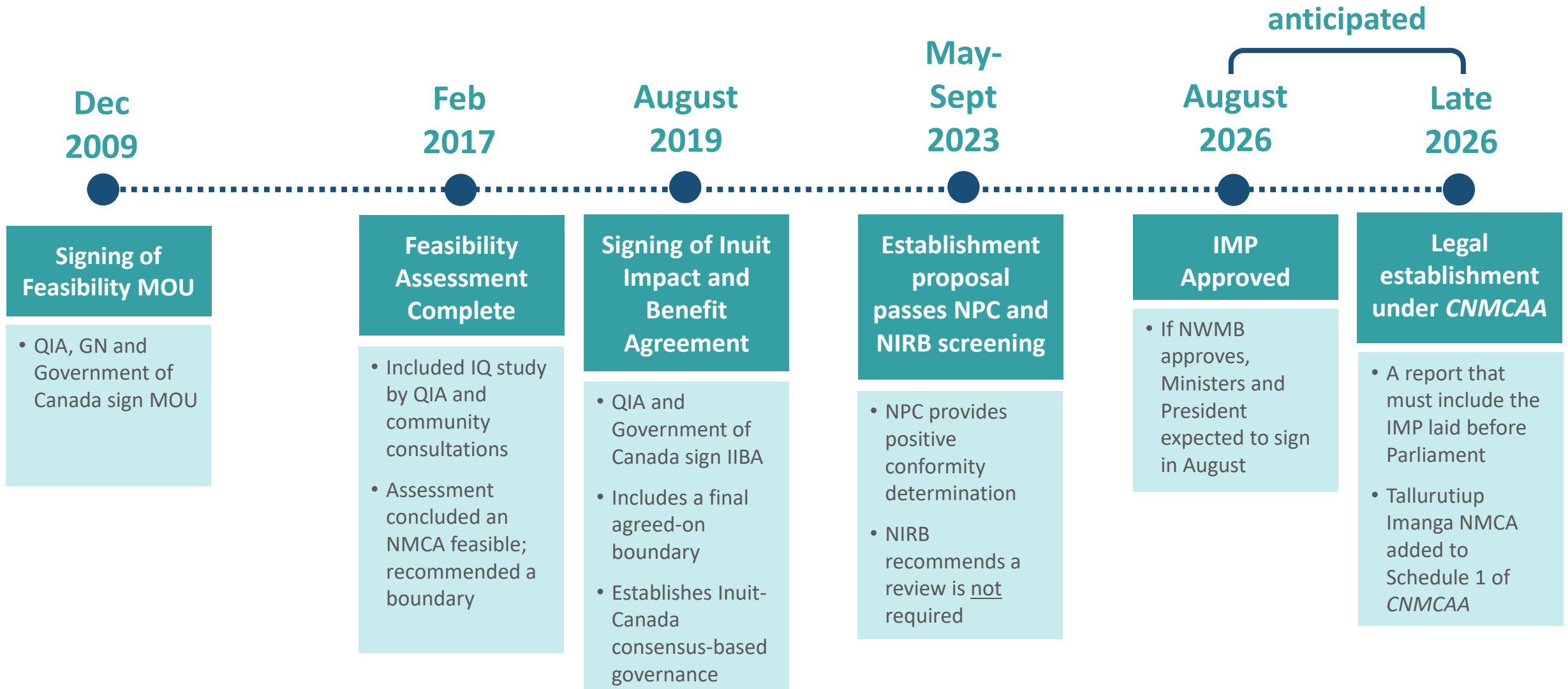
- ☒ Inuit harvesting and use
- ☒ Commercial fisheries
- ☒ Tourism
- ☒ Shipping
- ☒ Recreational use
- ☒ Disposal at sea
- ☐ Oil and gas activities
- ☐ Mining activities

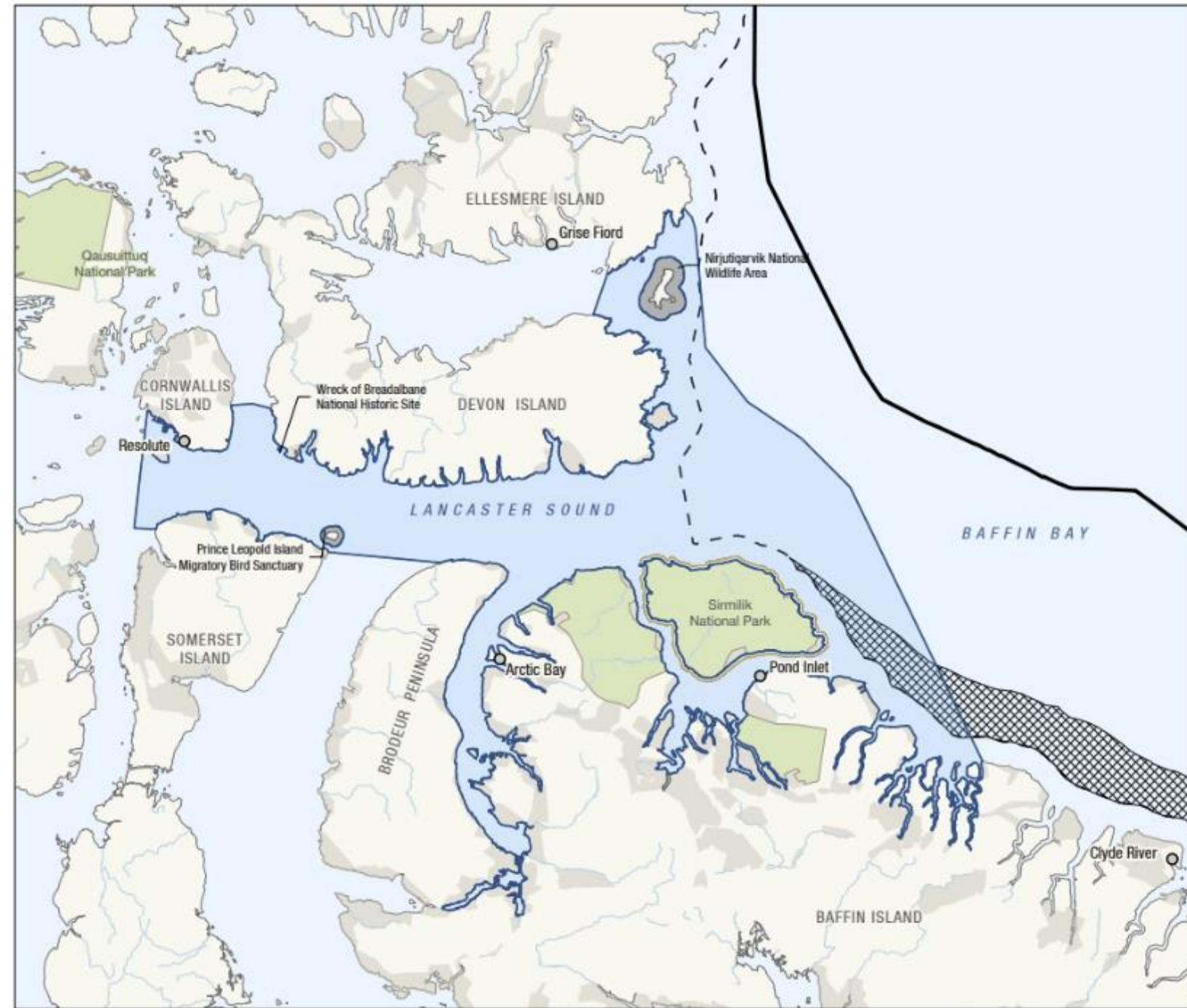
Introduction to Tallurutiup Imanga





Tallurutiup Imanga Establishment





Tallurutiup Imanga National Marine Conservation Area

 Tallurutiup Imanga National Marine Conservation Area

 National Park

Other Features

 Inuit Owned Lands

 Nunavut Settlement Area

 Bylot Island Migratory Bird Sanctuary

 Outer landfast ice zone

 Exclusive Economic Zone Boundaries

 Marine exclusion from Tallurutiup Imanga National Marine Conservation Area



**AULATTIQTIGIIT
BOARD**

Joint governance



QIA Director or
department head
for Tallurutiup
Imanga NMCA

Parks Canada Field
Unit Superintendent
for Tallurutiup
Imanga NMCA

Chair of the Inuit
Advisory Committee
(Imaq)

A senior
representative from
Fisheries and
Oceans Canada

A representative as determined by QIA

Aulattiqatigiit Board is a joint Qikiqtani Inuit Association and Parks Canada body created to guide the management of Tallurutiup Imanga National Marine Conservation Area (NMCA).

A senior representative from another federal department

Imaq

- Article 6 of the Tallurutiup Imanga IIBA
- Provides advise to QIA on matters affecting Inuit
- Imaq chair sits on the Aulattiqatigiit Board
- Current membership includes QIA's community directors of the five associated communities



Development of Tallurutiup Imanga Interim Management Plan



Development of the Interim Management Plan

1

Phase 1

Drafting the IMP (2018-2023)

2

Phase 2

Reviewing the IMP (2024-2025)

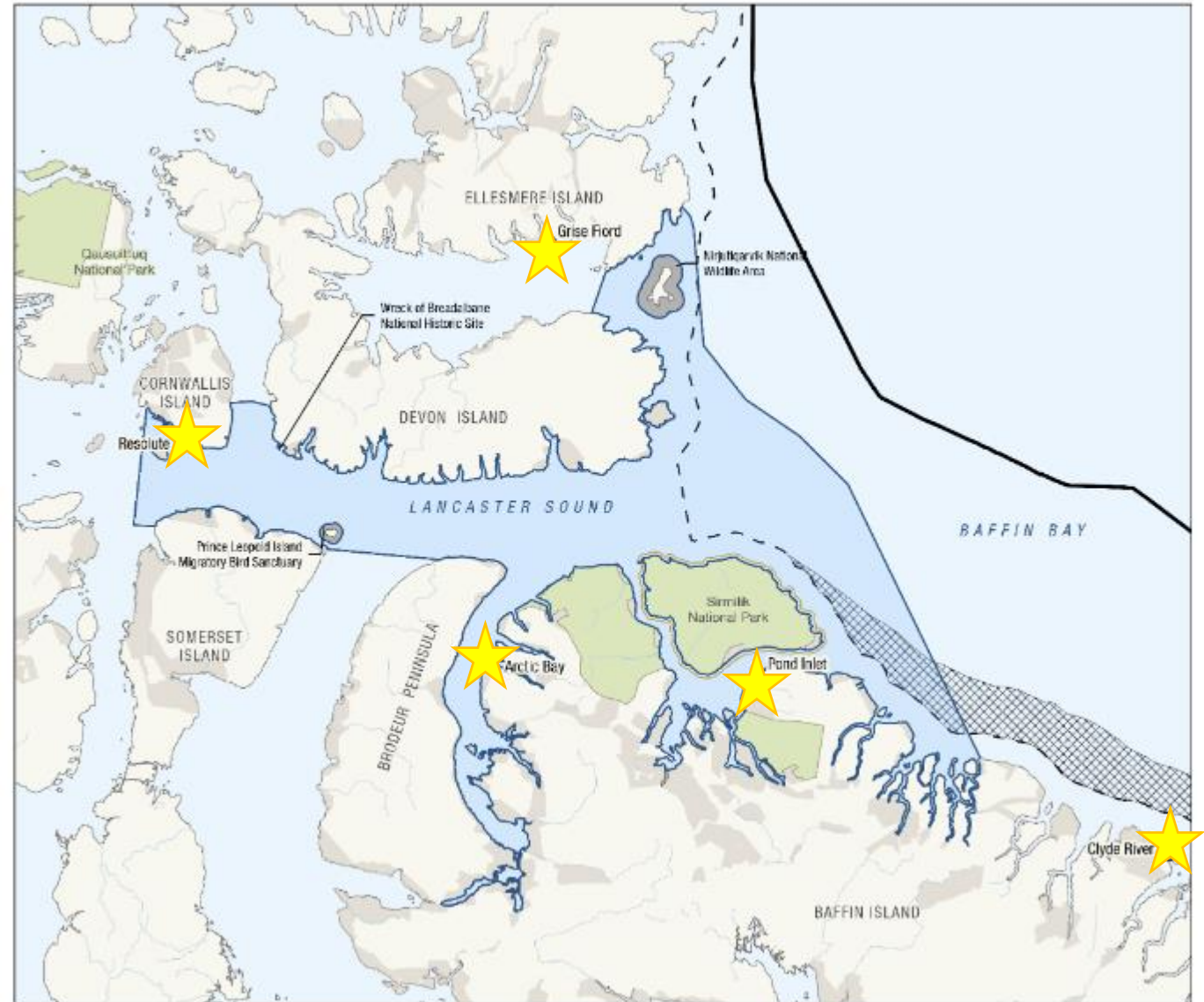
Communities Consulted

Tallurutiup Imanga Inuit Impact and Benefit Agreement defines the **Tallurutiup Imanga NMCA Communities** as:

- Arctic Bay
- Resolute
- Pond Inlet
- Clyde River
- Grise Fiord

Each community was visited **4 times from 2018 to 2025** in the process of developing the IMP:

1. May - July 2018
2. April - May 2019
3. March 2024
4. November 2024 - January 2025



Development of the IMP

1

Phase 1

Drafting the IMP
(2018-2023)

Feasibility Assessment

- Tallurutiup Imanga NMCA Feasibility Assessment completed in 2017
- Summary of ecology, regional Inuit Qaujimajatuqangit, and economic considerations

Community Consultations

- 2 rounds of meetings with Grise Fiord, Resolute, Pond Inlet, Arctic Bay, and Clyde River

Stakeholder Consultations

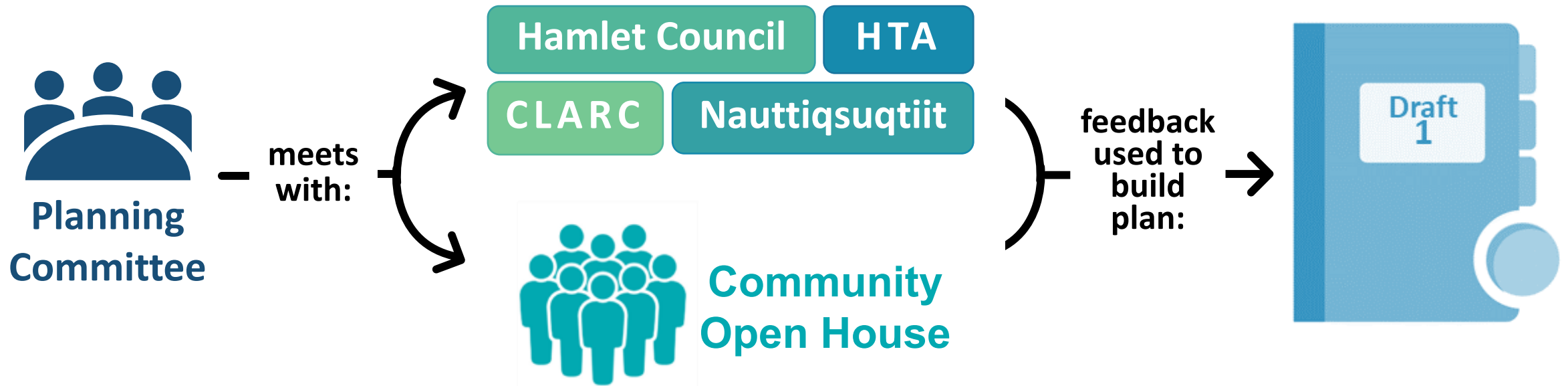
- Meeting and workshops held
- Cruise, shipping, mining, fishing tourism industries
- Nunavut institutions, NGOs, research groups, academia

Other data sources

- Draft NLUP and QWB submission
- Canadian Wildlife Service data
- Cruise ship data
- Sea ice, flow edge, polynya data

Phase 1 Community Consultations (2018-2019)

- Purpose of meetings was to hear community inputs and concerns regarding key issues
- 2 rounds of meetings held:
 - ✓ **May to July 2018**
 - ✓ **April to May 2019**



What we heard

Community Consultation 2018-2019



Protect and reduce impacts to wildlife ,
their habitat, and migration routes

Need to manage shipping traffic and
impacts on wildlife and habitat



Concerns about ice breaking and a
need for sea ice protection

Manage tourism adjacent to
communities



What we heard

Community Consultation 2018-2019



Improve communications/
manage cooperatively

Ensure Inuit Qaujimajatuqangit is included in
management and decision making



Set research priorities / training for
Inuit to conduct research

Coordinated monitoring within
TINMCA

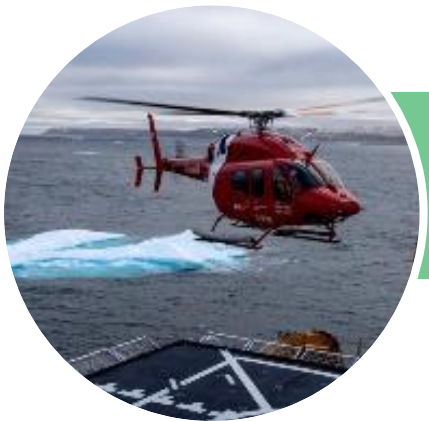


What we heard

Community Consultation 2018-2019



Changing ice conditions/
climate change



Coordination of emergency
response

Share knowledge and
information



Enforcement



Development of the IMP

2

Phase 2

Reviewing the IMP (2024-2025)

Community Review

- 2 in-person meetings and one online validation with Grise Fiord, Resolute, Pond Inlet, Arctic Bay, and Clyde River

Stakeholder Review

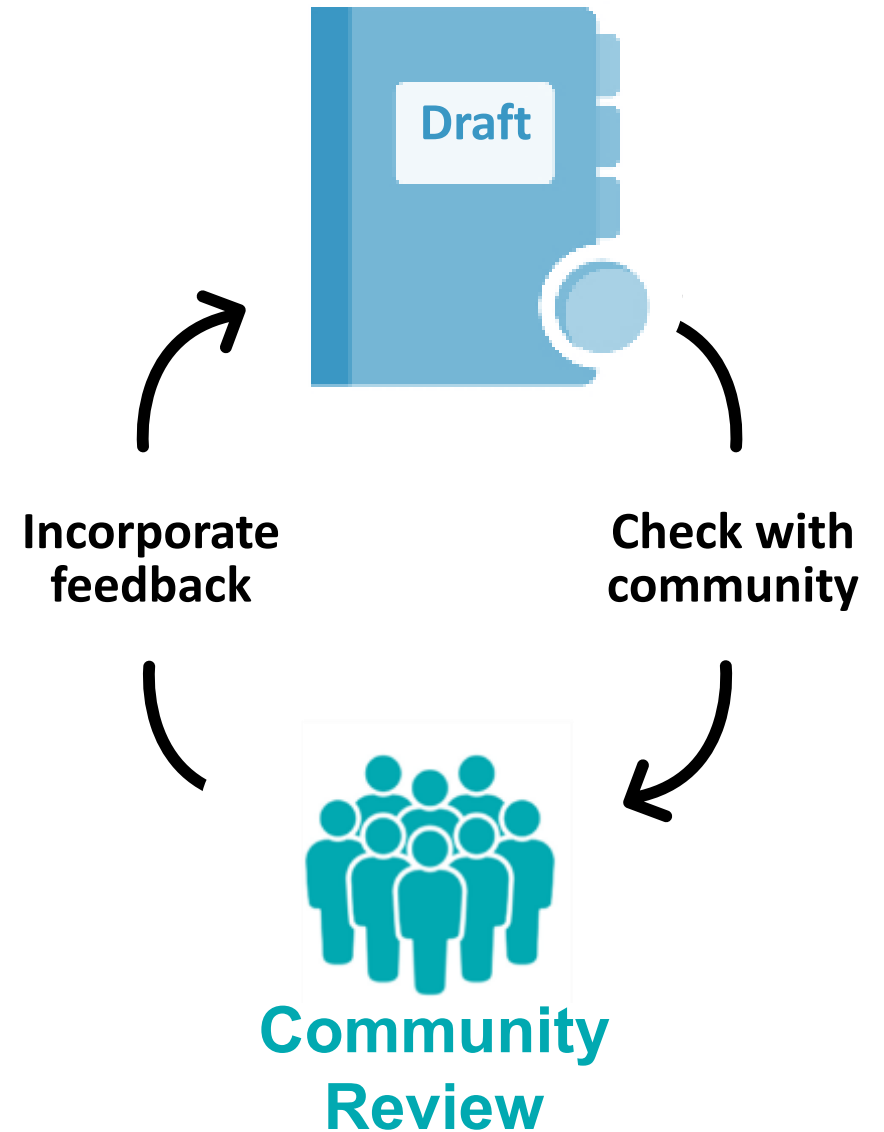
- Met with key industry stakeholders between May and September 2025
- Other stakeholders asked to review by email

Public Consultation

- IMP posted online June-July 2025

Phase 2 Community Review (2024-2025)

- Purpose of meetings was to review the draft IMP, and validate subsequent revisions
- 3 rounds of reviews held:
 - ✓ **March 2024**
 - ✓ **November 2024**
 - ✓ **Fall 2025**



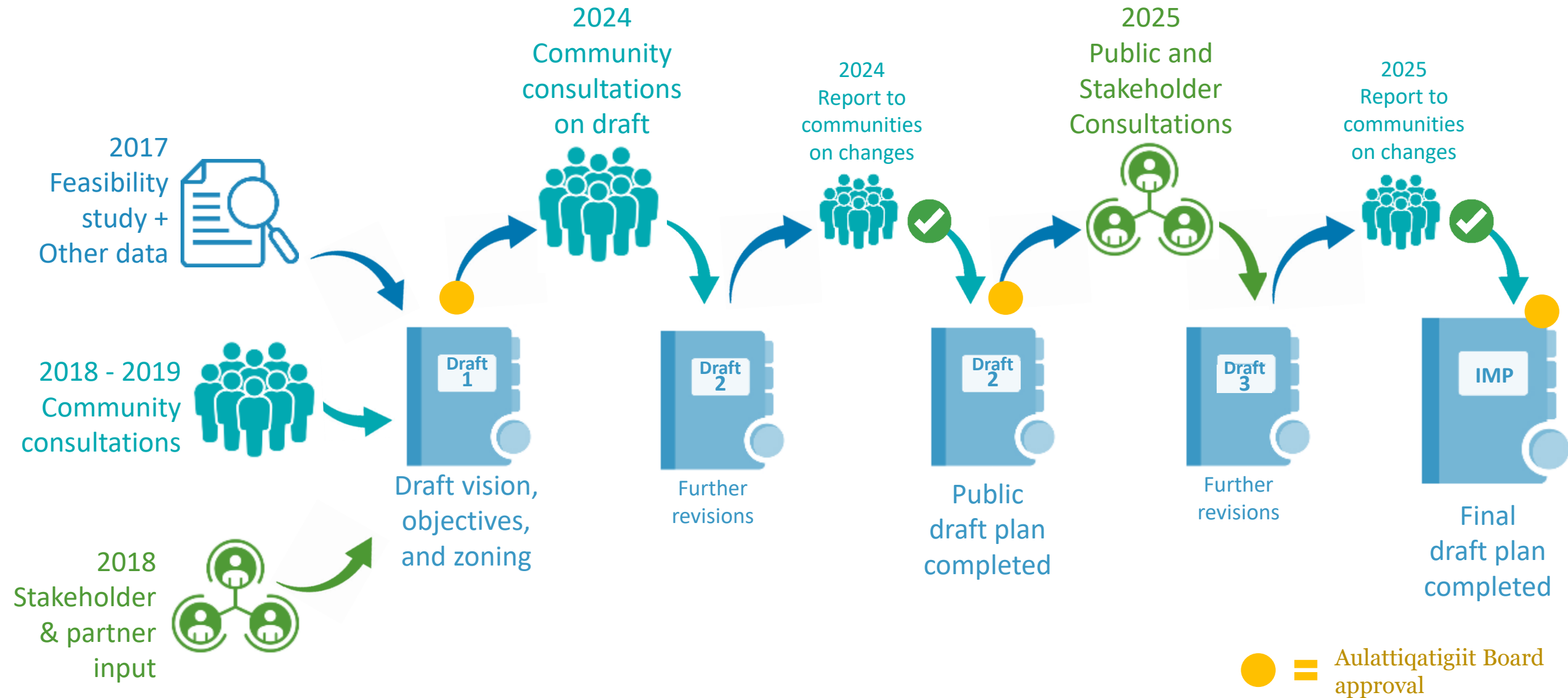


What we heard

Community Review 2024-2025

- Changes made to vision statement to better reflect Inuit values
- Changes made to targets to address desire to prioritize infrastructure and expand protection for seabirds
- Changes to dates for seasonal zoning plans to better reflect current seasonal realities
- Changes to the zoning plan to address issues such as:
 - More protection for the floe edge
 - Additional walrus haul-out areas that needed protection
 - Additional measure to better protect beluga and narwhal habitat
 - Extending protection for seabirds along the Buchan Gulf
- Certain areas needed more flexible forms of protection, added Areas of Special Importance to communities
 - These areas are of particular importance to communities and require special management focus to reduce disturbances
- The communities validated all the changes

Development of the Interim Management Plan



Consultation and Engagement Summary



Overview of Tallurutiup Imanga Interim Management Plan



What is the Interim Management Plan?

- Guidance for the Aulattiqatigiit Board and users
- Guides management until a full management plan developed
- The IMP is the last step required to establish Tallurutiup Imanga NMCA under the *Canada National Marine Conservation Areas Act*



Contents of the Interim Management Plan



VISION

Expresses an inspiring and vivid – yet achievable – description of the desired future state of the NMCA.



OBJECTIVES

Answer the question: “In order to achieve the vision, what results do we need to see?”



TARGETS

Answer the question: “How do we measure our progress toward achieving the desired results?”



ZONING

From more to less restrictive, describes what activities can take place in an area, when they can take place, and under what conditions.



Vision

Tallurutiup Imanga National Marine Conservation Area is a thriving globally significant ecosystem that sustains and empowers Inuit for generations to come and welcomes visitors to experience, appreciate, and respect its meaning to Inuit, Canada, and the Arctic region.

Objectives

Objective 1

- The natural and cultural heritage of Tallurutiup Imanga is protected and conserved.

Targets 1, 3, 4 and 6 are related to wildlife and wildlife habitat.



Objective 2

- The sustainable use of marine and terrestrial resources respects Inuit rights, results in economic and social benefits for Inuit, and enhances the well-being of the associated communities.

Objective 3

- Collaborative research and monitoring increases awareness, informs decision making, and promotes knowledge collection and sharing.

Target 1 is related to wildlife and wildlife habitat.



Objective 4

- Collaborative and coordinated prevention, preparedness, and response planning increases safety of the associated communities and NMCA users and the protection of Tallurutiup Imanga.



Objective 1

- **Target 1.** The effectiveness of the interim zoning plan in protecting and conserving natural and cultural heritage is evaluated to improve the zoning plan if needed (for example, changes to zone boundaries, or the need for additional management tools to support zoning) by the end of year five.
- **Target 3** - Processes for issuing authorizations (such as permits or licenses) for activities in Tallurutiup Imanga NMCA are developed, and documented in a format that is publicly available, by the end of year 2. These processes prioritize the protection of wildlife and Inuit use of the area in the management of other uses and activities within the NMCA. To the extent possible, these processes are streamlined with existing procedures.
- **Target 4** - As per the Federal Marine Protected Areas Protection Standard, an assessment of the compatibility of the use of bottom trawl gear with the NMCA's conservation objectives is conducted in collaboration with communities and stakeholders, and a report delivered to the Aulattiqatigiit Board by the end of year 5.
- **Target 6** - An assessment of the need for increased protection of colonial seabirds and their habitat is completed in collaboration with the Canadian Wildlife Service, and a report with findings and recommendations delivered to the Aulattiqatigiit Board by year 3.



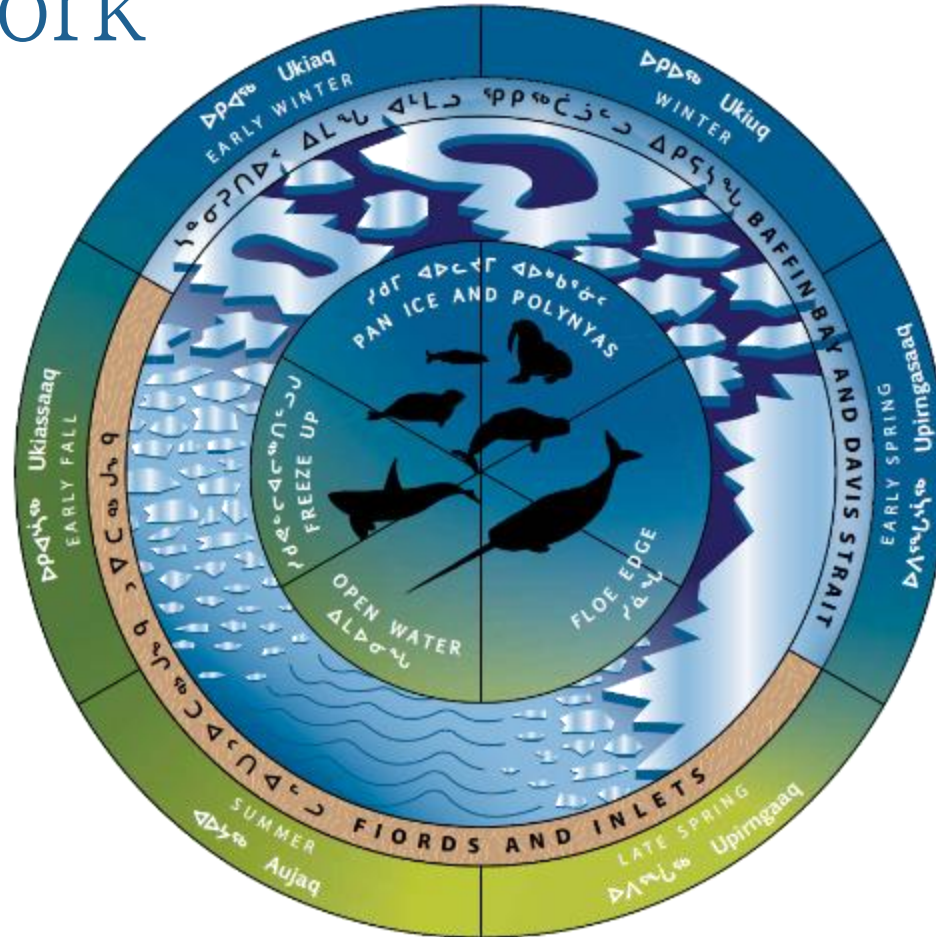
Objective 3

- **Target 1** - A minimum of 3 indicators to monitor ecological sustainability that are based on Inuit Qaujimajatuqangit and western science are co-developed with communities and approved by the Aulattiqatigiit Board. The monitoring of these indicators commences within 5 years.

Zoning Framework

Open Water Zoning Plan

July 21 to
November 15



Ice Zoning Plan

November 16
to July 20

Exceptions to zoning

- Inuit traditional use and access not affected
- National security or sovereignty, defense, law enforcement activities
- Safety and emergency response activities
- Community resupply
- Vessels engaged in innocent passage without stopping



The map illustrates the Ross Sea region, including Jones Sound, Lancaster Sound, and the Bay of Whales. Key geographical features labeled include Ellesmere Island, Devon Island, Somerset Island, and the Rongelap Peninsula. Sampling stations are marked with letters (A, B, C, D, E, F, G, H1, H2, H3, J, K) and circled numbers (11, 12, 13). The map also shows various islands and peninsulas, such as Somerset Island, Rongelap Peninsula, and the Bay of Whales. The map is color-coded, with blue for water, green for land, and yellow for specific areas. The map is titled 'Map of the Ross Sea region' and includes a scale bar and a north arrow.

(July 21 - November 15)

 Zone 1 (strict protection)
 Zone 2 (restricted protection)
 Zone 4 (multiple use)
 Area of special importance to communities (ASAC)
 Marine protected area (MPA) in the National Marine Conservation Area
 National Park

 Inland Owned Land
 Municipal Settlement Area
 Dyer Island Migratory Bird Sanctuary
 Area Inland to Airport
 Exclusive Economic Zone Boundary
 Northern Shipping Route

Model Center	Description
1	Model of the Adaptive Systems Model (Hollnagel, 9)
2	Adaptive control model
3	Adaptive control model
4	Intelligent control model
5	Control system
6	System control model
7	Regulation model
15, 16, 17	Enlarged control system model
18, 19, 20	Enlarged control system model
21	Enlarged control system model
22	Enlarged control system model



The map shows the Beaufort Sea region with various islands and water bodies. Key locations include Ellesmere Island, Devon Island, Somerset Island, and the Beaufort Peninsula. Water bodies shown are Jones Sound, Lancaster Sound, Gaffin Bay, and the Beaufort Sea. Sampling locations are marked with letters A through M. A legend indicates different types of sampling locations: A (black dot), B (white dot), E (yellow dot), G (yellow dot), L (yellow dot), and M (yellow dot). Lines connect these letters to specific sites on the map.

November 16 - July 20

Zone 1 (strict protection)
 Zone 2 (habitat protection)
 Zone 4 (multiple use)
 Marine exclusion from Billingsley Inlets
 National Marine Conservation Area
 National Park

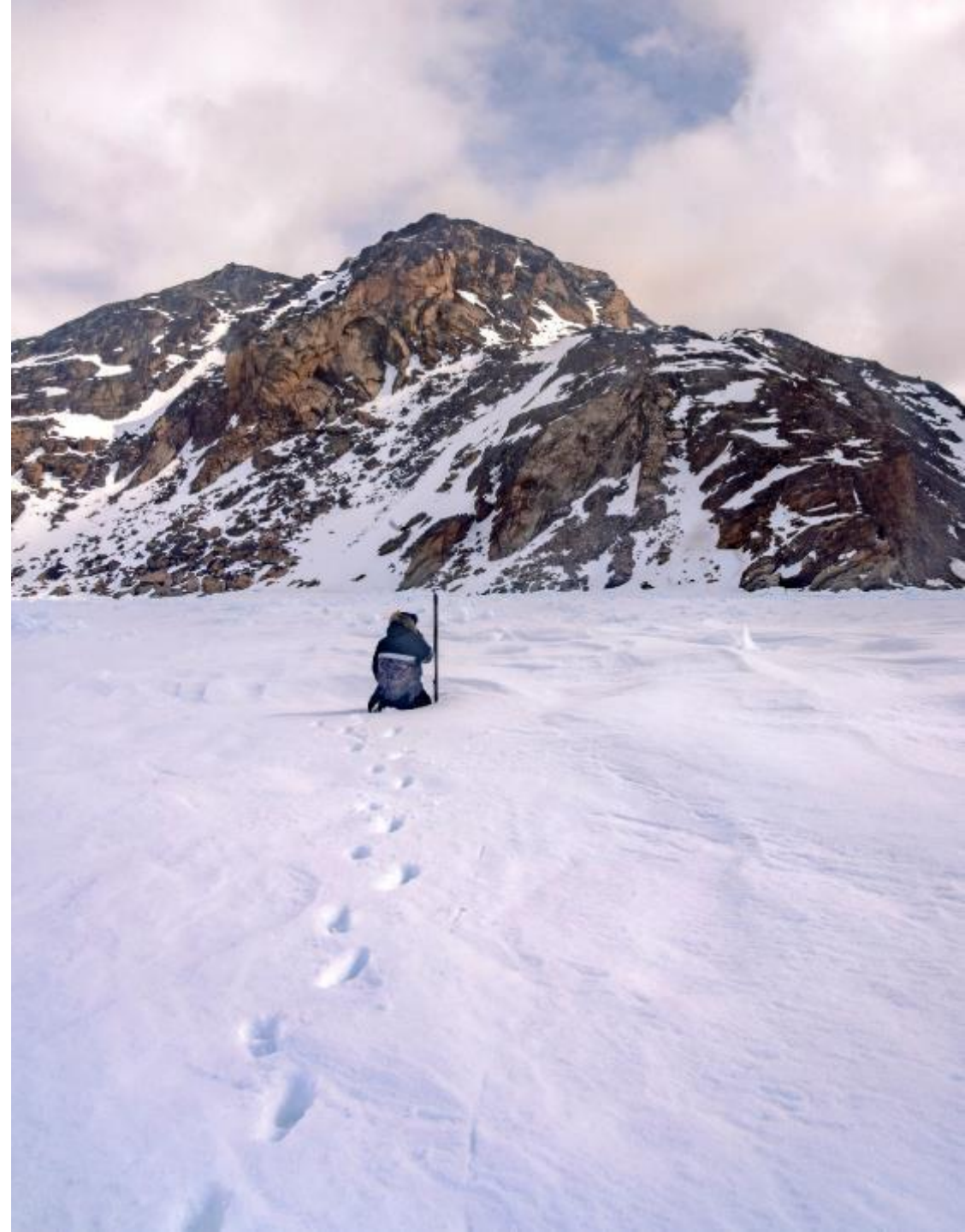
- Inland Gained Lands
- Natural Settlement Area
- Bay of Islands M. prairie B. ref Sanctuary
- Outer landfast ice zone
- Lachlan-Leonard zone boundaries
- Northern Shipping Route

Habitat Code	Description
A	Woods of Massachusetts National Historic Site
B	Wetland forest
C	Swampy wetland
D	Significant forest area
E	Very wet forest for growing timberland
F	Very wet forest



0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940 960 980 1000 1020 1040 1060 1080 1100 1120 1140 1160 1180 1200 1220 1240 1260 1280 1300 1320 1340 1360 1380 1400 1420 1440 1460 1480 1500 1520 1540 1560 1580 1600 1620 1640 1660 1680 1700 1720 1740 1760 1780 1800 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000 2020 2040 2060 2080 2100 2120 2140 2160 2180 2200 2220 2240 2260 2280 2300 2320 2340 2360 2380 2400 2420 2440 2460 2480 2500 2520 2540 2560 2580 2600 2620 2640 2660 2680 2700 2720 2740 2760 2780 2800 2820 2840 2860 2880 2900 2920 2940 2960 2980 3000 3020 3040 3060 3080 3100 3120 3140 3160 3180 3200 3220 3240 3260 3280 3300 3320 3340 3360 3380 3400 3420 3440 3460 3480 3500 3520 3540 3560 3580 3600 3620 3640 3660 3680 3700 3720 3740 3760 3780 3800 3820 3840 3860 3880 3900 3920 3940 3960 3980 4000 4020 4040 4060 4080 4100 4120 4140 4160 4180 4200 4220 4240 4260 4280 4300 4320 4340 4360 4380 4400 4420 4440 4460 4480 4500 4520 4540 4560 4580 4600 4620 4640 4660 4680 4700 4720 4740 4760 4780 4800 4820 4840 4860 4880 4900 4920 4940 4960 4980 5000 5020 5040 5060 5080 5100 5120 5140 5160 5180 5200 5220 5240 5260 5280 5300 5320 5340 5360 5380 5400 5420 5440 5460 5480 5500 5520 5540 5560 5580 5600 5620 5640 5660 5680 5700 5720 5740 5760 5780 5800 5820 5840 5860 5880 5900 5920 5940 5960 5980 6000 6020 6040 6060 6080 6100 6120 6140 6160 6180 6200 6220 6240 6260 6280 6300 6320 6340 6360 6380 6400 6420 6440 6460 6480 6500 6520 6540 6560 6580 6600 6620 6640 6660 6680 6700 6720 6740 6760 6780 6800 6820 6840 6860 6880 6900 6920 6940 6960 6980 7000 7020 7040 7060 7080 7100 7120 7140 7160 7180 7200 7220 7240 7260 7280 7300 7320 7340 7360 7380 7400 7420 7440 7460 7480 7500 7520 7540 7560 7580 7600 7620 7640 7660 7680 7700 7720 7740 7760 7780 7800 7820 7840 7860 7880 7900 7920 7940 7960 7980 8000 8020 8040 8060 8080 8100 8120 8140 8160 8180 8200 8220 8240 8260 8280 8300 8320 8340 8360 8380 8400 8420 8440 8460 8480 8500 8520 8540 8560 8580 8600 8620 8640 8660 8680 8700 8720 8740 8760 8780 8800 8820 8840 8860 8880 8900 8920 8940 8960 8980 9000 9020 9040 9060 9080 9100 9120 9140 9160 9180 9200 9220 9240 9260 9280 9300 9320 9340 9360 9380 9400 9420 9440 9460 9480 9500 9520 9540 9560 9580 9600 9620 9640 9660 9680 9700 9720 9740 9760 9780 9800 9820 9840 9860 9880 9900 9920 9940 9960 9980 10000 10020 10040 10060 10080 10100 10120 10140 10160 10180 10200 10220 10240 10260 10280 10300 10320 10340 10360 10380 10400 10420 10440 10460 10480 10500 10520 10540 10560 10580 10600 10620 10640 10660 10680 10700 10720 10740 10760 10780 10800 10820 10840 10860 10880 10900 10920 10940 10960 10980 11000 11020 11040 11060 11080 11100 11120 11140 11160 11180 11200 11220 11240 11260 11280 11300 11320 11340 11360 11380 11400 11420 11440 11460 11480 11500 11520 11540 11560 11580 11600 11620 11640 11660 11680 11700 11720 11740 11760 11780 11800 11820 11840 11860 11880 11900 11920 11940 11960 11980 12000 12020 12040 12060 12080 12100 12120 12140 12160 12180 12200 12220 12240 12260 12280 12300 12320 12340 12360 12380 12400 12420 12440 12460 12480 12500 12520 12540 12560 12580 12600 12620 12640 12660 12680 12700 12720 12740 12760 12780 12800 12820 12840 12860 12880 12900 12920 12940 12960 12980 13000 13020 13040 13060 13080 13100 13120 13140 13160 13180 13200 13220 13240 13260 13280 13300 13320 13340 13360 13380 13400 13420 13440 13460 13480 13500 13520 13540 13560 13580 13600 13620 13640 13660 13680 13700 13720 13740 13760 13780 13800 13820 13840 13860 13880 13900 13920 13940 13960 13980 14000 14020 14040 14060 14080 14100 14120 14140 14160 14180 14200 14220 14240 14260 14280 14300 14320 14340 14360 14380 14400 14420 14440 14460 14480 14500 14520 14540 14560 14580 14600 14620 14640 14660 14680 14700 14720 14740 14760 14780 14800 14820 14840 14860 14880 14900 14920 14940 14960 14980 15000 15020 15040 15060 15080 15100 15120 15140 15160 15180 15200 15220 15240 15260 15280 15300 15320 15340 15360 15380 15400 15420 15440 15460 15480 15

Zoning Walk Through

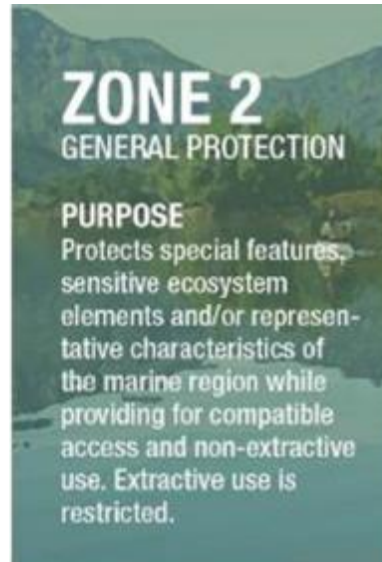


Zoning

A vertical rectangular panel with a brownish-orange background. At the bottom, there is a faint image of a whale breaching the water.

ZONE 1
STRICT PROTECTION

PURPOSE
Strictly protects special features and/or sensitive ecosystem elements that may be susceptible to disturbance. Access and extractive use are restricted.

A vertical rectangular panel with a greenish-blue background. At the bottom, there is a faint image of a coastal landscape with mountains and water.

ZONE 2
GENERAL PROTECTION

PURPOSE
Protects special features, sensitive ecosystem elements and/or representative characteristics of the marine region while providing for compatible access and non-extractive use. Extractive use is restricted.

A vertical rectangular panel with a blue background. At the bottom, there is a faint image of a small boat on the water.

ZONE 3
HABITAT PROTECTION

PURPOSE
Protects specific habitats while providing for compatible access and extractive uses. Some uses are restricted to support specific habitat conservation objectives.

A vertical rectangular panel with a blue background. At the bottom, there is a faint image of a sailboat on the water.

ZONE 4
MULTIPLE USE

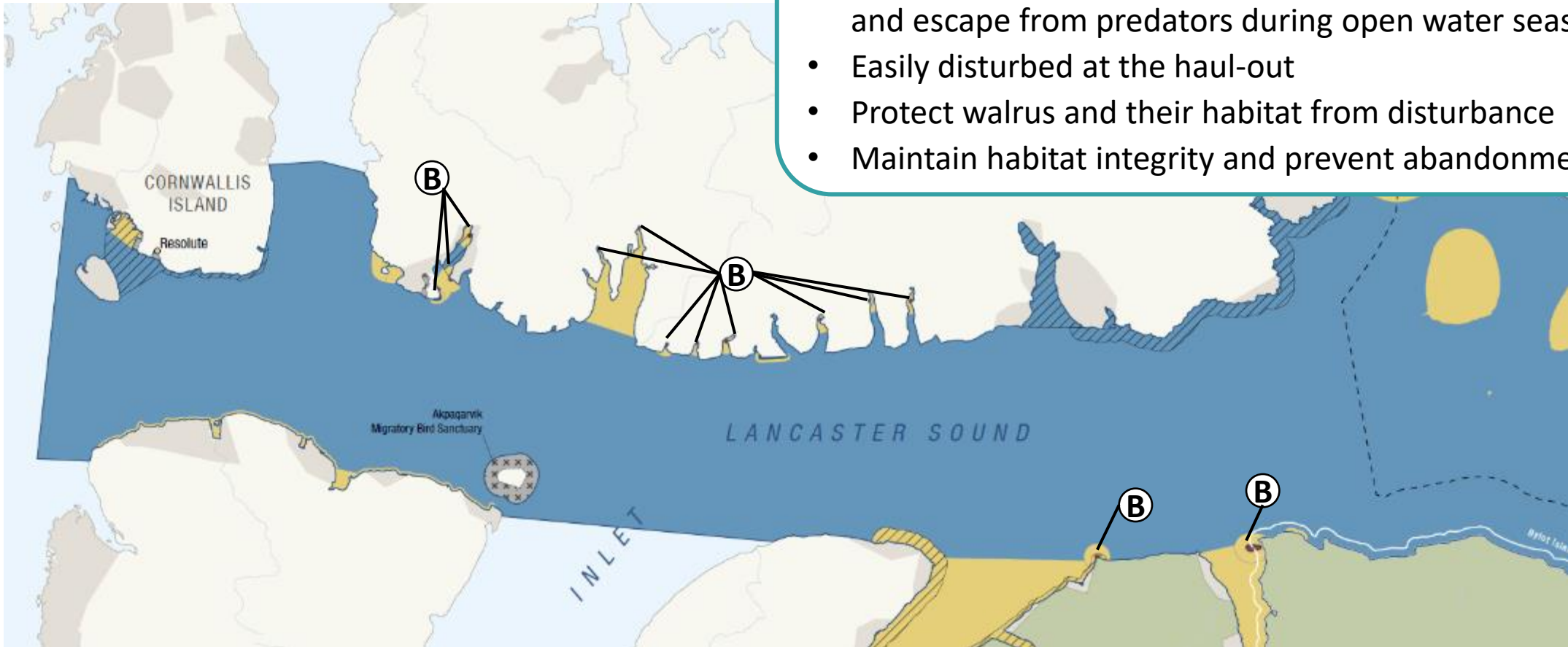
PURPOSE
Sustains the greatest range of uses that do not compromise ecological sustainability, cultural resources or heritage values.

Indigenous traditional use continues in all zones, consistent with Section 35 of the Constitution Act.*

Walrus haul-outs

What is protected and why

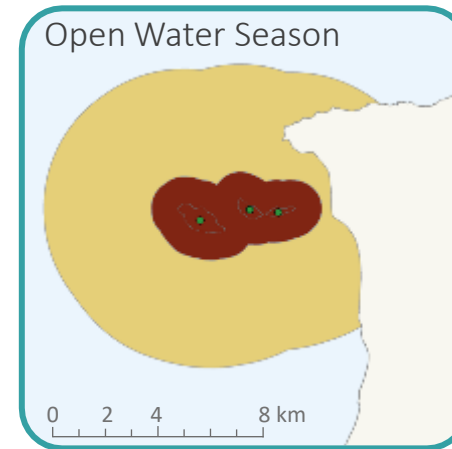
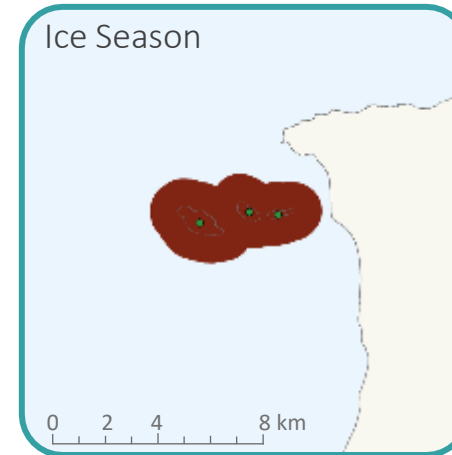
- 13 important walrus haul-out sites for resting, feeding and escape from predators during open water season
- Easily disturbed at the haul-out
- Protect walrus and their habitat from disturbance
- Maintain habitat integrity and prevent abandonment



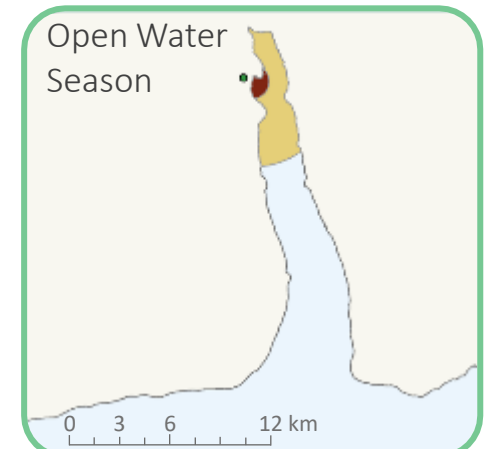
Walrus haul-outs

- Zoning for walrus haul-outs developed to mirror the requirements outlined in the 2023 Recommended Nunavut Land Use Plan, as recommended by the Qikiqtaaluk Wildlife Board
- **Zone 1 - Strict protection (year-round):**
 - **For Wollaston Islands:** No access on islands and in water a 1-km buffer around islands
 - **For all other haul-outs:** No access in water a 1-km buffer around haul-out
 - Some research and monitoring allowed
 - **Harvesting restrictions:** All non-Inuit* harvesting prohibited in area
- **Zone 3 - Open water habitat protection:**
 - Buffer extending additional 4 km seawards
 - Prohibits commercial shipping, commercial and recreational fishing
 - Restriction based on vessel size for recreational and commercial tourism (see next slide)
 - Prohibits flying an aircraft at an altitude < 5 000 ft
 - Exceptions for research may apply through permitting process
 - **Harvesting restrictions:** All non-Inuit* harvesting prohibited in area

Wollaston Islands



All other haul-outs



* Inuit traditional use, including hunting, fishing, trapping, and gathering **can continue** in all areas and zones of Tallurutiup Imanga NMCA

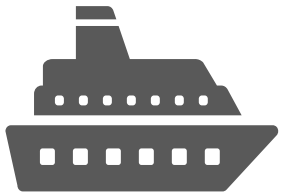
Walrus haul-outs



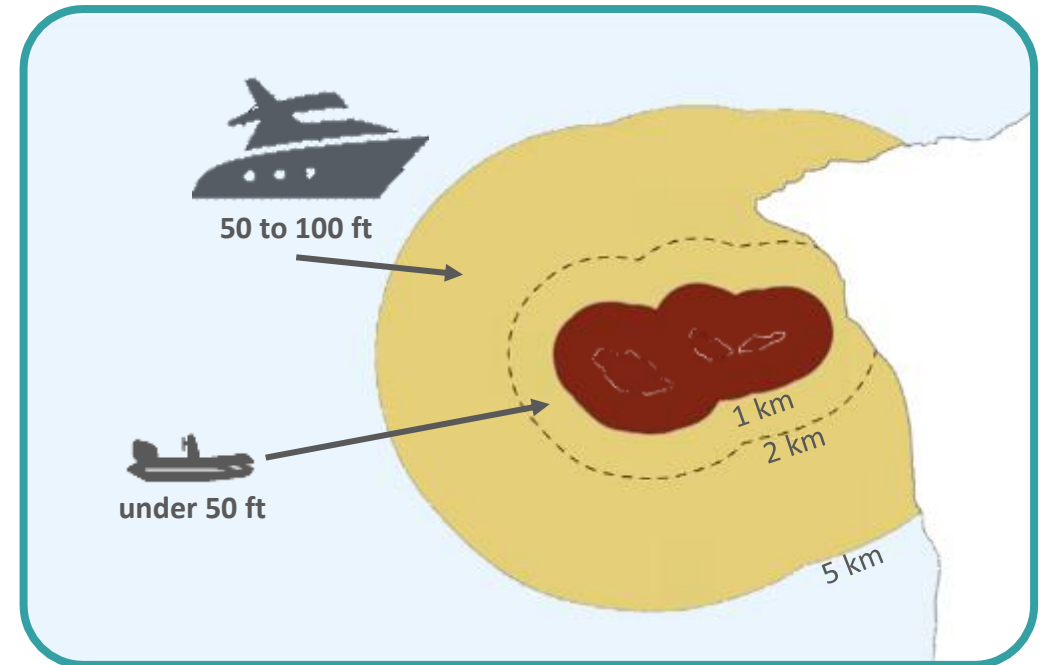
- **< 50 ft:** may navigate anywhere within the zone 3 area (e.g. kayaks, zodiacs)



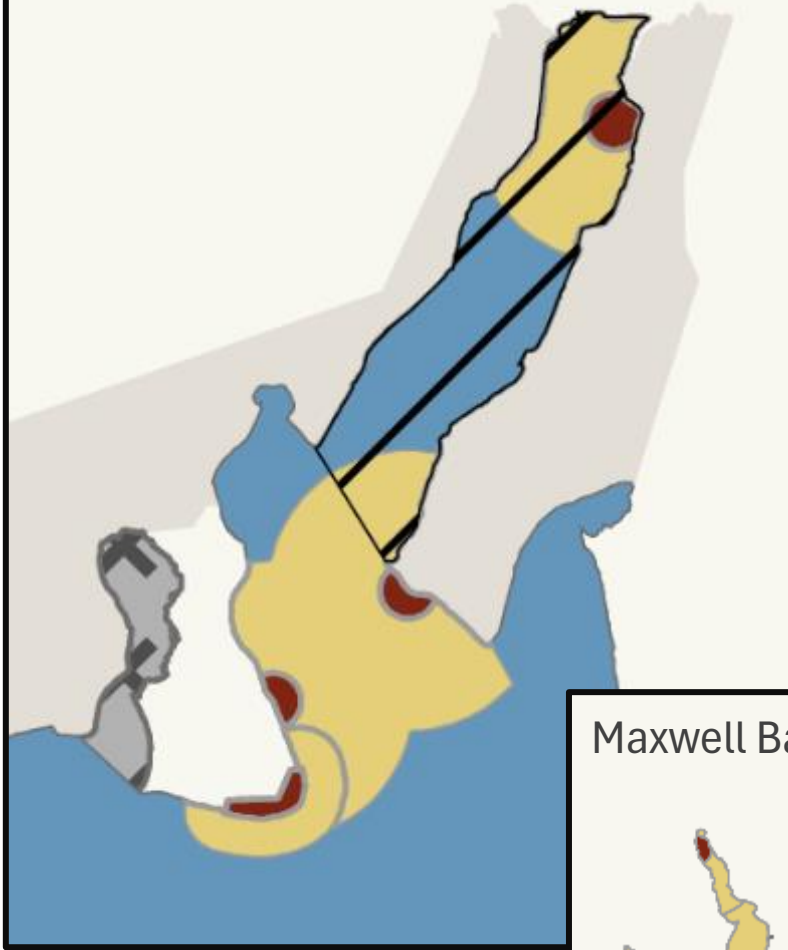
- **50 - 100 ft:** may enter the zone 3 area but must always remain at least 2 km from the haul-out



- **>100 ft:** prohibited from accessing or transiting through these zone 3 areas



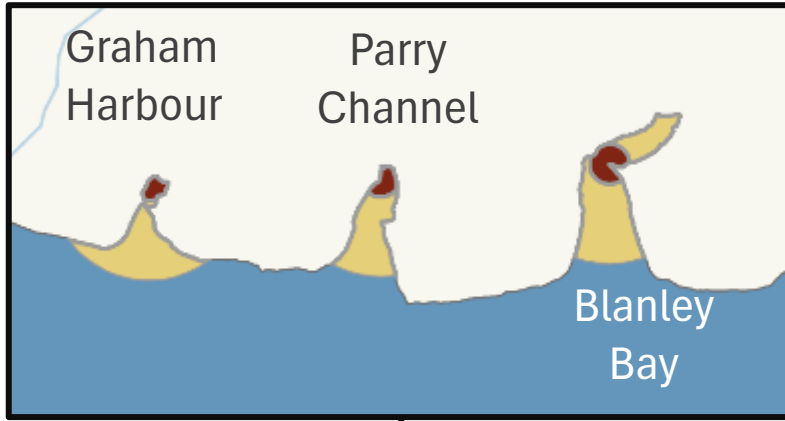
Radstock Bay



Graham Harbour

Parry Channel

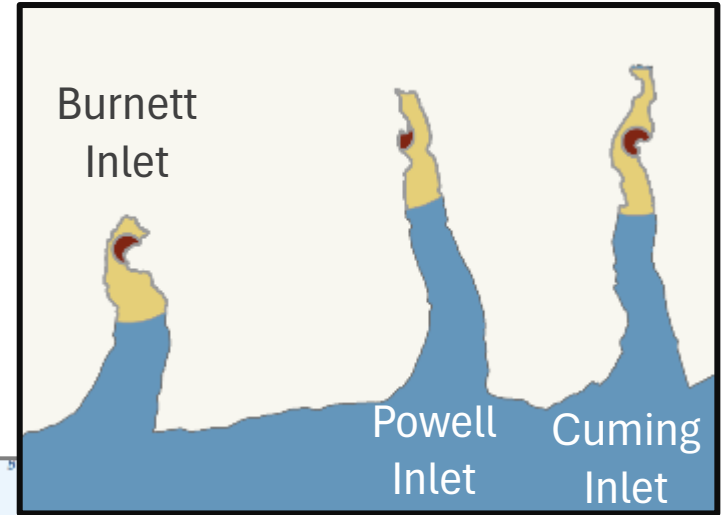
Blanley Bay



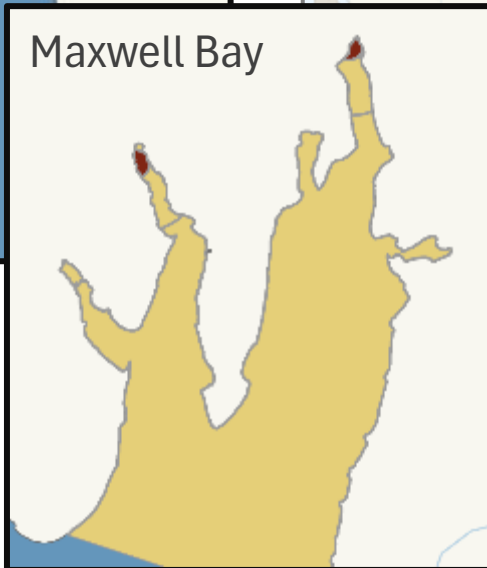
Burnett Inlet

Powell Inlet

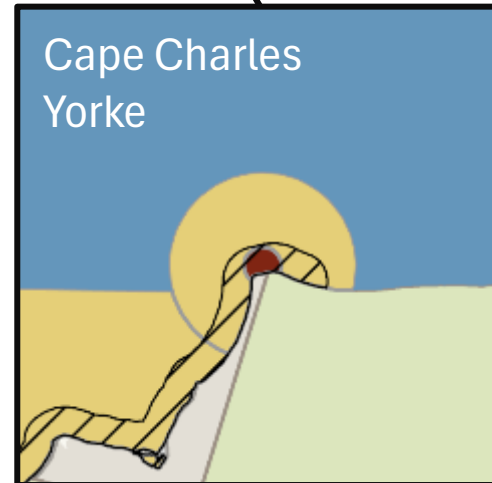
Cuming Inlet



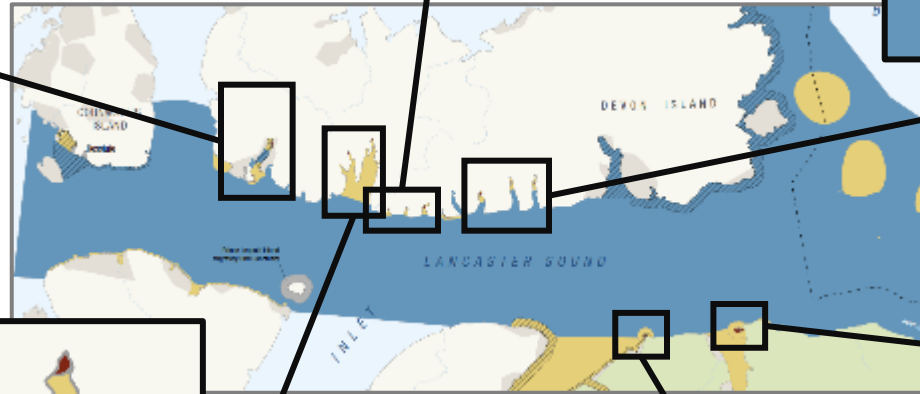
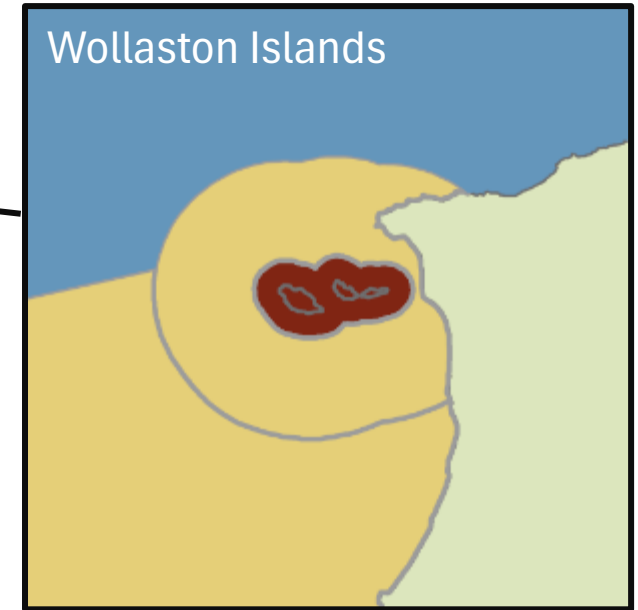
Maxwell Bay



Cape Charles
Yorke



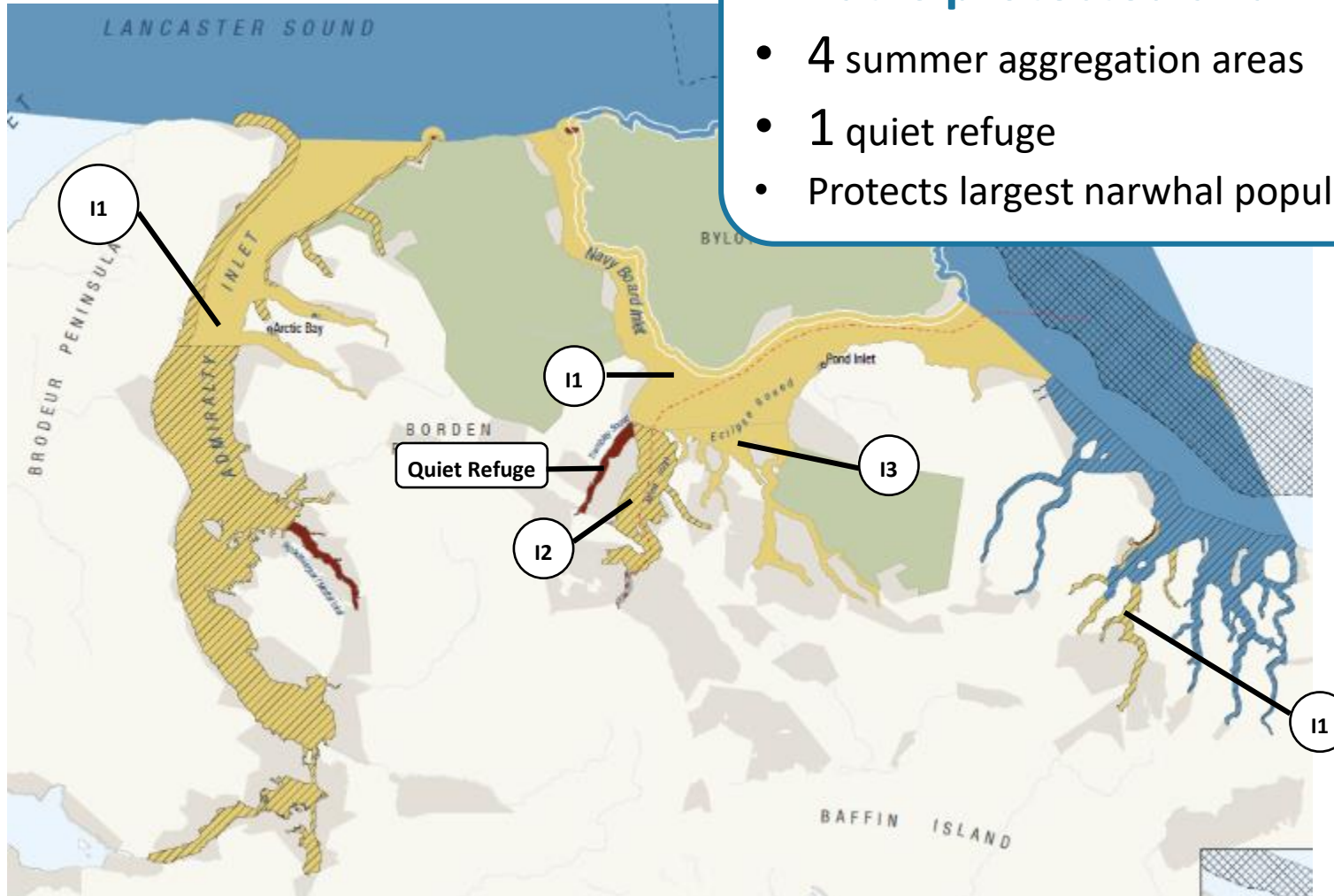
Wollaston Islands



Narwhal habitat

What is protected and why

- 4 summer aggregation areas
- 1 quiet refuge
- Protects largest narwhal population in the world



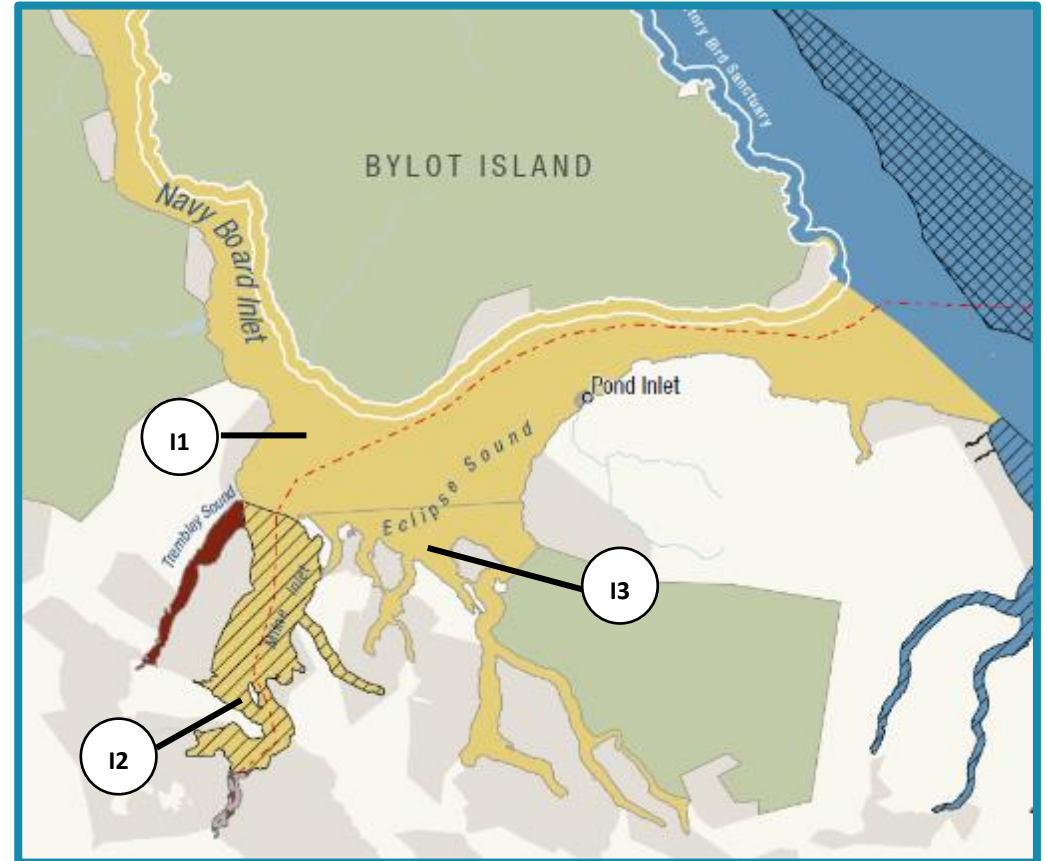
Narwhal habitat

- **Zone 1 - Strict protection:**

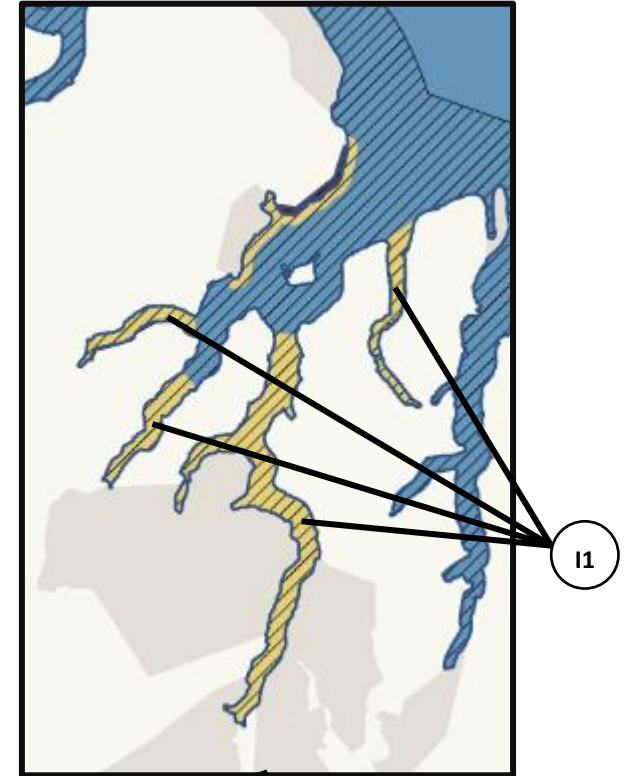
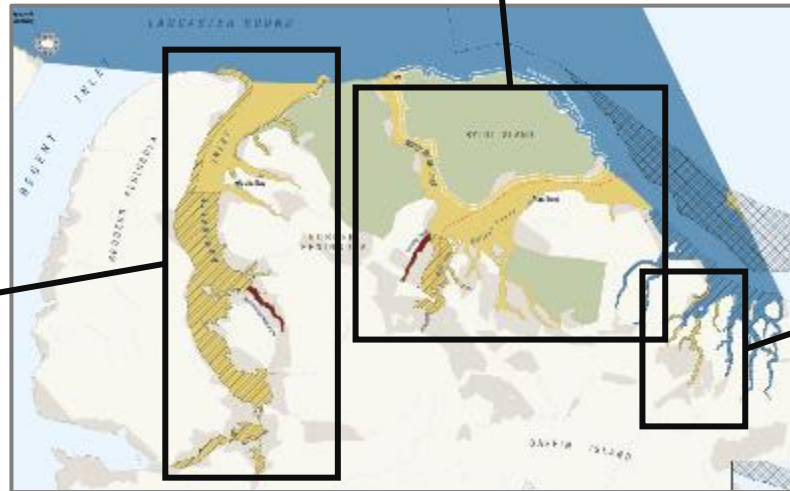
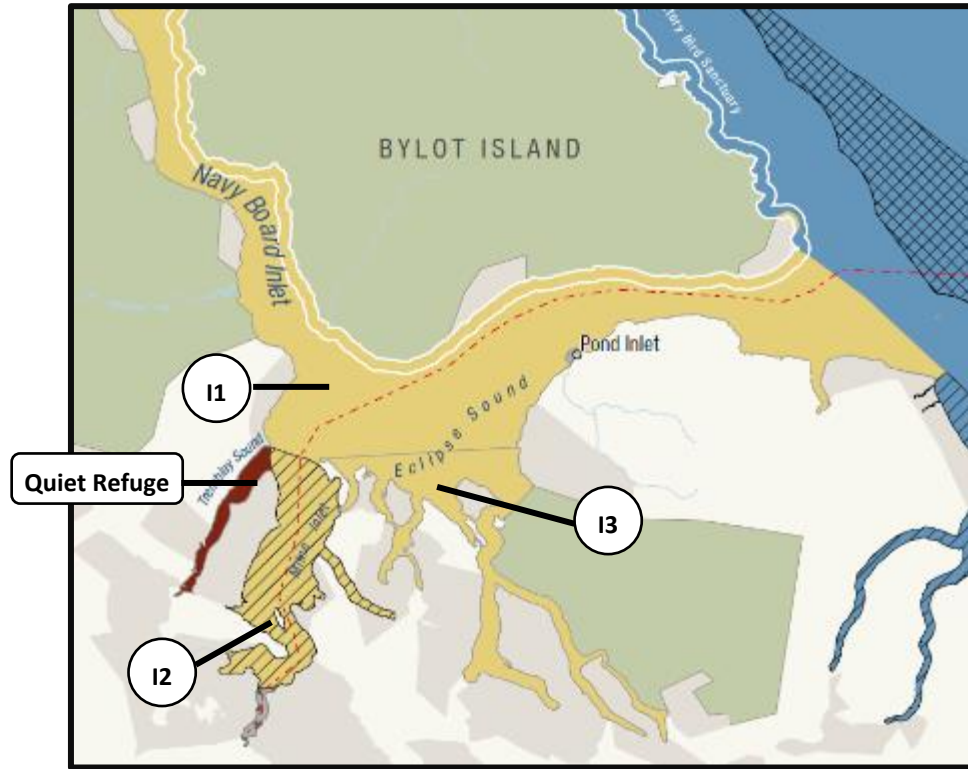
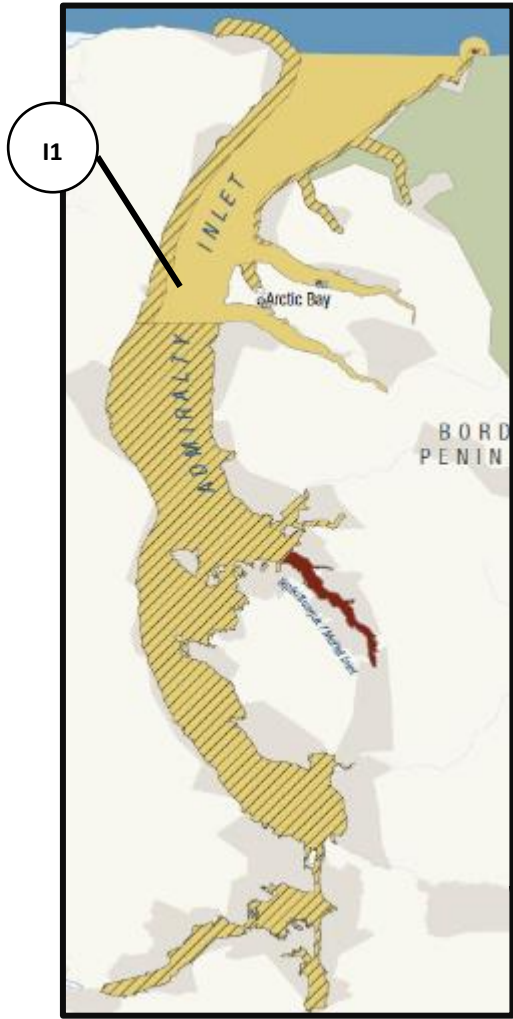
- No access to Trembley Sound during open water season; quiet refuge
- Some research and monitoring allowed
- **Harvesting restrictions:** All non-Inuit* harvesting prohibited in area

- **Zone 3 - Open water habitat protection:**

- Speed limit of 9 knots for all vessels over 300 tons
- Cruise ships prohibited in Milne Inlet (I2) and southern fiords of Eclipse Sound (I3)
- Commercial ships prohibited in southern fiords of Eclipse Sound (I3)
- **Harvesting restrictions:** All non-Inuit* bottom contact fishing gear is prohibited in area



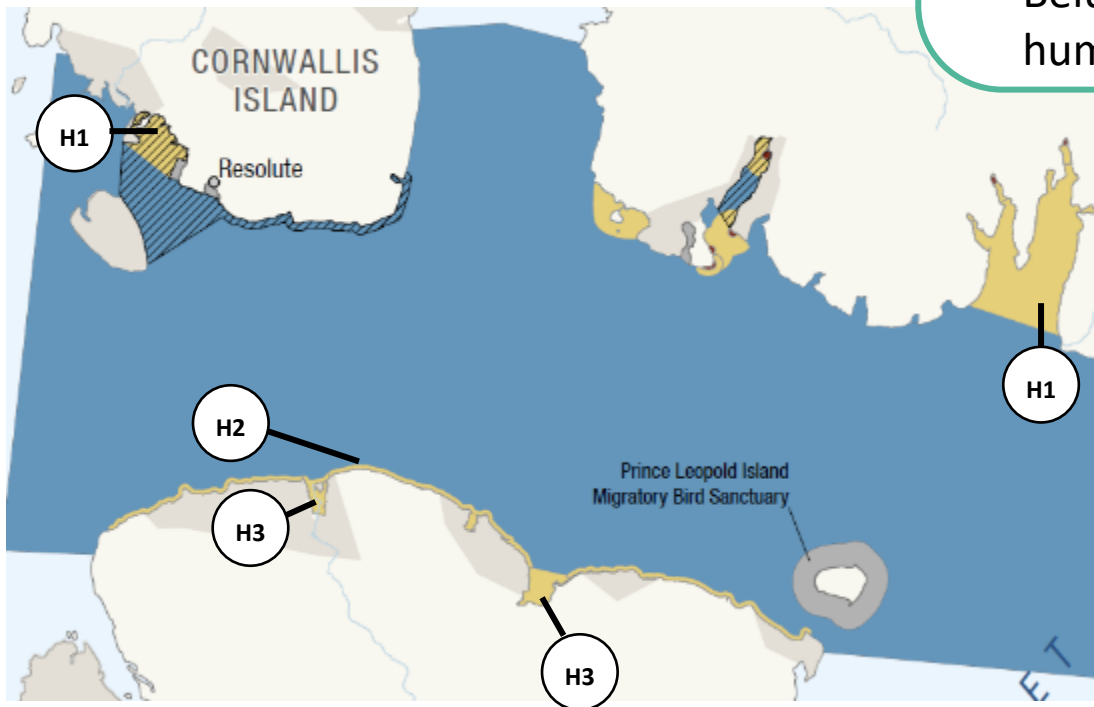
* Inuit traditional use, including hunting, fishing, trapping, and gathering **can continue** in all areas and zones of Tallurutiup Imanga NMCA



Beluga habitat

What is protected and why

- 4 shallow estuaries known to be important beluga nursery and molting grounds used yearly
- 1-km strip stretching along the entire northern coast of Somerset Island, and important aggregation area
- Belugas are disturbed by underwater noise from some human activities



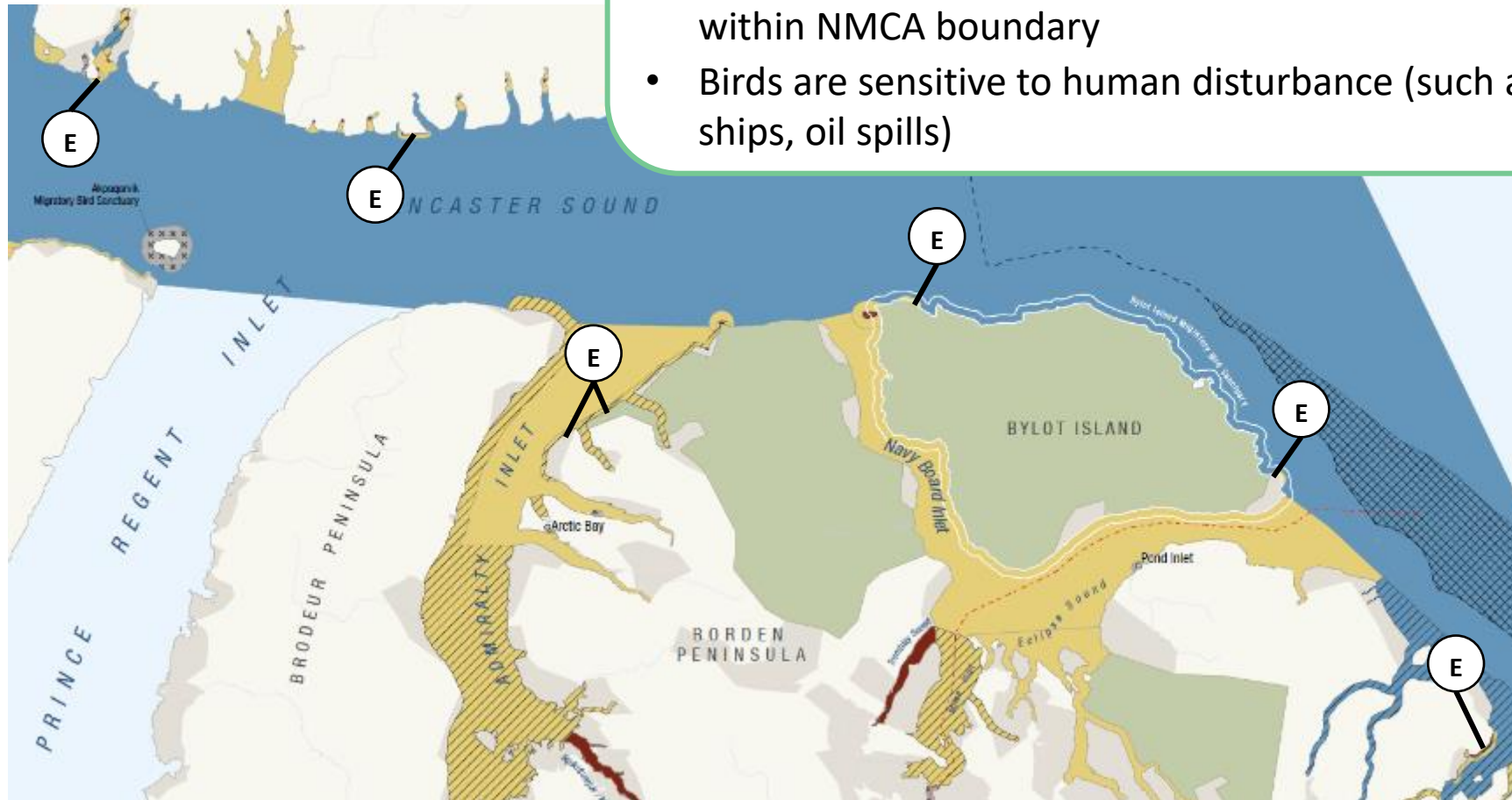
Zone 3 - Open water habitat protection:

- Prohibits flying an aircraft at an altitude < 5 000 ft
- No commercial shipping
- No commercial fisheries
- No new of coastal or in-water infrastructure (H1 & H3)
- H3 – Kippaarittuq/Cunningham Inlet and Garnier Bay
 - No motorized access
- H1 – Maxwell Bay and Allen Bay
 - Motorized access for tourism and recreation allowed
- H2 – Northern coast of Somerset Island
 - Motorized access for small vessels only
 - Small scale coastal and in-water infrastructure for tourism or recreation allowed
- **Harvesting restrictions:** Non-Inuit* hunting, gathering, trapping as well as commercial fishing prohibited in area

Seabird colonies

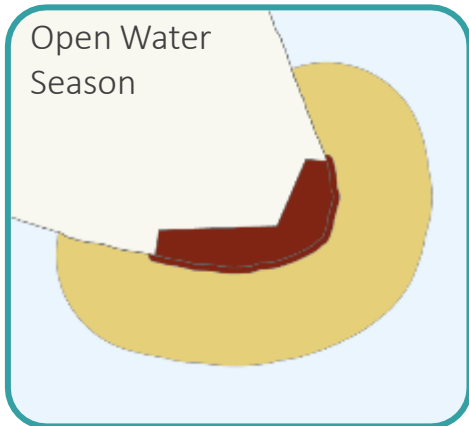
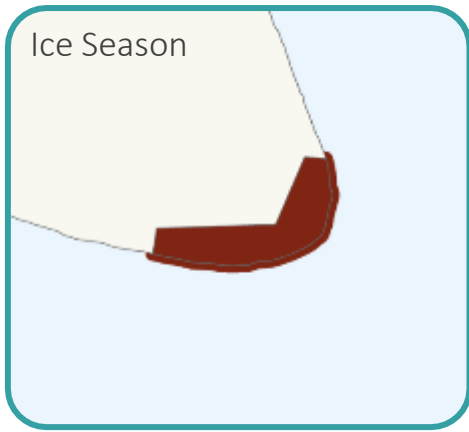
What is protected and why

- 6 key migratory bird habitat sites for nesting, chick rearing, and foraging
- For 3 of these sites, terrestrial coastal cliffs included within NMCA boundary
- Birds are sensitive to human disturbance (such as from ships, oil spills)

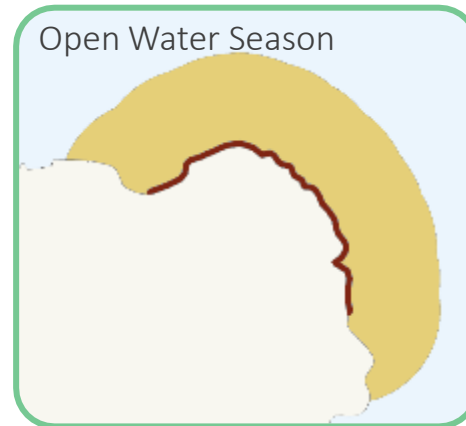
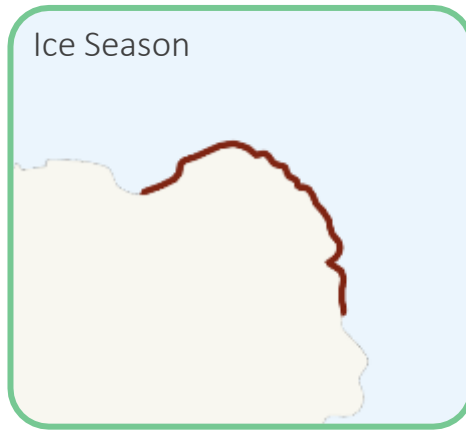


Seabird colonies

Terrestrial colony Included in NMCA



Terrestrial colony Excluded from NMCA



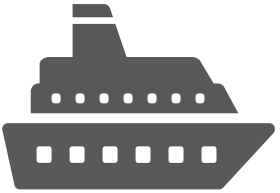
- **Zone 1 - Strict protection:**
 - No access to 100-m buffer from cliff for all 6 sites
 - No access to 3 nesting cliffs located within NMCA boundary
 - Some research and monitoring allowed
 - **Harvesting restrictions:** All non-Inuit* harvesting prohibited in area
- **Zone 3 - Open water habitat protection:**
 - Buffer extending additional 1.5 km seawards
 - Prohibits commercial fishing, commercial shipping and transiting vessels
 - Restriction based on vessel size for recreational and commercial tourism, and recreational fishing (see next slide)
 - 500-m setback for community resupply vessels when birds present
 - Prohibits flying an aircraft at an altitude < 3 500 ft
 - Additional aerial, marine and terrestrial migratory bird setbacks may apply
 - **Harvesting restrictions:** Non-Inuit* hunting, gathering, trapping as well as commercial fishing prohibited in area

* Inuit traditional use, including hunting, fishing, trapping, and gathering **can continue** in all areas and zones of Tallurutiup Imanga NMCA

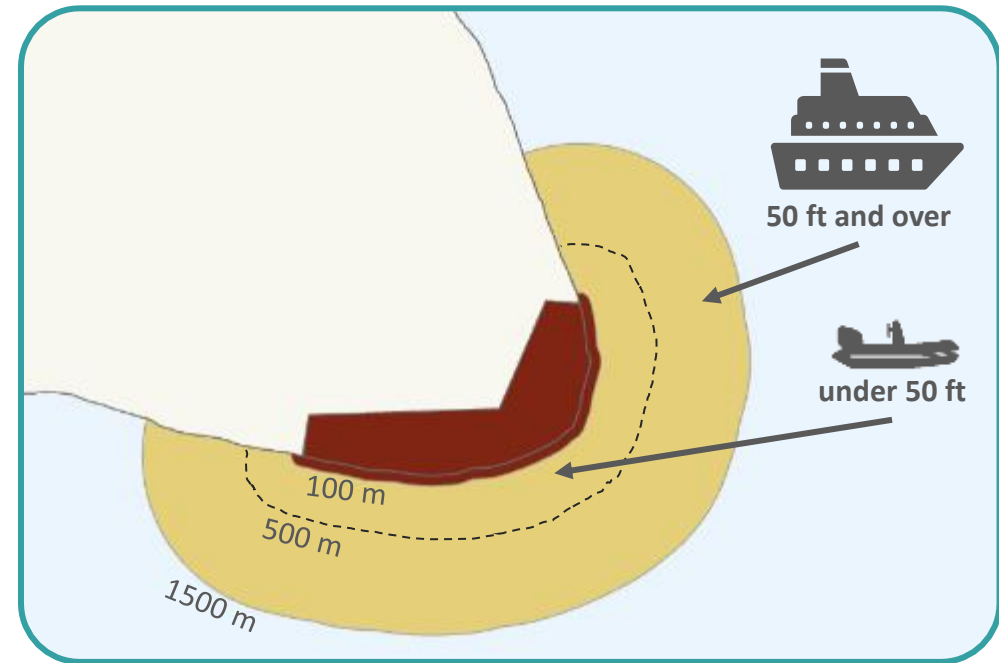
Seabird colonies

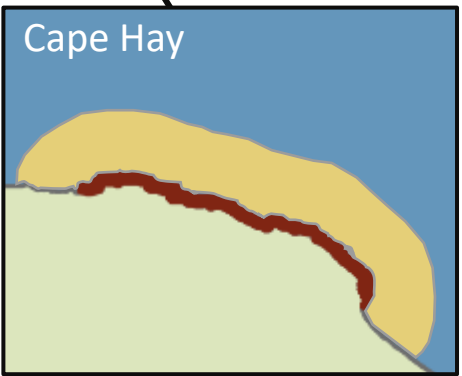
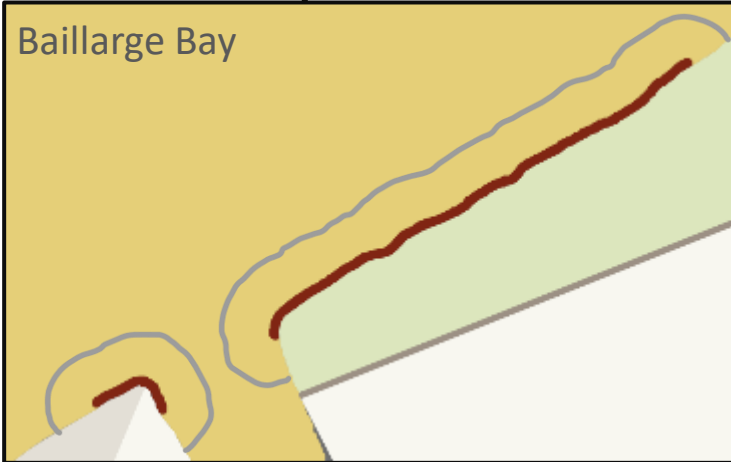
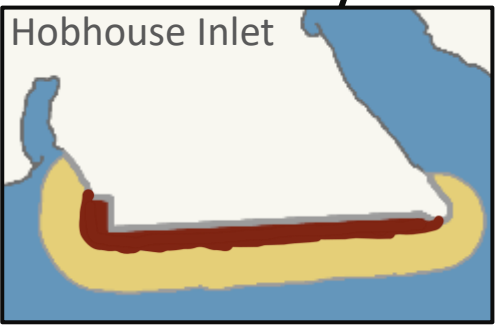
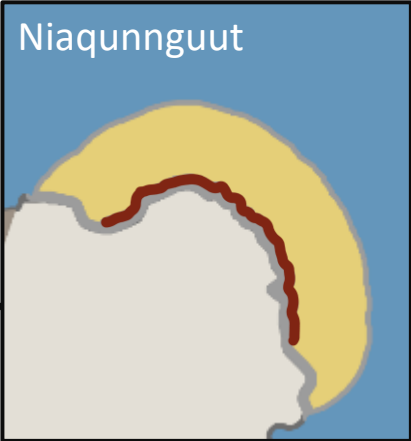
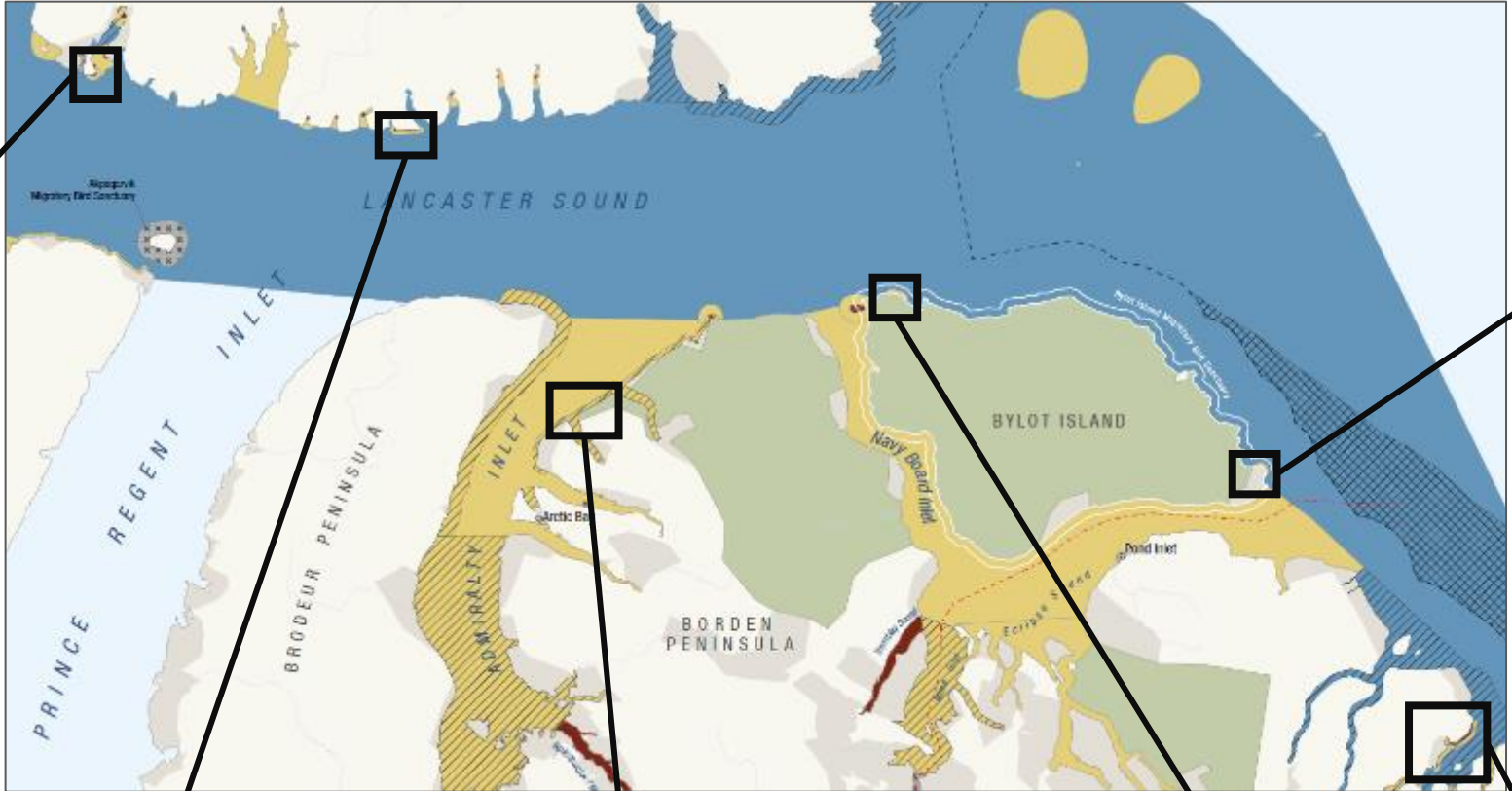
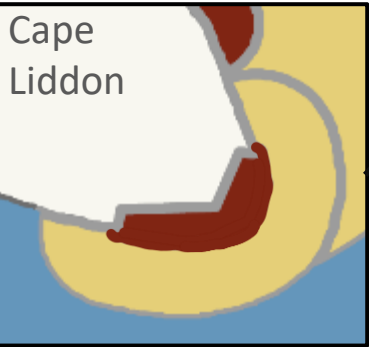


- **< 50 ft:** may navigate anywhere within the zone 3 area (e.g. kayaks, zodiacs)

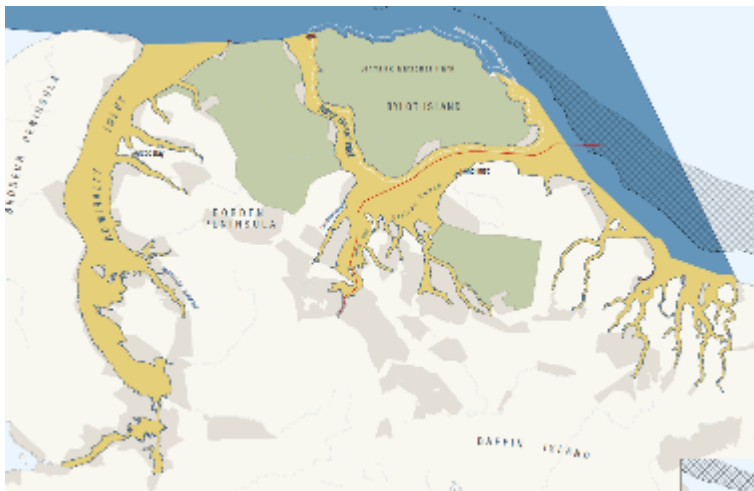
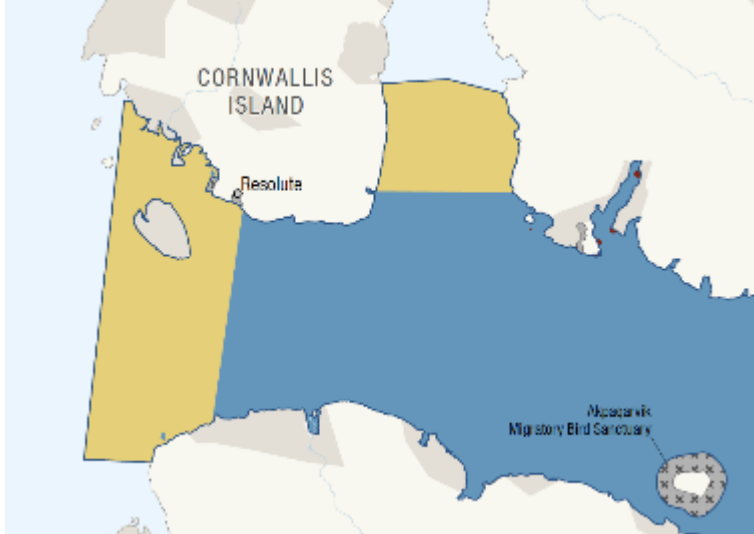


- **> 50 ft:** authorized commercial tourism vessels (e.g. cruise ships) may enter zone 3 area but must always remain at least 500 m from the colony





Sea ice habitat



What is protected and why

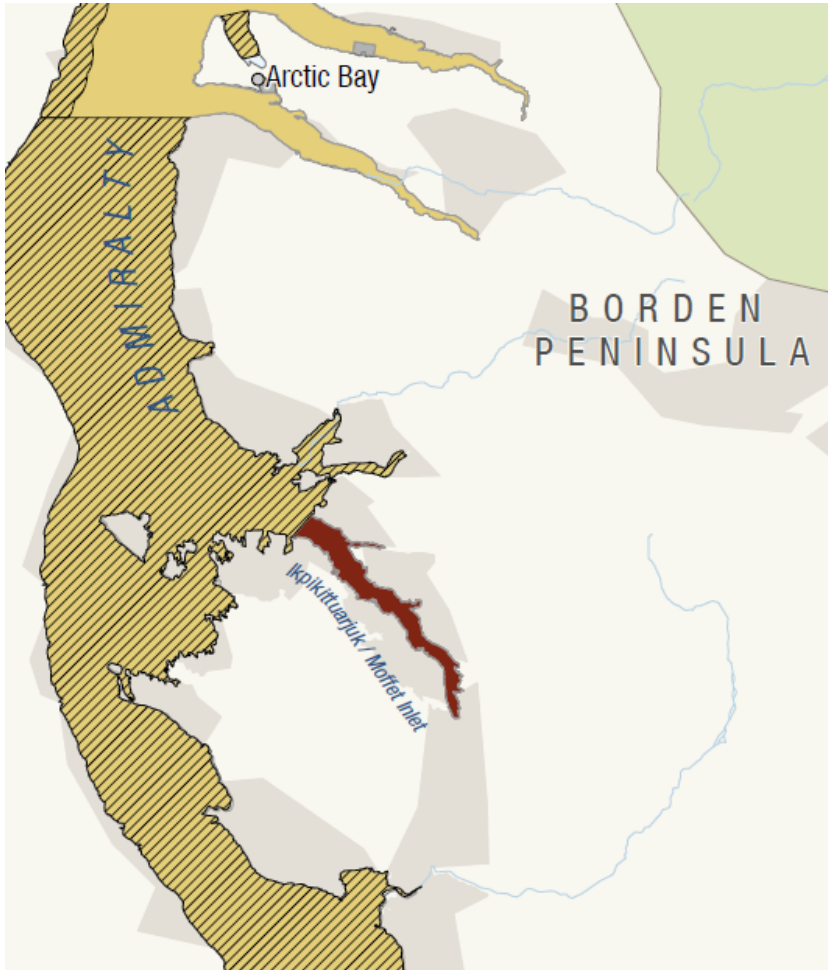
- Peary caribou ice crossings (critical habitat)
- Important habitat for wildlife (e.g., seals, polar bears)
- Valued by communities as on-ice travel routes and hunting grounds

Zone 3 – Ice season habitat protection:

- All shipping and cruise ship activity is prohibited from Nov. 16 to Jul. 20 except for:
 1. General exceptions to zoning*;
 2. Shipping activity in project approved on or before the date Tallurutiup Imanga is established (project certificate terms and conditions apply)
 3. Valid conservation reasons that are assessed on a case-by-case basis (for example to free trapped whales).
- The dates the prohibition apply may be varied under certain conditions
- **Harvesting restrictions:** Bottom contact fishing gear is prohibited in area

* Inuit traditional use and access; National security or sovereignty, defense, law enforcement activities; Safety and emergency response activities; Community resupply; Vessels engaged in innocent passage without stopping

Ikpikittuarjuk / Moffet Inlet



What is protected and why

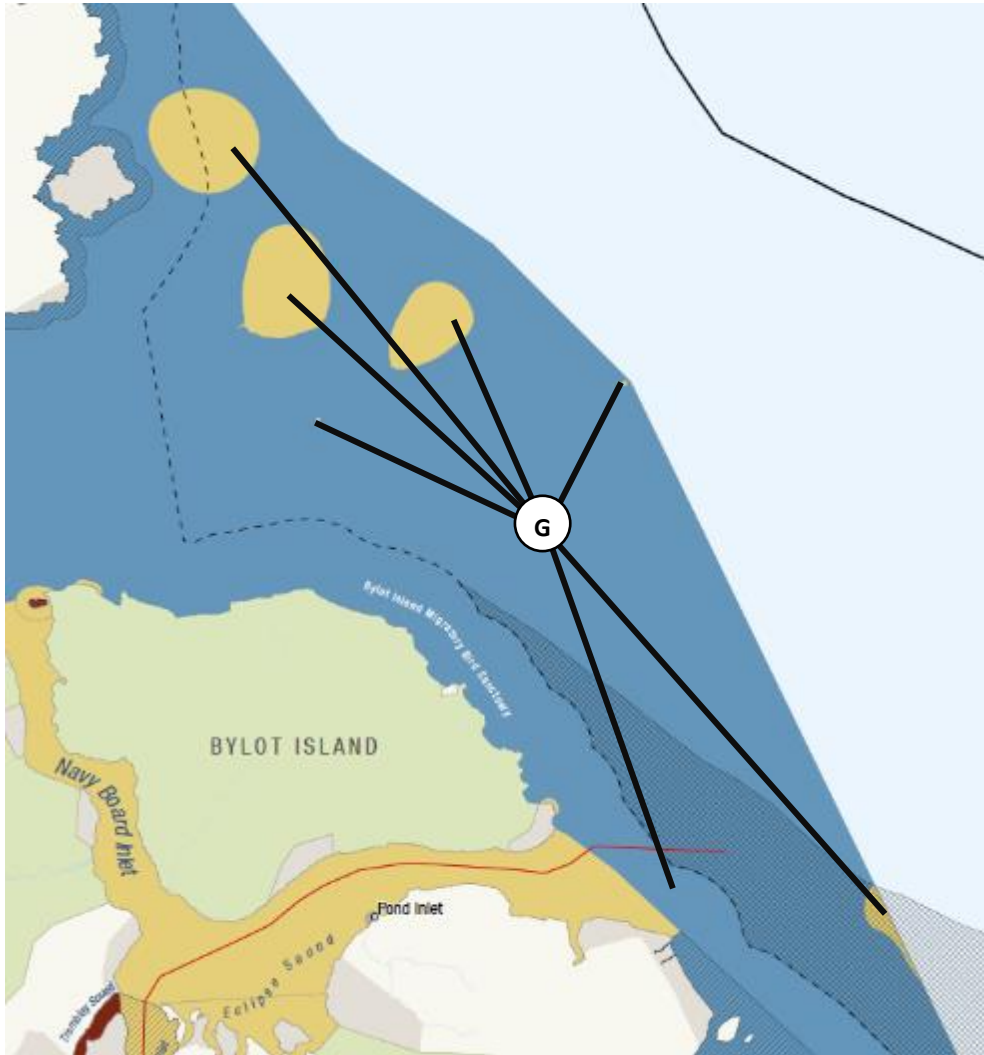
- Valued by local communities
- Abundance of bowhead, narwal, walrus and char
- Concern around decline in char population

Zone 1 - Strict protection:

- No access during open water season
- Some research allowed
- **Harvesting restrictions:** All non-Inuit* harvesting prohibited in area

* Inuit traditional use, including hunting, fishing, trapping, and gathering **can continue** in all areas and zones of Tallurutiup Imanga NMCA

Significant benthic Areas



What is protected and why

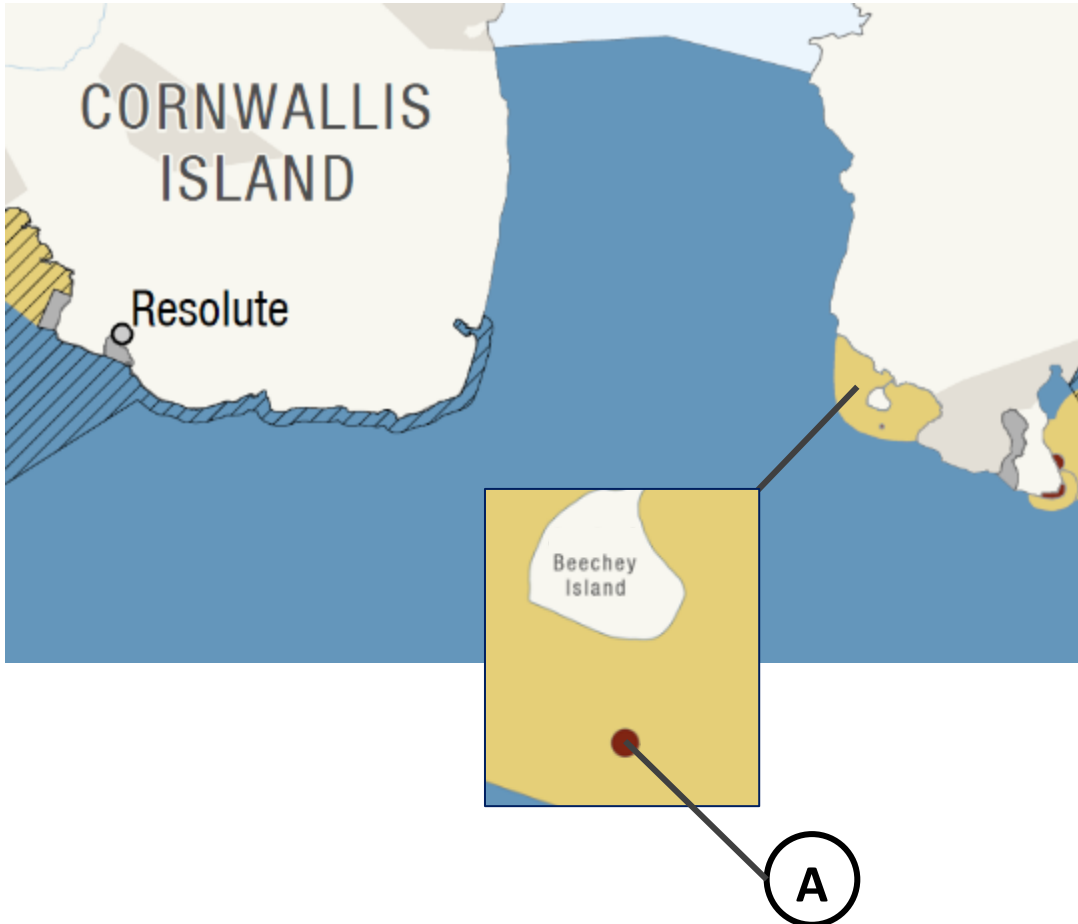
- 7 important sea floor habitat areas for many species
- Special habitat due to sea pens, a type of coral
- Disturbing the sea floor can remove or damage these sea pens

Zone 3 – Open water habitat protection

- No mobile bottom contact fishing gear allowed
- No infrastructure installed on the sea floor
- **Harvesting restrictions:** Bottom contact fishing gear is prohibited in area



Wreck of Breadalbane



What is protected and why

- Remains of a ship that was involved in the search for Captain John Franklin's lost expedition.
- Protect sensitive cultural resources by limiting further damage to the wreck

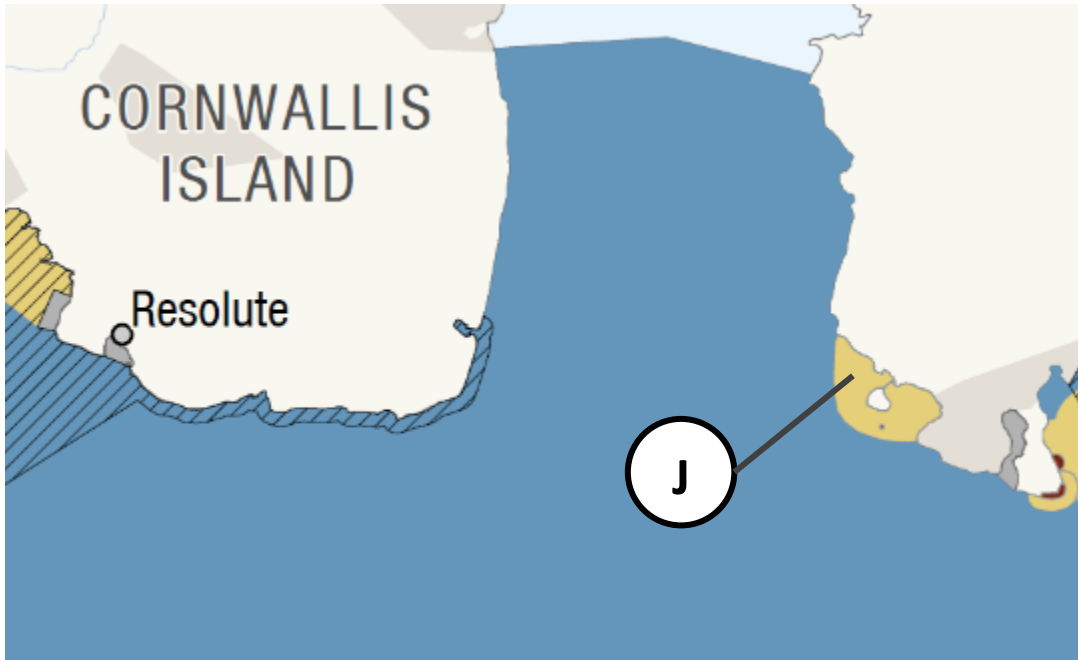
Zone 1 - Strict protection:

- No access 250-m radius circle centered on the mid-point of the hull
- Mobile bottom contact gear prohibited
- **Harvesting restrictions:** All non-Inuit* harvesting prohibited in area



* Inuit traditional use, including hunting, fishing, trapping, and gathering **can continue** in all areas and zones of Tallurutiup Imanga NMCA

Underwater cultural resource area



What is protected and why

- Known cultural resources in the shallow waters surrounding Beechey Island
- To protect known and potential cultural resources

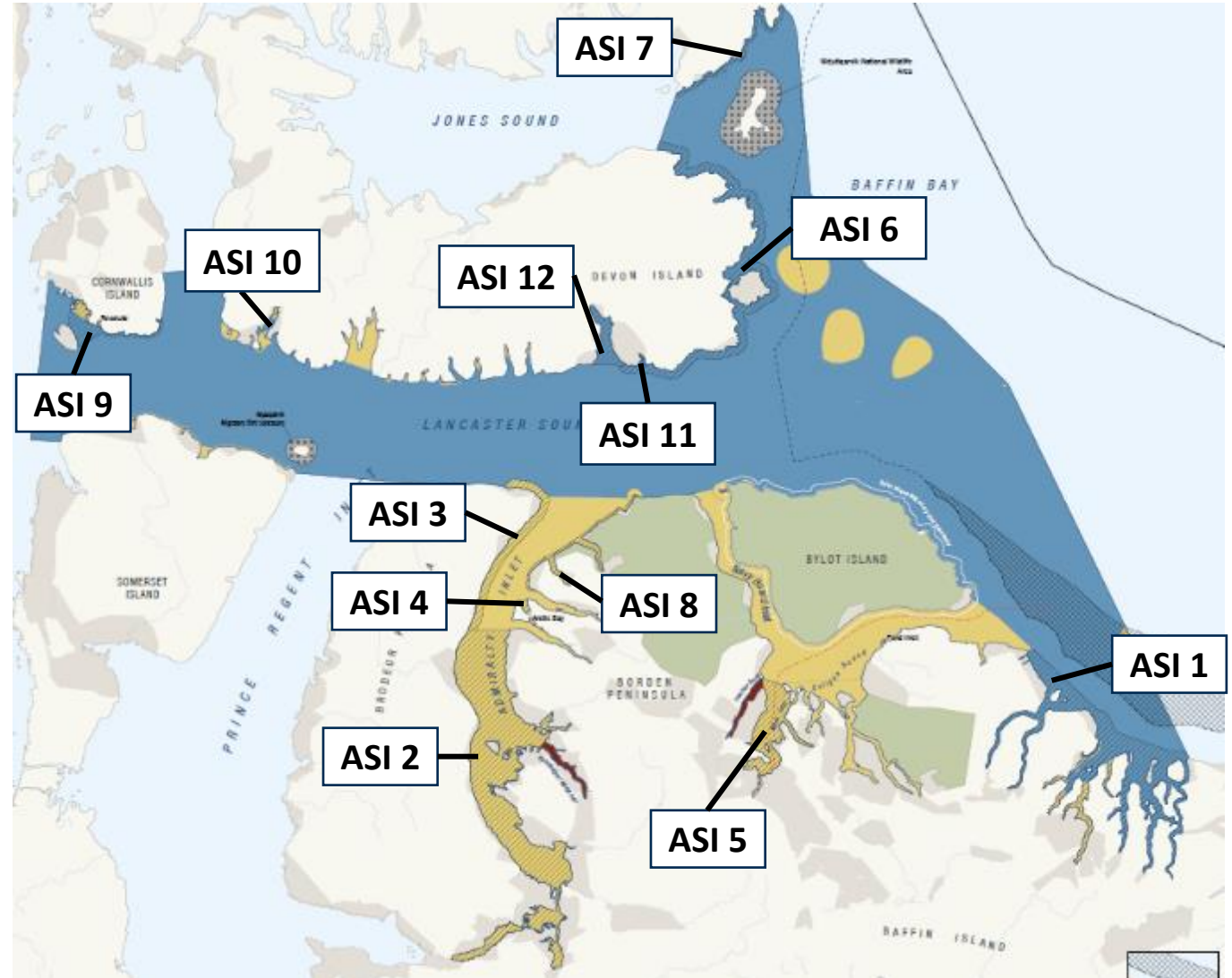
Zone 3 – Open water habitat protection

- Diving and submersible use are prohibited
- **Harvesting restrictions:** Bottom contact fishing gear is prohibited in area

Areas of Special Importance (ASI)

Important to Inuit cultural practices, more flexibility to adapt to changing conditions and patterns of use.

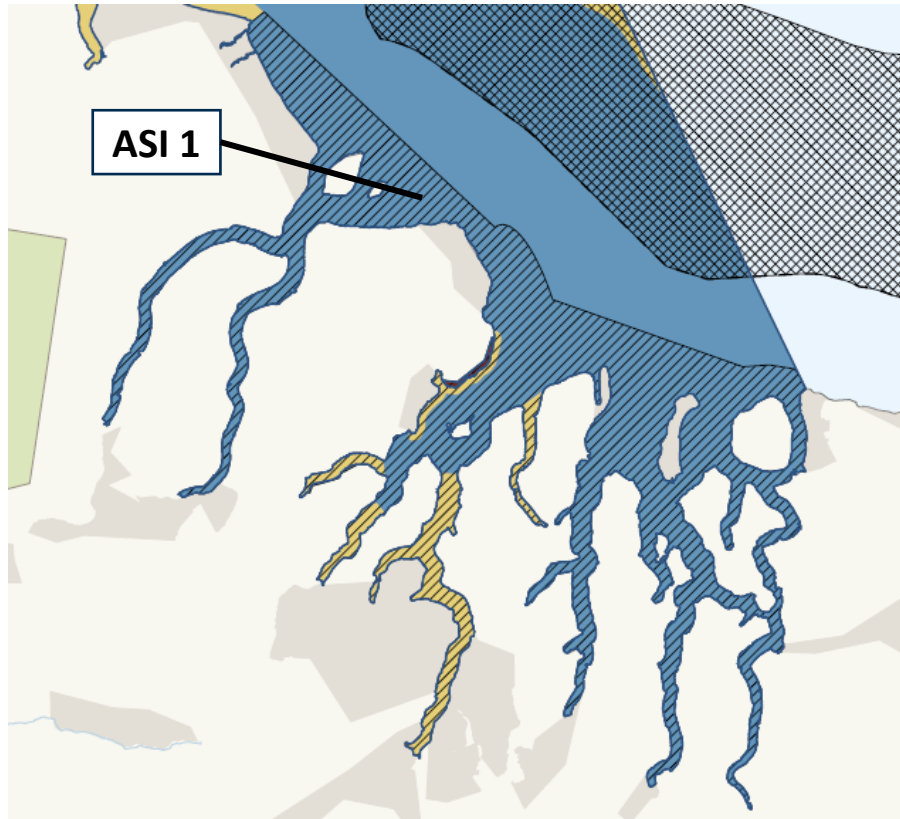
1. Fjords North of Clyde River
2. South Admiralty Inlet
3. Strip along shore of Brodeur Peninsula
4. Victor Bay
5. Milne Inlet
6. Southeast and northeast coast of Devon Island
7. Southeast coast of Ellesmere Island
8. North shore of Borden Peninsula
9. Resolute passage and Cornwallis Island coast
10. Radstock Bay
11. Dundas Harbour
12. Croker Bay



Areas of Special Importance

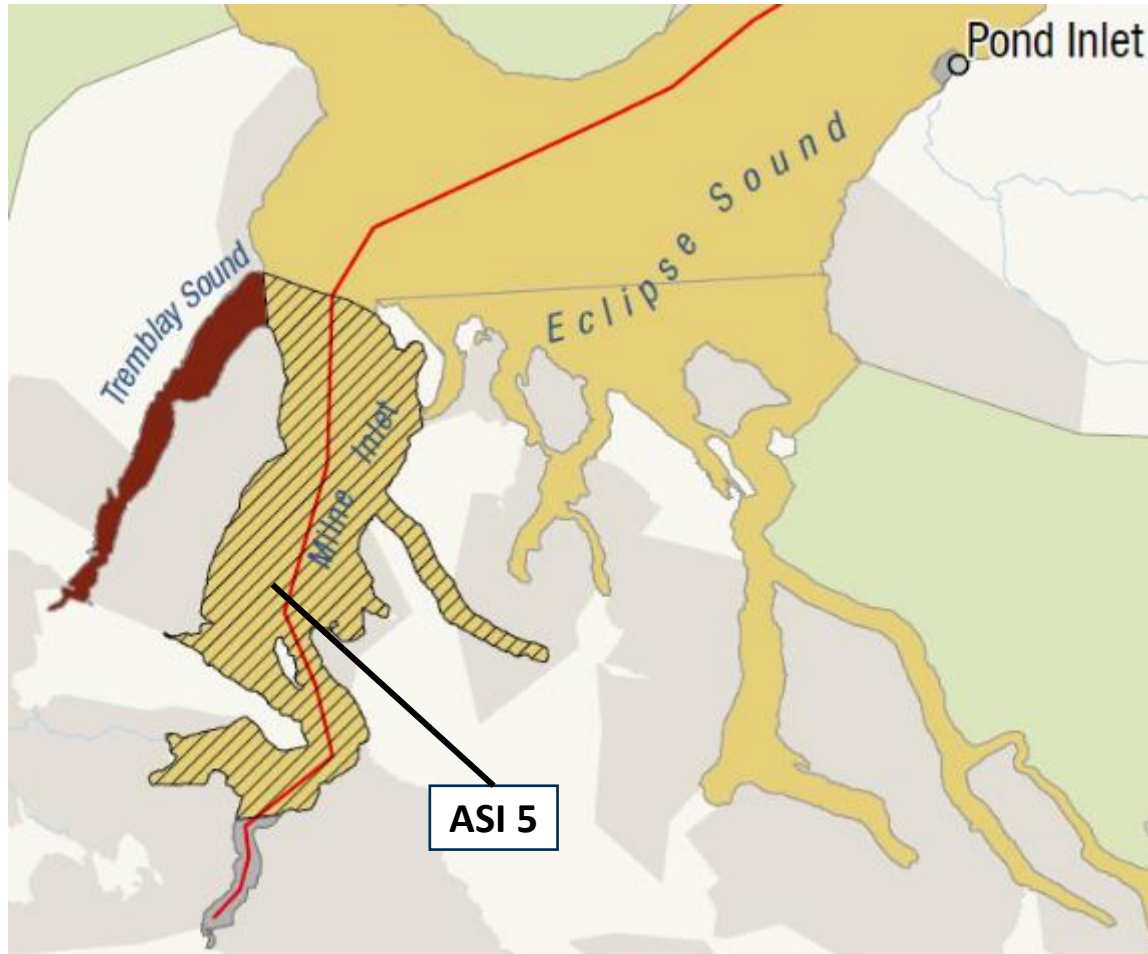
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ASI 1: Fjords North of Clyde River



- Visitor orientation.
- Visitors requested to hire local guide.
- Support enhanced communication between communities and other users to respect communities
- Ships requested not to travel into northern fiords.
- Up to 3-week closure beginning of open water season to protect community harvest in the southern fiords
- Zoning applies.

ASI 5: Milne Inlet



- Visitor orientation.
- Visitors encouraged to hire local guide.
- Support enhanced communication between communities and other users to respect communities
- Speed limit of 9 knots for vessels over 300 tons.
- Zoning applies: No cruise ships (narwhal protection).

NWMB Approval



For NWMB Approval

Section 5.2.34 (c)

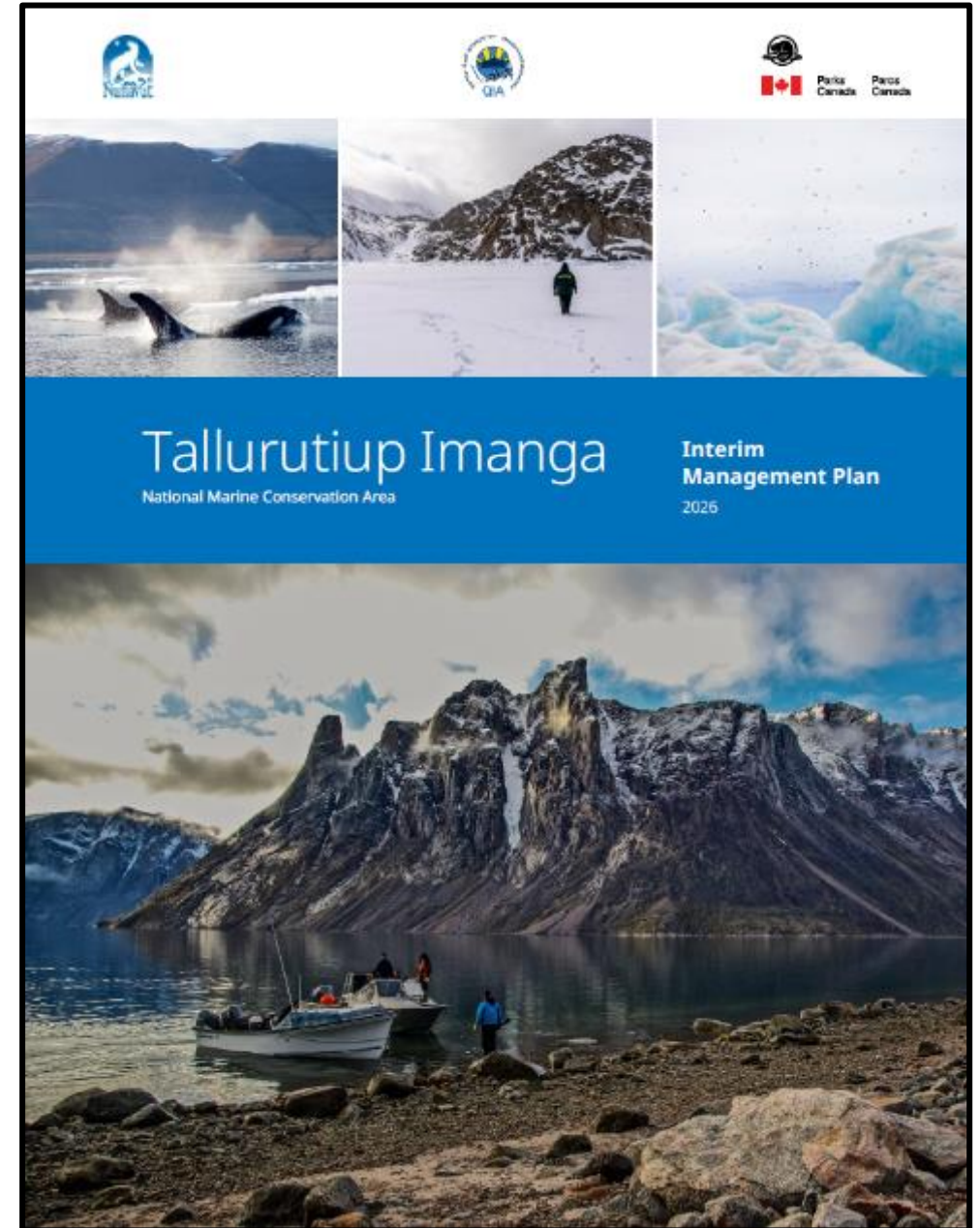
(c) approve plans for management and protection of particular wildlife habitats including areas within Conservation Areas, Territorial Parks and National Parks;

- ☐ Approve the Interim Management Plan for Tallurutiup Imanga NMCA

Section 5.6.48 - Non-Quota Limitations

Subject to the terms of this Article, the NWMB shall have sole authority to establish, modify or remove, from time to time and as circumstances require, non-quota limitations on harvesting in the Nunavut Settlement Area.

- ☐ Approve non-Inuit limitations on harvesting in Zones 1 and 3



Zone 1 – Ice and Open Water Season

Not allowed

= Limitation on Harvesting
for non-Inuit*

***Access and extractive uses are prohibited throughout all Zone 1 areas for non-Inuit**

	Wreck of Breadalbane NHS of Canada	Walrus haul-out sites	Seabird colonies	Ikpikittuarjuk/ Moffet Inlet	Tremblay Sound
Recreational fishing	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed
Commercial fisheries	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed
Hunting, trapping, gathering (non-rights based)	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed
Bottom trawling	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed

**No restriction on sport hunting as per the Tallurutiup Imanga IIBA*

Zone 3 – Ice Season

Not allowed

=

**Limitation on Harvesting
for non-Inuit****

	Peary Caribou sea ice crossings*	Other key sea ice habitat*	Significant Benthic Areas
Recreational fishing	Allowed	Allowed	Allowed
Commercial fisheries	Allowed	Allowed	Allowed
Hunting, trapping, gathering (non-rights based)	Allowed	Allowed	Allowed
Bottom trawling	Not allowed	Not allowed	Not allowed

*Commercial shipping is not allowed

***No restriction on sport hunting as per the Tallurutiup Imanga IIBA*

Zone 3 – Open Water Season

Not allowed

= Limitation on Harvesting
for non-Inuit *

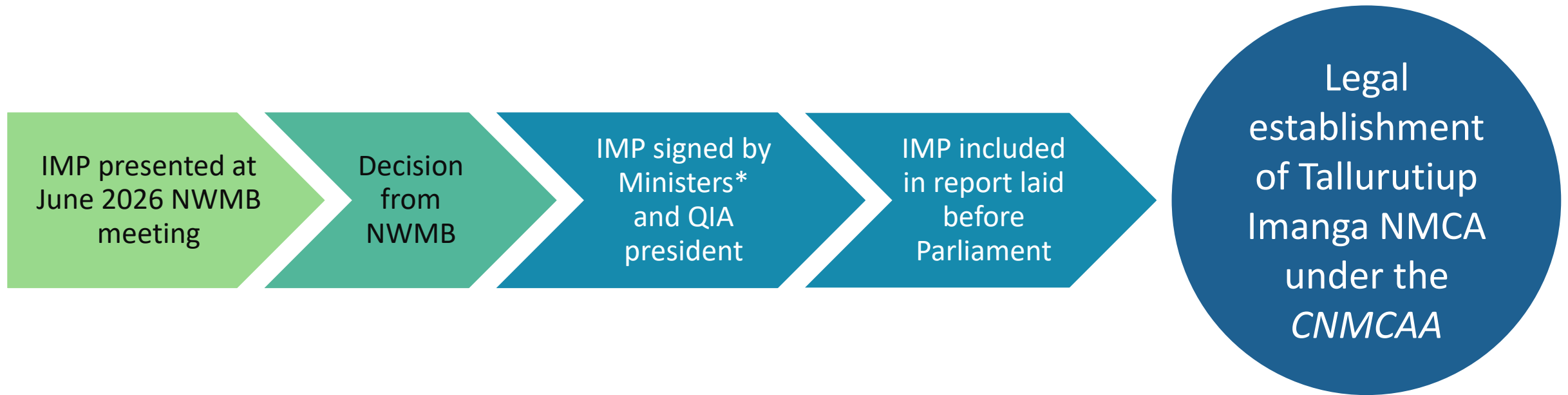
	Walrus haul-out buffer	Seabird colony buffers	Significant Benthic Areas	Beluga summer aggregation areas	Narwhal summer aggregation areas	Underwater cultural resource area
Recreational fishing	Not allowed	Allowed	Allowed	Allowed	Allowed	Allowed
Commercial fisheries	Not allowed	Not allowed	Allowed	Not allowed	Allowed	Allowed
Hunting, trapping, gathering (non-rights based)	Not allowed	Not allowed	Allowed	Not allowed	Allowed	Allowed
Bottom trawling	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed	Not allowed

**No restriction on sport hunting as per the Tallurutiup Imanga IIBA*

Next Steps



Next Steps in the process



*For the Government of Canada: Minister of Environment, Climate Change and Nature; Minister of Transport; Minister of Fisheries.
For the Government of Nunavut: Minister of Environment.

Contact

tallurutiupimanga@pc.gc.ca



Qikiqtani Inuit Association
Justin Buller - jfbuller@dryasconsulting.ca



Government of Nunavut
environment@gov.nu.ca | 1-867-975-7700

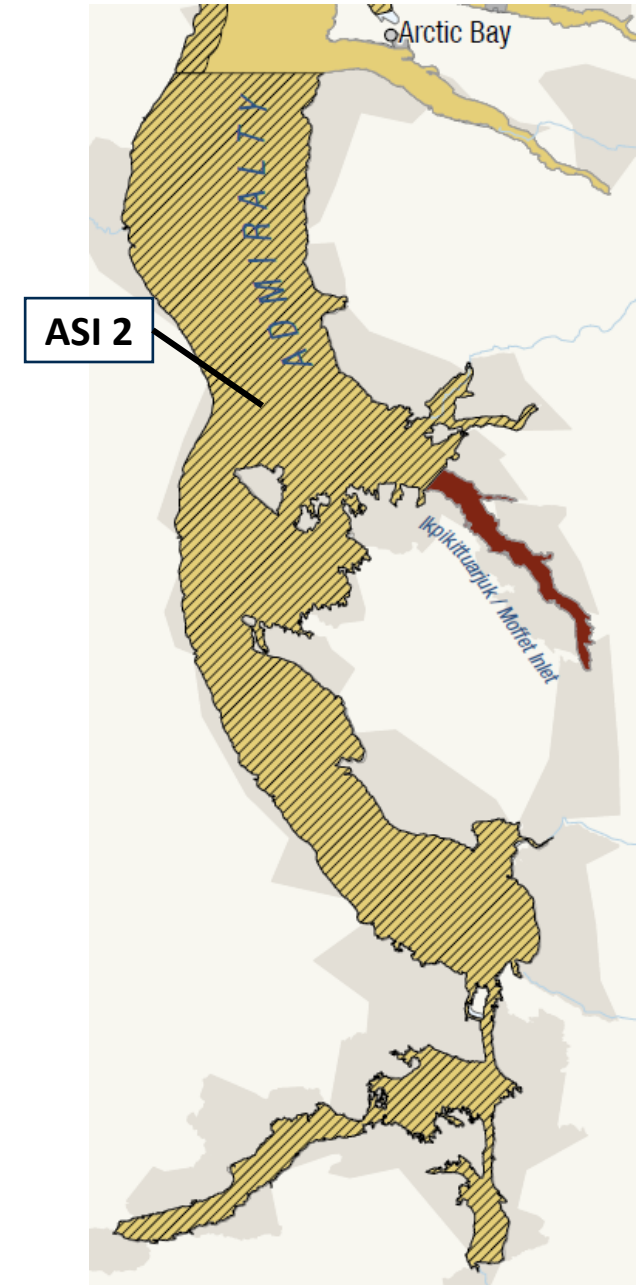


Parks Canada
Laurent Jonart - laurent.jonart@pc.gc.ca | 867-222-1102

APPENDIX 1: ASI Slides

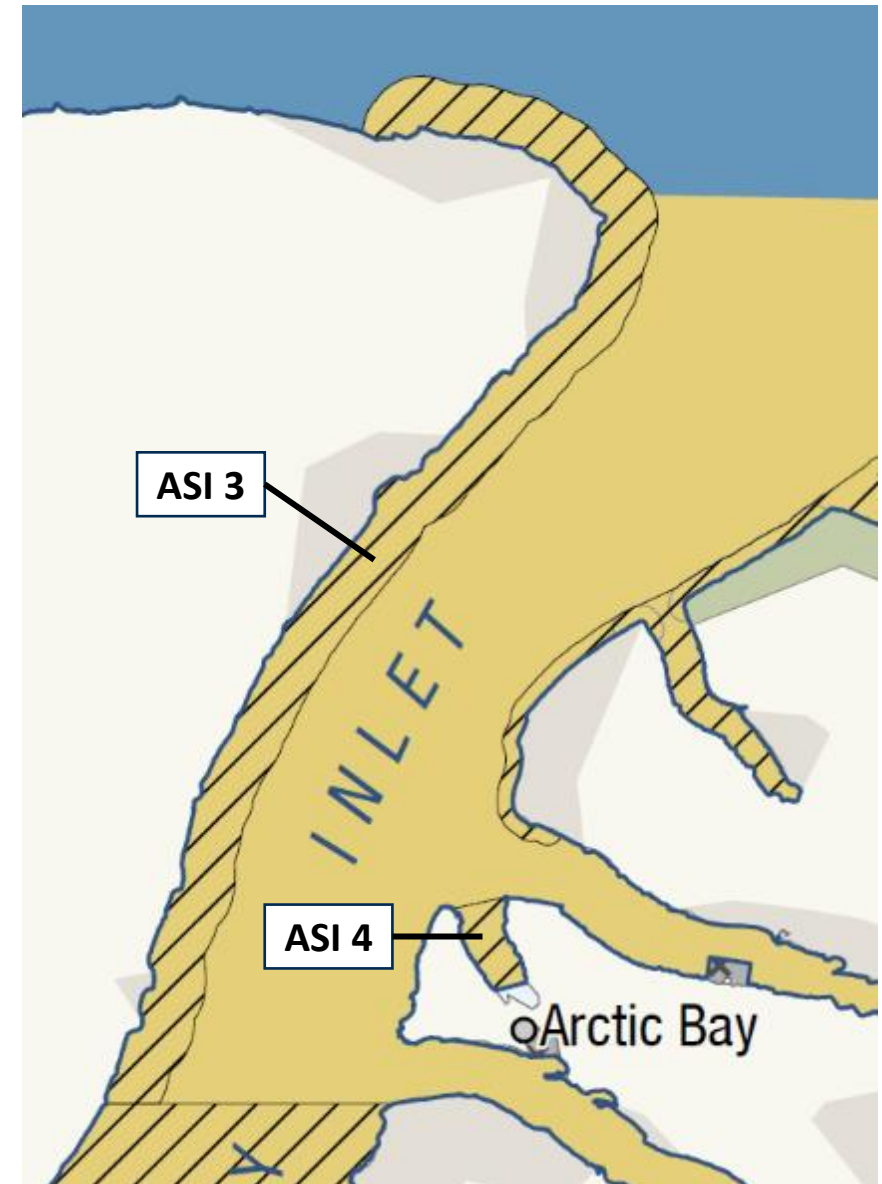
ASI 2: South Admiralty Inlet

- Orientation for visitors
- Visitors requested to hire a local guide.
- Support enhanced communication between communities and other users to respect communities.
- Speed limit of 9 knots for vessels over 300 tons for all Admiralty Inlet.



ASI 3: Strip along eastern shore of Brodeur Peninsula & ASI 4: Victor Bay

- Orientation for visitors
- Visitors requested to hire local guide
- Support enhanced communication between communities and other users to respect communities.
- Request vessels to obtain community support before accessing close to the shoreline.
- Victor Bay: Request that visiting vessels avoid Victor Bay to prevent interference with community activities

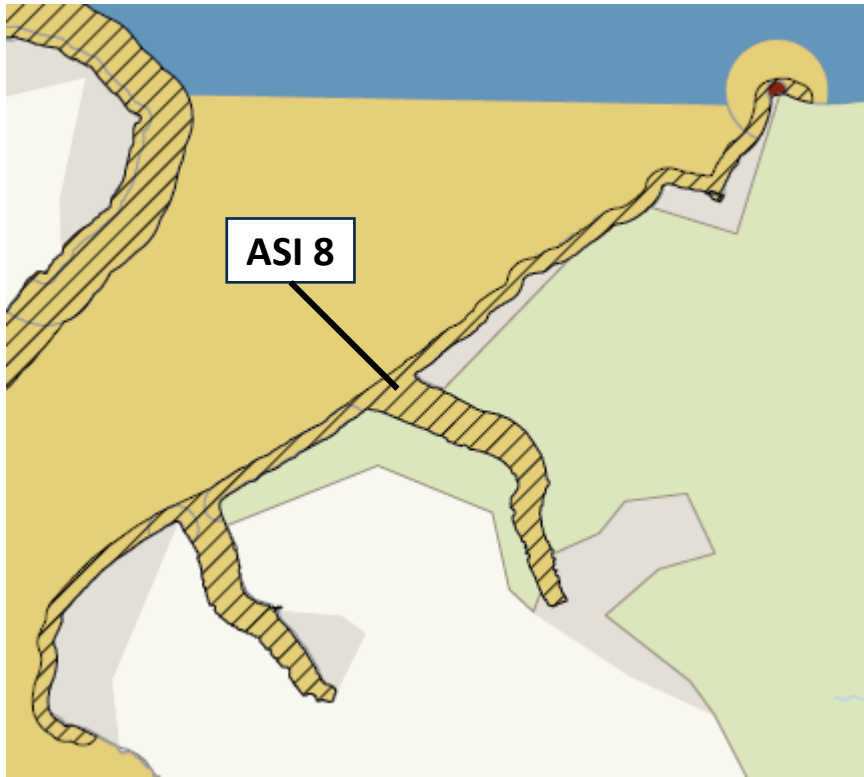


ASI 6: Southeast and northeast coasts of Devon Island & ASI 7: Southeast coast of Ellesmere Island

- Orientation for visitors
- Visitors requested to hire a local guide.
- Support enhanced communication between communities and other users to respect communities.

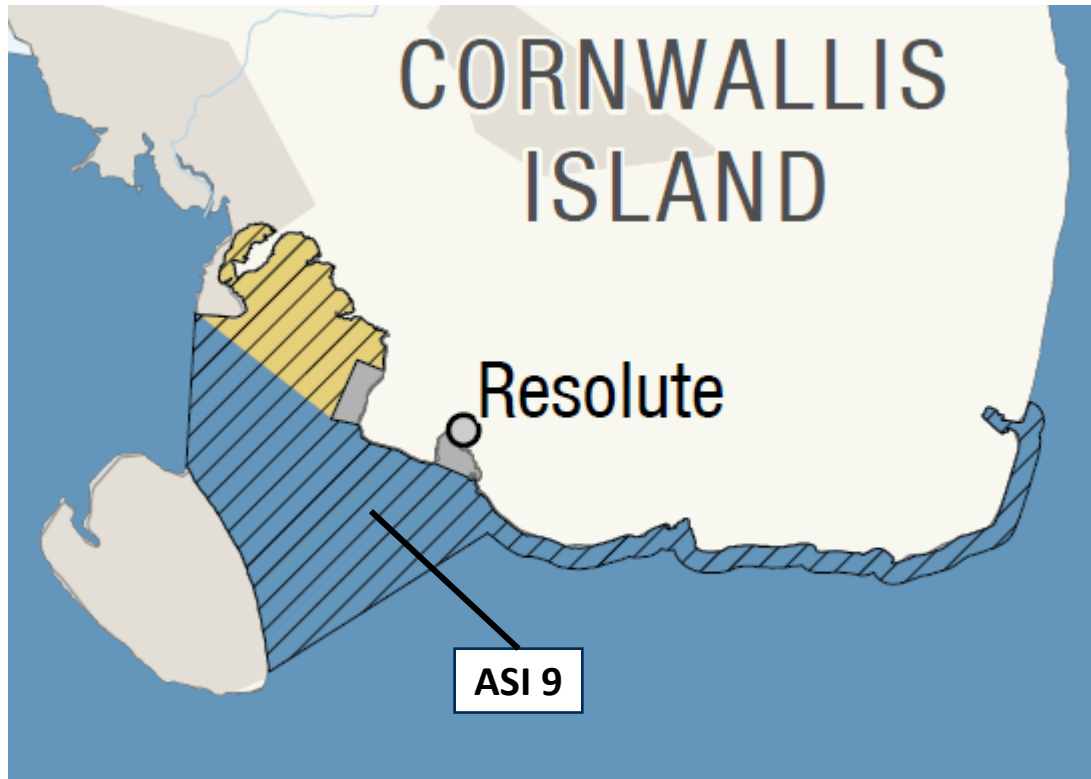


ASI 8: Western shore of Borden Peninsula



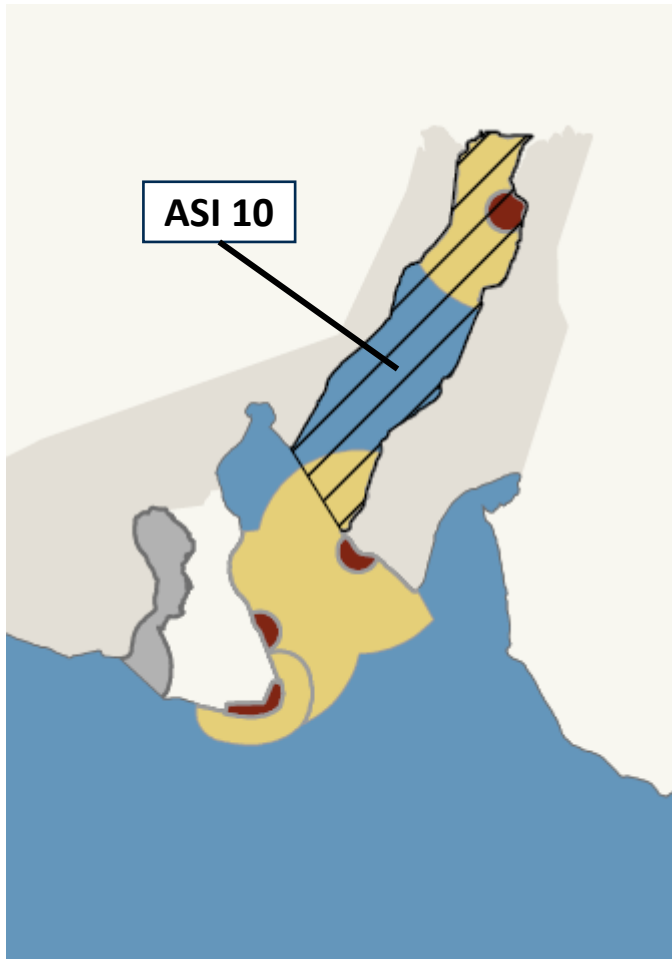
- Orientation for visitors
- Visitors requested to hire a local guide.
- Support enhanced communication between communities and other users to respect communities.
- Request vessels to obtain community support before accessing the area.

ASI 9: Resolute Passage and Cornwallis Island coast



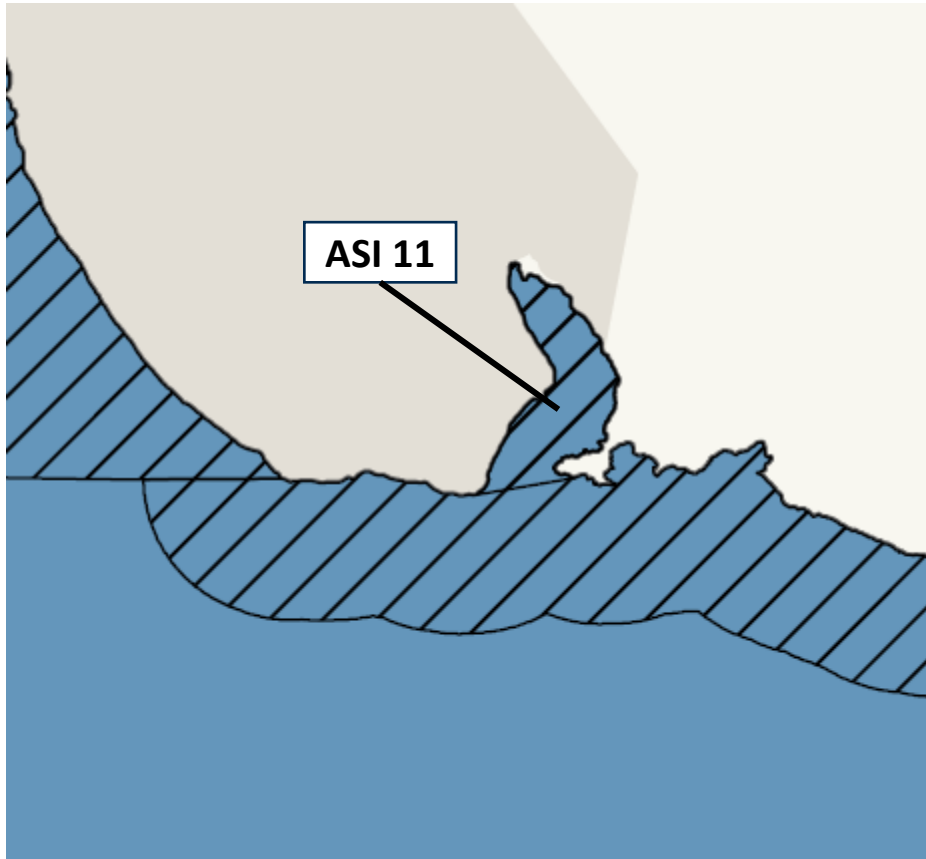
- Orientation for visitors
- Visitors requested to hire a local guide.
- Support enhanced communication between communities and other users to respect communities.
- Catch and release fishing will be discouraged.
- Preferred routes for cruise ships and commercial shipping will be identified.
- Community concerns about science and research. Permits will be required with community input on what is permitted or not.

ASI 10: Radstock Bay



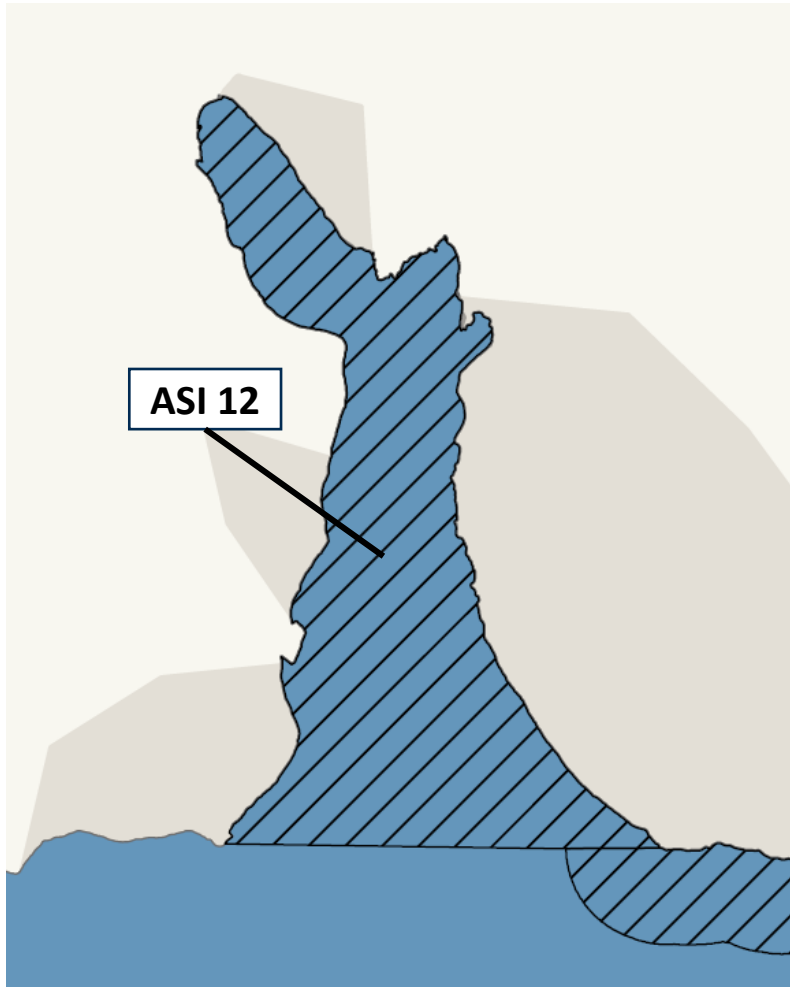
- Orientation for visitors
- Visitors will requested to a hire local guide.
- Support enhanced communication between communities and other users to respect communities.
- Ships are encouraged not to travel into these areas.
- Catch and release fishing will be discouraged.

ASI 11: Dundas Harbour



- Orientation for visitors
- Visitors will be encouraged to hire a local guide.
- Support enhanced communication between communities and other users to respect communities.
- Ships are encouraged not to travel into these areas.
- Catch and release fishing will be discouraged.
- Participants recommended strict protection for area (no access). But Parks Canada / AB has no control over land areas outside TINMCA and cannot use zoning to cut off access.
- Concerns about access to Dundas Harbour cultural sites have been communicated to GN.

ASI 12: Croker Bay



- Visitor orientation.
- Visitors encouraged to hire local guide.
- Support enhanced communication between communities and other users to respect communities
- Ships requested to avoid area.
- Catch and release fishing discouraged.
- No removal of glacier ice.
- Note: participants recommended strict protection for area.

Sport Hunting in Tallurutiup Imanga NMCA

No Restriction to Sport Hunting as per the IIBA:

8.1.3 To acknowledge that sports hunting and Inuit activities carried out within Tallurutiup Imanga NMCA shall continue after Tallurutiup Imanga NMCA is established as a national marine conservation area pursuant to the Canada National Marine Conservation Areas Act.

8.1.4 To acknowledge that sports hunting and Inuit activities will continue to be managed within Tallurutiup Imanga NMCA in accordance with the Nunavut Agreement and all applicable laws of general application.

8.5.1 The Parties acknowledge that sports hunting activities within Tallurutiup Imanga NMCA shall continue to be regulated and managed by applicable laws of general application and in accordance with the Nunavut Agreement.

8.5.2 The Aulattiqatigiit Board may provide recommendations as it deems appropriate to federal departments and agencies relating to the regulation of sports hunting activities within Tallurutiup Imanga NMCA including with respect to matters having the potential to impact Inuit participation therein.

8.5.3 Licences, permits, fees and other requirements that may be imposed by Parks Canada and Department of Fisheries and Oceans with respect to sports hunting shall not unduly or unreasonably constrain Inuit participation in sports hunting. The foregoing provision does not apply to existing DFO regulations that pertain to sports hunting.



Tallurutiup Imanga

National Marine Conservation Area

Interim Management Plan

2026



2026

Tallurutiup Imanga

National Marine Conservation Area

Interim Management Plan

Front cover image credits
top from left to right: Hugues Michaud, Nicole McFadden, Nicole McFadden
bottom: Niore Iqalukjuak

Foreword

Text and signatures to come during signing.

President
Qikiqtani Inuit Association

Minister of Environment
Government of Nunavut

Minister of Fisheries
Government of Canada

Minister of Transport
Government of Canada

Minister of Environment,
Climate Change and Nature
Government of Canada

Recommendations

Recommended by:

*Chief Executive Officer
Parks Canada*

*Field Unit Superintendent
Parks Canada*

Letter of support from Aulattiqatigiit Board

Text and signatures to come during signing.

*Co-Chair, Aulattiqatigiit Board
[Director, Qikiqtani Inuit Association]*

*Co-Chair, Aulattiqatigiit Board
[Field Unit Superintendent
Parks Canada]*



Photo: Nicole McFadden

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Glossary of Terms

Associated communities: For Tallurutiup Imanga NMCA, the associated communities are Arctic Bay, Resolute, Pond Inlet, Clyde River, and Grise Fiord.

Aulattiqatigiit Board: The joint Inuit and Canada management board established through the Tallurutiup Imanga NMCA Inuit Impact and Benefit Agreement in accordance with section 8.4.11 of the *Nunavut Agreement*.

Commercial tourism: The practice of providing recreational activity services with the intent of generating revenue. It can involve services such as tours, charters, excursions, outfitting, accommodation, and equipment rental.

Country food: Traditional Inuit food, including game meats, migratory birds, fish, and foraged foods. In addition to providing nourishment, country food is an integral part of Inuit identity and culture and contributes to self-sustainable communities.

Cultural heritage: Includes both tangible cultural resources and intangible cultural heritage, such as cultural traditions, practices, knowledge, skills and beliefs.

Cultural resource: A human work, object, or a place that has evidence of human activity or has spiritual or cultural meaning, and that has been determined to be of heritage value and includes tangible and intangible elements. For greater certainty, intangible elements may include Inuit stories, legends, history, spirituality, practices, representations, expressions, knowledge, and skills.

Ecological sustainability: A state in which marine ecosystems are self-regulating and resilient, and whose structure, function, and capacity to provide ecosystem services are not compromised.

Ecologically sustainable use: Use of marine resources in a manner that meets the needs of present and future generations without compromising ecological sustainability.

Ecosystem: A dynamic complex of animal, plant and microorganism communities and their non-living environment interacting as a functional unit.

Fishing: Understood to mean “fishing” as defined under the *Fisheries Act*. For greater certainty, includes the harvest of any marine animal, including invertebrates, such as clams or shrimp.

Innocent passage: Passage of a vessel is considered innocent so long as it is not prejudicial to the peace, good order or security of the coastal State; such passage shall be continuous and expeditious. Full definition and context in Articles 18 and 19 of the *United Nations Convention on the Law of the Sea*.

Interim management plan: The interim management plan for Tallurutiup Imanga NMCA required under paragraph 7(1)(d) of the *Canada National Marine Conservation Areas Act*.

Inuit Impact and Benefit Agreement (IIBA): The Inuit Impact and Benefit Agreement for Tallurutiup Imanga NMCA, required under Article 8 of the *Nunavut Agreement*.

Inuit Nunangat: The homeland of the Inuit, where Inuit live and use the lands, waters and sea ice. In Canada, Inuit Nunangat includes Nunavut and the northern parts of Labrador, Quebec, Northwest Territories and Yukon.

Inuit Qaujimajatuqangit: The traditional, current, and evolving body of Inuit values, beliefs, experience, perceptions, and knowledge, regarding the environment including land, water, wildlife, and people, to the extent that people are part of the environment. This Inuit Qaujimajatuqangit definition refers to knowledge passed on from generation to generation and describes what it means to be Inuit, how to interact with others, and how to survive on the land.

Inuit use: Past, present, or future Inuit activities or endeavors related to natural, economic, social, or cultural resources and identified as Inuit rights by the *Nunavut Agreement*.

Management Advisory Committee: The advisory committee required under subsection 11(1) of the *Canada National Marine Conservation Areas Act* to advise the Minister on the formulation, review, and implementation of the Management Plan for Tallurutiup Imanga NMCA.

Management plan: The management plan for Tallurutiup Imanga NMCA required under section 8.4.13 of the *Nunavut Agreement* and Section 9 of the *Canada National Marine Conservation Areas Act*.

Marine protected area: An area in the marine environment that is defined and managed through legal and/or other effective means to achieve the long-term conservation of nature with associated ecosystem services and cultural values (adapted from the International Union for Conservation of Nature). In the context of NMCAs, “marine” includes both ocean environments and the Great Lakes.

National Marine Conservation Area (NMCA): A national marine conservation area of Canada named and described in Schedule 1 of the *Canada National Marine Conservation Areas Act*.

Nunavut Agreement: The *Agreement between Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada* that was ratified by a vote of the Inuit of the Nunavut Settlement Area and by the enactment by Parliament of the *Nunavut Land Claims Agreement Act*, S.C. 1993 c. 29.

Parks Canada: The Parks Canada Agency, the body corporate established by the *Parks Canada Agency Act*.

Precautionary principle: Where there are threats of environmental damage, lack of scientific certainty is not used as a reason for postponing preventative measures (*CNMCAA* preamble).

Recreational activities (non-extractive): Activities that are non-commercial that individuals engage in for enjoyment and well-being. These activities do not involve extracting renewable or non-renewable resources from the environment (for example, fish, whales, minerals, seaweed, etc.). Recreational activities could include things like boating, wildlife viewing, photography, traveling by snowmobile, or underwater exploration. This definition does not apply to Inuit use.

Sensitive ecosystem element: An ecosystem element that is at risk of being lost or compromised due to its intolerance to disturbance.

Small vessel: means small vessels as described in the *Small Vessel Regulations* (<https://laws-lois.justice.gc.ca/eng/regulations/sor-2010-91>).

Special feature: A natural or cultural feature of outstanding or unique value within Tallurutiup Imanga NMCA due to its rarity or particular importance.

Stakeholder: A person or group with an interest or concern related to the establishment and/or management of Tallurutiup Imanga NMCA (for example, environmental non-government organizations, fisheries associations and unions, commercial tourism operators and shipping organizations).

List of Acronyms Used

ASI	Area of Special Importance
CNMCAA	<i>Canada National Marine Conservation Areas Act</i>
IIBA	Inuit Impact and Benefit Agreement
NMCA	National Marine Conservation Area
UNESCO	United Nations Educational, Scientific and Cultural Organization



Photo: Nicole McFadden

1.0 Introduction

Located in Nunavut, the boundaries of Tallurutiup Imanga National Marine Conservation Area (NMCA) encompass the length of Lancaster Sound, stretching from Resolute Bay in the west to Baffin Bay in the east, beyond the territorial waters into Canada's Exclusive Economic Zone (Figure 1). At approximately 108,000 km², Tallurutiup Imanga NMCA represents nearly 2% of Canada's total marine area. It is the ecological driver for much of the eastern Arctic and provides important habitat for nearly all Arctic marine species. Its waters are a migratory corridor for numerous species and essential habitat for polar bears, seals, walrus, bowhead whales, narwhal, beluga whales and migratory birds. The area has sustained Inuit for generations and is an artery connecting communities and allowing travel throughout the High Arctic. Access to wildlife resources found in the NMCA is essential to food sovereignty and Inuit well-being and is critical for the region to remain a source of healthy country food.



Photo: Hugues Michaud

The origin of the name Tallurutiup Imanga connects Inuit traditions and the land. Inuit believe that Devon Island resembles facial tattoos on a jawline. Talluruti is the Inuktitut name for Devon Island and Imanga means a body of water surrounding an area.

The establishment of Tallurutiup Imanga as a National Marine Conservation Area reflects decades of work by Inuit, and supporting partners, to conserve this magnificent place. An Inuit Impact and Benefit Agreement (IIBA) towards the establishment of Tallurutiup Imanga NMCA was signed in 2019 between the Qikiqtani Inuit Association and the Government of Canada, as represented by Parks Canada, Fisheries and Oceans Canada and the Canadian Coast Guard, and Transport Canada. The IIBA provides benefits to Inuit and directions on the management of Tallurutiup Imanga NMCA, including the inclusion of Inuit Qaujimajatuqangit in decision-making, research and monitoring, cultural heritage, management planning, exploratory fisheries, marine shipping, and the promotion of Inuit rights.

In addition to transferring benefits to Inuit, the IIBA established the governance structure for Tallurutiup Imanga NMCA. The Aulattiqatigiit Board, the consensus-based joint Inuit and Canada management board, examines all steps, decisions, initiatives, and undertakings relating to the planning, operation, and management of Tallurutiup Imanga NMCA. The Aulattiqatigiit Board consists of three members appointed by the Qikiqtani Inuit Association and three appointed by the Government of Canada. Canada's appointees include senior representatives from Parks Canada, Fisheries and Oceans Canada, and a third member as determined by the Minister responsible for Parks Canada, who is currently an official from Transport Canada. Board members for the Qikiqtani Inuit Association are two senior officials from the organization and the Chair of the Imaq Committee, an Inuit advisory committee for the Qikiqtani Inuit Association which provides the perspectives of Inuit from the communities associated with Tallurutiup Imanga NMCA. The governance structure of the NMCA is completed by the Operations Committee, a joint Inuit and Canada committee which cooperates on operational aspects of managing the NMCA following the directions set by the Aulattiqatigiit Board.

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Photo: Nicole McFadden

who is currently an official from Transport Canada. Board members for the Qikiqtani Inuit Association are two senior officials from the organization and the Chair of the Imaq Committee, an Inuit advisory committee for the Qikiqtani Inuit Association which provides the perspectives of Inuit from the communities associated with Tallurutiup Imanga NMCA. The governance structure of the NMCA is completed by the Operations Committee, a joint Inuit and Canada committee which cooperates on operational aspects of managing the NMCA following the directions set by the Aulattiqatigiit Board.

The Board is responsible for the implementation of this interim management plan and future management plans. It works by consensus to make decisions on the operations and management of Tallurutiup Imanga NMCA, in accordance with the *Nunavut Agreement*, the *Canada National Marine Conservation Areas Act (CNMCAA)*, and the *Policy on the Establishment and Management of National Marine Conservation Areas* ("NMCA Policy"). The Board may consult with communities, engage with industry, and/or seek advice and expertise from any individual or organization, on any matters related to the management of Tallurutiup Imanga NMCA. The Board can also use management tools, such as temporary closure, to adapt to changing conditions, based on recommendations from subject matter experts.

1.1 Purpose and scope of the interim management plan

Consistent with the *Canada National Marine Conservation Areas Act (CNMCAA)*, this interim management plan provides guidance for the management of Tallurutiup Imanga NMCA. The vision, management objectives and targets, and zoning plan address key themes related to the protection and conservation of important habitats and biodiversity; the ecologically sustainable use and management of marine resources; protection for Inuit rights and promotion of benefits from the NMCA; recognition of Inuit cultural heritage and stewardship; the inclusion of Inuit Qaujimajatuqangit, and collaborative research and monitoring strategies.

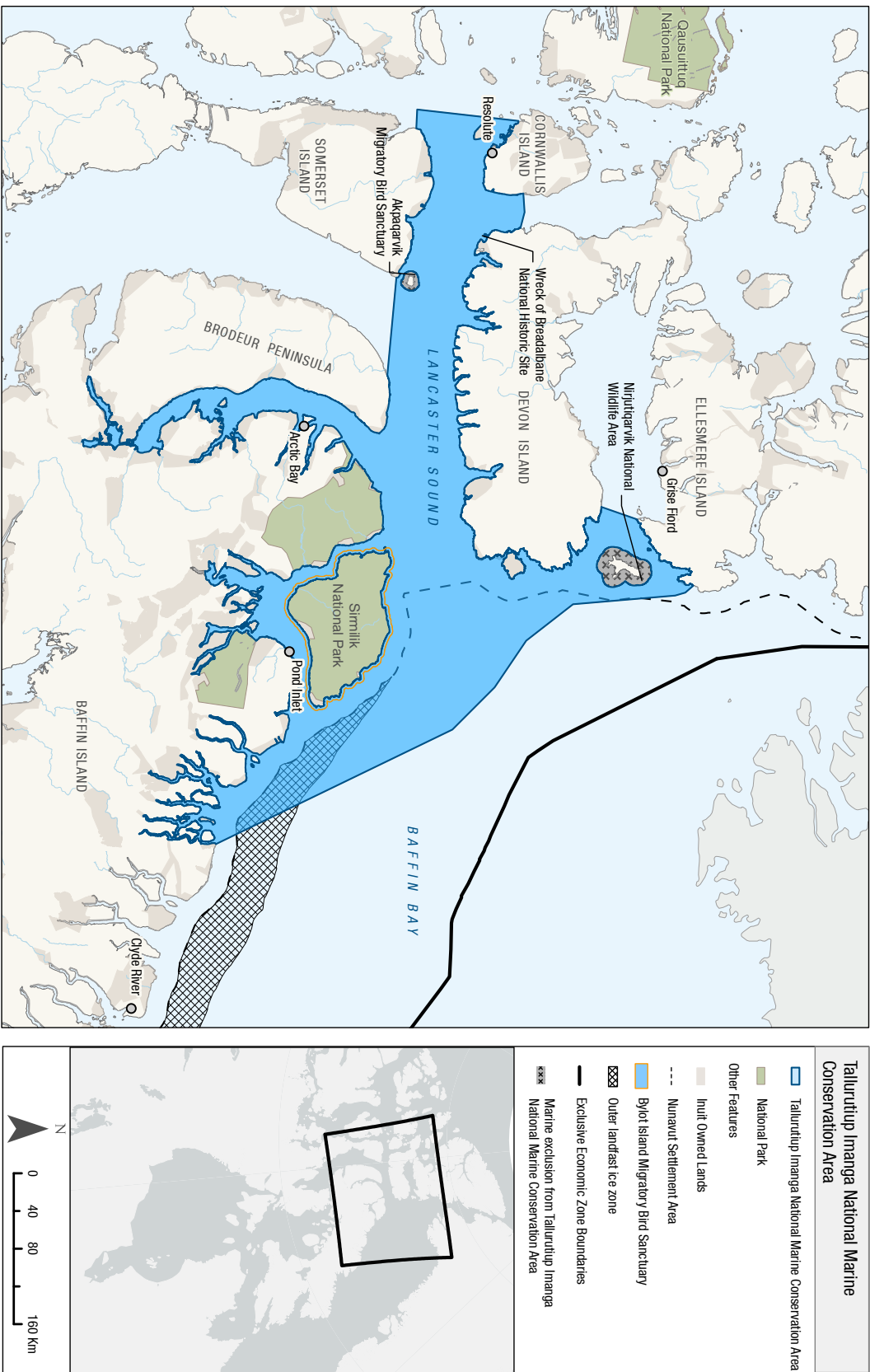


Figure 1.1 Map showing the location of Tallurutiup Imanga National Marine Conservation Area

This interim management plan was developed by a Planning Committee consisting of representatives from the Qikiqtani Inuit Association, the Government of Nunavut, and the Government of Canada (Parks Canada). The Planning Committee held extensive consultations with the five communities associated with Tallurutiup Imanga NMCA (Resolute, Grise Fiord, Arctic Bay, Pond Inlet, and Clyde River) and key stakeholders including the commercial tourism, fishing, and shipping industries, environmental non-governmental organizations, academia, and other Federal government departments in 2018 and 2019. These consultations informed the development of the content of this plan. In 2024 and 2025, consultations were again held with the associated communities to finalize this draft of the interim management plan.

This interim management plan will remain in place until a full management plan for the NMCA is developed and tabled in parliament within five years following establishment under the *CNMCAA*. The development of the full management plan will also rely on extensive consultations to identify a long-term vision for the NMCA, and provisions for ecosystem protection, human use, zoning, public awareness, and performance evaluation. The management plan will replace the interim management plan as the guiding document to manage the NMCA for up to ten years. Under the *CNMCAA*, management plans undergo review cycles at least every ten years and any amendments to the plan are required to be tabled in parliament.

Progress toward achieving the objectives and the effectiveness of the interim management plan are monitored on an ongoing basis. Reports on progress toward achieving the interim management plan objectives and targets will be shared with communities, partners, and stakeholders and made publicly available. Parks Canada shares its annual implementation report in June; this report is presented to the Aulattiqatigiit Board at a public meeting. Any feedback received is documented and used as input for the creation of the next management plan.

1.2 Establishment of Tallurutiup Imanga National Marine Conservation Area

NMCAs are established for the purpose of protecting and conserving representative marine areas for the benefit, education, and enjoyment of the people of Canada and the world (*CNMCAA* s. 4(1)). The *CNMCAA* enables Parks Canada to establish and manage a system of NMCAs that are representative of the Atlantic, Arctic and Pacific Oceans, and the Great Lakes.

The *CNMCAA* requires that marine conservation areas are:

“...managed and used in a sustainable manner that meets the needs of present and future generations without compromising the structure and function of the ecosystems...with which they are associated” (*CNMCAA* s. 4(3))

NMCAs are places where Indigenous peoples continue their traditional and cultural practices—including accessing traditional foods—and fulfill their roles as stewards. Protecting marine biodiversity and ecosystems is of primary importance.

Between 2009 and 2017, the Lancaster Sound National Marine Conservation Area Feasibility Assessment Steering Committee, comprised of representatives from the



Photo: Nicole McFadden

Qikiqtani Inuit Association, Government of Canada, and Government of Nunavut, worked together on an assessment to determine whether an NMCA was feasible and desirable in Lancaster Sound. The Steering Committee led years of consultations with local communities and stakeholders, and conducted studies related to ecological and Inuit knowledge, commercial tourism, fishing, and hydrocarbons. The committee found that the establishment of an NMCA to conserve and protect the Lancaster Sound region was both feasible and desirable. The process culminated in 2017 with *A National Marine Conservation Area Proposal for Lancaster Sound – Feasibility Assessment Report* which recommended the establishment of a NMCA and recommended a preliminary boundary of approximately 109,000 km² influenced significantly by Inuit Qaujimajatuqangit.

The recommendations included in the feasibility assessment were accepted through a Memorandum of Understanding between the Qikiqtani Inuit Association, the Government of Canada (Parks Canada) and the Government of Nunavut in August 2017. The Memorandum of Understanding also established a Planning Committee responsible for the development of this interim management plan and for recommending the final boundary for the NMCA. At the same time, Parks Canada and the Qikiqtani Inuit Association signed Terms of Reference to launch the negotiation of the IIBA towards the establishment of Tallurutiup Imanga NMCA, as required by the Nunavut Agreement. The Planning Committee finally recommended a slightly revised boundary of 108,000km², as described in the 2019 IIBA (Figures 1.1 and 1.2).

1.3 Inuit and the Environment: Cultural and Historical Background

Approximately 4,100 people currently live in communities, use camps, and access traditional sites along the shores of the NMCA. Throughout the year, the ecological abundance of this area provides for Inuit today as it has for generations. Inuit who call this place home are deeply connected to it by their history, culture, language, and traditions. Through harvesting, travel, and living within this area, Inuit have helped maintain ecological balance since the arrival of their ancestors, thousands of years ago. The many species that have co-existed with Inuit in this area continue to provide food and resources for clothing, shelter, and economic benefits. Inuit

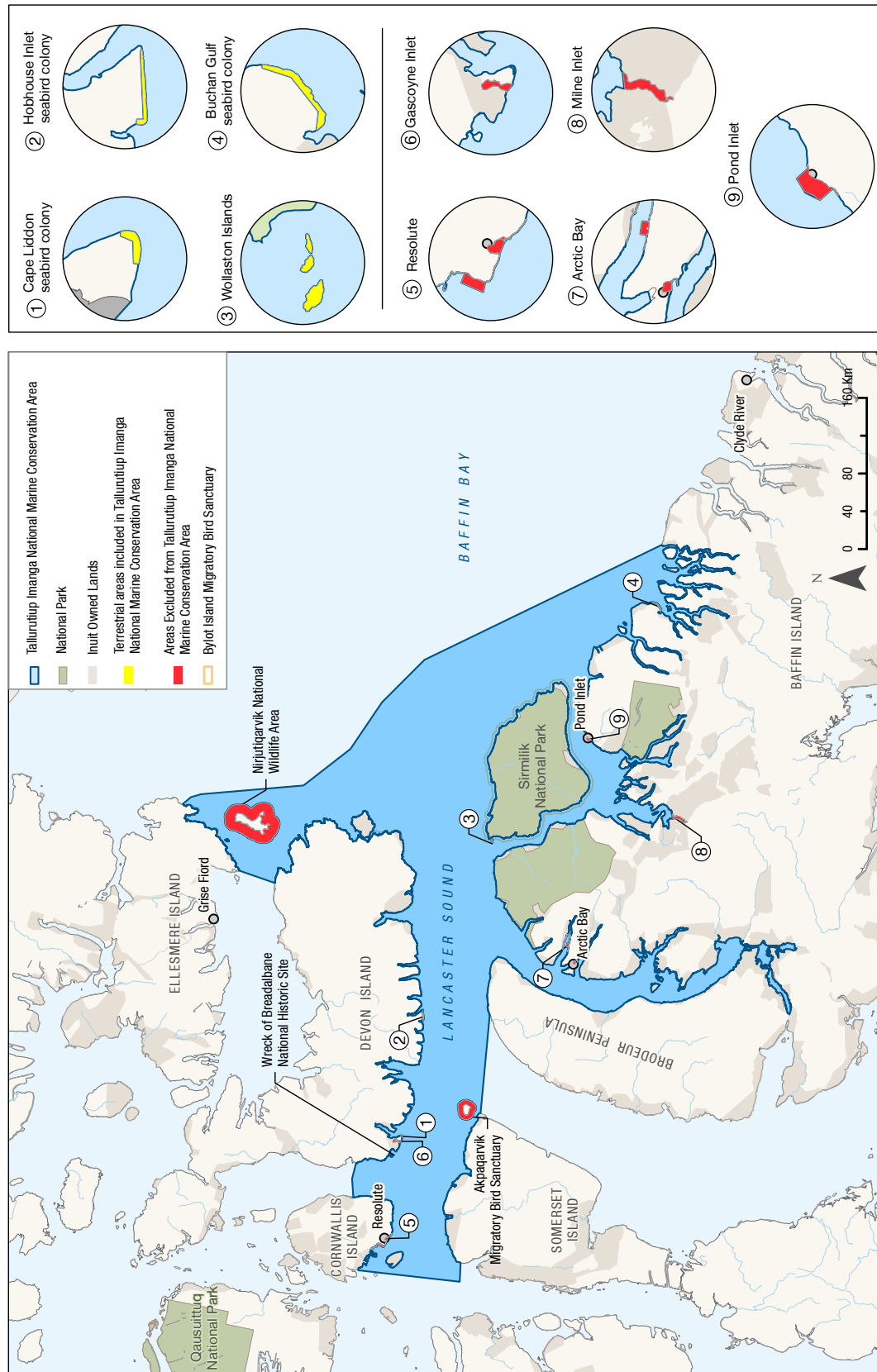


Figure 1.2 Map showing detail of the Tallurutiup Imanga NMCA boundary. Yellow areas are terrestrial areas that are included within the NMCA boundary; red areas are areas excluded from the NMCA.

have a deep knowledge of the animals of this area, as well as their habitats, biology, and behaviour. Inuit Qaujimajatuqangit encompasses all things important to Inuit relationships with the environment and, as such, is part of all decision-making. Inuit Qaujimajatuqangit is constantly generating new knowledge, and its application is critical to governance and management of Tallurutiup Imanga NMCA.

1.4 Importance of Conserving Tallurutiup Imanga

Tallurutiup Imanga NMCA is recognized as one of the most biologically productive and diverse Arctic marine areas in the world. Lancaster Sound is a major east-west waterway, encompassing significant portions of the maritime route from the North Atlantic, through the Canadian Archipelago and Arctic Ocean, and onwards to the Pacific Ocean. The region has supported Inuit year-round for millennia, as demonstrated by at least 46 known archaeological sites and continued subsistence use to this day. Inuit Qaujimajatuqangit carries the collective experience and harvesting traditions used in the area for generations.

At a national level, protecting Tallurutiup Imanga NMCA contributes to Parks Canada's long-term goal of establishing at least one NMCA in each of the 29 distinct marine regions of Canada. Tallurutiup Imanga NMCA represents the Lancaster Sound marine region in the Arctic Ocean and is the sixth region to be represented within the system of NMCAs.



Photo: Parks Canada

"Conservation and management of Tallurutiup Imanga is important because we have to protect the marine mammals, like seals and narwhals—especially when they are our main source of food."

James Simone, Pond Inlet

Lancaster Sound was identified by an International Union for the Conservation of Nature-Natural Resource Defense Fund 2011 report as a 'Super Ecologically and Biologically Significant Area' for the Arctic. The extent of Tallurutiup Imanga NMCA includes all or part of eight Ecologically and Biologically Significant Areas identified in the Canadian Arctic by Fisheries and Oceans Canada and three Key Terrestrial Habitat Sites for migratory birds. In addition, Tallurutiup Imanga NMCA, along with Sirmilik National Park, has been added to Canada's Tentative List for UNESCO World Heritage Sites as an exceptional representation of the high Arctic coastal ecosystem.

Current scientific data for Tallurutiup Imanga NMCA are relatively limited. However, two notable components to the biological features of the area are major concentrations of nesting and migratory marine birds, and nationally and globally

significant concentrations of marine mammals including 75% of the global narwhal population. Populations of several marine mammals classified by the Committee on the Status of Endangered Wildlife in Canada as “Special Concern”, including bowhead whales, beluga, walrus, and polar bear, rely on Tallurutiup Imanga NMCA and its adjacent shores for critical life stages such as foraging, breeding, and migration to and from summer habitats. The ecological importance of Tallurutiup Imanga NMCA also extends to the sea floor: there are areas of significant concentrations of corals and sponges within the NMCA.

A major reason for the abundant marine life in Tallurutiup Imanga NMCA is the presence of polynyas, large areas of open water surrounded by sea ice. Formed by a combination of ocean currents and winds, the nutrient rich waters of these polynyas provide abundant food and productive habitat for marine mammals, Arctic birds, and other species that make the Arctic ecosystem their home.

Ice breakup also begins earlier in certain regions of the NMCA than in the surrounding area because of these currents and winds: in early spring along the ice floe edge, nutrients well up to the surface, combining with sunlight to create ‘hot spots’ of biological productivity. The resulting abundance at the base of the food chain provides critical spring foraging habitat for fish such as Arctic cod and other species such as narwhal, beluga, bowhead whales, and large aggregations of marine birds. As ice gives way to open water, critical travel routes open for marine animals and people.

1.5 Economic Activities and Uses within Tallurutiup Imanga NMCA

In addition to subsistence hunting, fishing, gathering, and other traditional uses of Inuit harvesting marine resources, the core economic activities within the NMCA include commercial shipping (resupply to local communities and marine transportation for the Baffinland Iron Mines Corporation) and the commercial tourism industry (such as cruise and yacht excursions, kayaking, sport hunting, floe edge commercial tourism, wildlife viewing, dogsledding, snowmobiling and cultural education).

Commercial and exploratory fisheries are an emerging activity within Tallurutiup Imanga NMCA and of great interest to the associated communities as an opportunity for economic development. Inuit regularly harvest Arctic char for subsistence and as part of small-scale commercial fisheries. Other marine transportation activities include research vessels, international cargo ships transiting Lancaster Sound and Eclipse Sound, government vessels (for example, Canadian Coast Guard icebreakers, Department of National Defence activities, and resupply to the Nanisivik Naval Facility), as well as local and non-local pleasure craft.

1.6 Guiding Principles for the management of Tallurutiup Imanga NMCA

1. Use of Inuit Qaujimajatuqangit

Inuit values, experience, and Inuit Qaujimajatuqangit inform and guide all aspects of management for Tallurutiup Imanga NMCA.

2. Inuit Identity and Relationship with the Physical Landscape

Inuit are part of the land and sea and Tallurutiup Imanga NMCA is part of Inuit Nunangat. The physical, mental, and spiritual health of Inuit is dependent on a healthy ecosystem and the continuity of Inuit cultural practices, such as harvesting. Inuit rely on the environment and its wildlife for physical sustenance and cultural renewal, and in turn, Inuit are stewards of the NMCA dedicated to ensuring its long-term health and sustainability.

3. Cooperative Approach to Adaptive Management

Adaptive management is both a deliberate process for dealing with uncertainty and responding to new information by adjusting management to improve operational outcomes, and also an iterative process that learns from real-world outcomes of past management actions to improve future strategies. In managing Tallurutiup Imanga NMCA and implementing the interim management plan, the Aulattiqatigiit Board will make decisions through consensus governance, taking into consideration new information about changes to the environment, about changing human use, and about needs of Inuit in the associated communities, as well as results of past management actions. As new information becomes available, the Aulattiqatigiit Board will use various tools available to them (Appendix D) to adapt management strategies and address emerging changes.

4. Precautionary Principle and Ecosystem Approach

Management of Tallurutiup Imanga NMCA will be rooted in the precautionary principle and the twelve principles of an ecosystem approach from the Convention on Biological Diversity, which considers humans to be an essential component of the ecosystem (<https://www.cbd.int/ecosystem/principles.shtml>).

5. Whole of Government Approach

A whole of government approach with relevant federal and territorial government departments will be taken towards the management of Tallurutiup Imanga NMCA to ensure integrated and consistent decision making, the efficient use of resources, and to ensure administrative processes are as streamlined as possible.

6. Alignment with Canadian and International Law

The management of Tallurutiup Imanga NMCA will be consistent with the *Nunavut Agreement*, applicable federal and territorial laws, comply with Canada's domestic and international legal obligations, and allow for the proper conduct of the external affairs of Canada.

2.0

Planning Context

2.1 Legislative and Policy Context

The *CNMCAA* provides the legal authority and framework for Parks Canada to establish and manage Tallurutiup Imanga NMCA. The Minister of Fisheries and Oceans Canada and Minister of Transport Canada maintain their respective regulatory authorities within the NMCA and must agree on any management provision that relates to their respective areas of responsibility (Table 2.1). Parks Canada ensures coordination and collaboration among federal departments who have jurisdiction in the NMCA. The management of the NMCA will also be supported through regulations under the *CNMCAA* (currently in development and expected to come into force in 2026).

All parties with jurisdiction in Tallurutiup Imanga NMCA ensure their responsibilities are carried out in accordance with the enabling legislation and regulations, consistent with the *Nunavut Agreement*, the *CNMCAA*, the *IIBA*, other

Federal Body	Responsibility
Parks Canada	• Public lands (implications for managing Species At Risk, impact assessment) • All matters not the responsibility of another Minister • Coordination of federal management efforts
Fisheries and Oceans Canada	• Fishing, aquaculture and fisheries management , safe navigation, and ocean science
Canadian Coast Guard	• Responsible for search and rescue, icebreaking, environmental response
Transport Canada	• Marine navigation and marine safety • Aviation
Environment and Climate Change Canada (Canadian Wildlife Services)	• Management of Nirjutiqarvik National Wildlife Area, Akpaqarvik Migratory Bird Sanctuary, and Bylot Island Migratory Bird Sanctuary

Table 2.1 Shared Federal Responsibility

applicable legislation, regulations, NMCA Policy, NMCA management plans, and other policy instruments (Appendix C).

The Marine Safety and Security Branch of Transport Canada has the responsibility for ensuring that marine navigation in Arctic waters is conducted to mitigate the safety and environmental risks associated with marine navigation through the *Arctic Waters Pollution Prevention Act* and the *Canada Shipping Act*. In the Arctic, both Acts, along with the *Marine Transportation Security Act*, and their associated regulations are applied to provide Canada's operational regulatory regime governing marine safety, security, and environmental protection matters. The Marine Safety and Security Branch administers and enforces these Acts and associated Regulations.

Fisheries and Oceans Canada has responsibility for fisheries management and aquaculture in NMCAs, including Indigenous fisheries. Fisheries and Oceans Canada is responsible for the provision of aids to navigation, marine communication and traffic services. The Canadian Coast Guard is responsible for icebreaking, marine pollution response, and maritime search and rescue to ensure safe and accessible waterways.

In addition to the above, Environment and Climate Change Canada is mandated to protect migratory birds according to the *Migratory Birds Convention Act*. Parks Canada is responsible for administering the *Species at Risk Act* for federal lands and waters administered by Parks Canada, including Tallurutiup Imanga NMCA.

Once the NMCA is established under the *CNMCAA*, Parks Canada will replace the Nunavut Planning Commission in conducting conformity reviews for project proposals occurring within Tallurutiup Imanga NMCA. The requirements set out by, or under, any law for which Parks Canada has authority will replace any approved

land use plans in conformity determinations. This interim management plan and subsequent full management plans will be tools used in both conformity reviews and subsequent impact assessment processes.

2.2 Roles of Other Government and Co-Management Bodies

Tallurutiup Imanga NMCA is a vast area, and cooperation with others is key for successful management.

Territorial Government

The Government of Nunavut will continue to play a role in such things as Nunavut Research Institute research permits, cultural heritage management, commercial tourism development, promotion and supports for a strong sustainable commercial tourism sector, investor confidence and promotion, wildlife management, and licensing within Nunavut.

Further to the IIBA, the Government of Nunavut shall remain involved in such matters as capacity building and training activities for Inuit (IIBA s. 10.4.1) and improving the understanding of the marine ecosystem and the potential for sustainable fishing opportunities (IIBA s. 16.1.4).



The Government of Nunavut will seek active and continuous participation in the management of Tallurutiup Imanga NMCA, including seeking a seat on the Management Advisory Committee that will be responsible for the formulation, review and implementation of the Management Plan as per s.11(1) of the CNMCAA.

Institutions of Public Government

The institutions of public government as set out in the Nunavut Agreement will continue to play an important role within Tallurutiup Imanga NMCA. The Nunavut Wildlife Management Board will continue its role in decisions related to wildlife management. The Nunavut Impact Review Board will continue its role of screening and reviewing projects. When a project is proposed to take place both within and outside of the NMCA, the Nunavut Planning Commission will consider the components of the project outside of the NMCA and the Aulattiqatigiit Board will review the portions of the project inside the NMCA.

Protected areas within and adjacent to Tallurutiup Imanga NMCA

Governance of the NMCA provides continuity and alignment between protected areas that lie adjacent to or within the NMCA boundary and their associated co-management regimes and IIBAs (for example, Sirmilik National Park administered by Parks Canada and Akpaqarvik and Bylot Island Migratory Bird Sanctuaries and Nirjutiqarvik National Wildlife Area administered by the Canadian Wildlife Service of Environment and Climate Change Canada). This alignment will not diminish protection in either the NMCA or the other protected areas.





Photo: Nicole McFadden

3.0

A Vision for Tallurutiup Imanga NMCA

Tallurutiup Imanga National Marine Conservation Area is a thriving, globally significant ecosystem that sustains and empowers Inuit for generations to come and welcomes visitors to experience, appreciate, and respect its meaning to Inuit, Canada, and the Arctic region.

The structure and function of the ecosystems of Tallurutiup Imanga NMCA are protected, remain strong and healthy, and are cooperatively managed by Inuit and the Government of Canada. The management of Tallurutiup Imanga NMCA acknowledges the key role that Inuit play as part of the Arctic ecosystem and as stewards of the NMCA. The cooperative management approach safeguards Inuit harvesting areas and activities, and supports Inuit self-determination over their general well-being, including economic, social, and cultural development. Marine resources are managed in an ecologically sustainable manner for the lasting benefit of coastal communities.

Inuit continue to directly rely on this region for sustaining their lives, enjoying year-round access to marine wildlife; practicing their culture and traditions such as hunting, being stewards of the land and waters; continuing to accumulate their vast knowledge, and maintaining strong connections with their youth, other Canadians, and the world. Ecologically sustainable and culturally respectful visitation are promoted, and Inuit play a central role in managing commercial tourism activities and sharing their knowledge with visitors.





4.0

Management Objectives

The following management objectives and targets consider the recommendations of the report resulting from the 2017 feasibility assessment and the additional consultations conducted by the Planning Committee with the five associated communities and key stakeholders during 2018, 2019, 2024 and 2025. They guide the management of Tallurutiup Imanga NMCA over the anticipated five-year lifespan of the plan. The objectives describe the broad aspirational outcomes; the targets are more specific and serve to measure and report on progress toward each objective. The years specified in the targets refer to when within the five-year lifespan of the plan the target will be completed. The managing partners of the NMCA develop their respective annual workplans using the guidance of these objectives and targets in addition to the guidance provided in the IIBA.



Objective 1: The natural and cultural heritage of Tallurutiup Imanga is protected and conserved.

Tallurutiup Imanga is the ecological driver of the eastern Canadian Arctic marine ecosystem, providing sustenance and essential habitat for a diversity of species, including species at risk. A healthy, productive marine ecosystem is critical for these marine species and for Inuit, who depend on the marine environment for livelihood, food security, and cultural continuity. Healthy ecosystems also have enhanced resilience to natural and human-induced disturbances and changes, including climate change. Tallurutiup Imanga NMCA managers will prioritize the protection and conservation of the rich biodiversity and unique ecosystems of Tallurutiup Imanga NMCA, from the flourishing colonies of marine animals living on the bottom of the ocean floor, to the sea ice on the surface that supports Inuit self-sufficiency, provides critical habitat, and drives biological productivity.

Managers will also ensure there is effective management of sites of cultural importance within Tallurutiup Imanga NMCA, which include Inuit cultural and spiritual sites, archaeological sites, and the Wreck of Breadalbane, to ensure they are cared for and protected. An effective zoning plan gives management the tools to protect natural and cultural heritage. Users must also be aware of the rules and guidelines in place to reduce impacts on wildlife habitat, sea ice, areas of importance to communities for sustenance and cultural activities, and the unique features of Tallurutiup Imanga NMCA. Clear, simple, and streamlined processes for issuing permits and authorizations will ensure users know when and where authorizations are required and ensure the impacts of activities are minimized.

Achieving the following targets will help accomplish this objective:

Target 1. The effectiveness of the interim zoning plan in protecting and conserving natural and cultural heritage is evaluated to improve the zoning plan if needed (for example, changes to zone boundaries, or the need for additional management tools to support zoning) by the end of year five.

Target 2. A plan that identifies effective communication tools to inform NMCA users about the protection and conservation of the natural and cultural heritage of Tallurutiup Imanga NMCA is completed by year two. Implementation of the identified tools begins in year three.

Target 3. Processes for issuing authorizations (such as permits or licenses) for activities in Tallurutiup Imanga NMCA are developed, and documented in a format that is publicly available, by the end of year two. These processes prioritize the protection of wildlife and Inuit use of the area in the management of other uses and activities within the NMCA. To the extent possible, these processes are streamlined with existing procedures.

Target 4. As per the Federal Marine Protected Areas Protection Standard, an assessment of the compatibility of the use of bottom trawl gear with the NMCA's conservation objectives is conducted in collaboration with communities and stakeholders, and a report delivered to the Aulattiqatigiit Board by the end of year five.

Target 5. A Cultural Resources Management Plan, or alternative management tools as directed by the Aulattiqatigiit Board (IIBA s. 12.2), is completed, and implemented by year two.

Target 6. An assessment of the need for increased protection of colonial seabirds and their habitat is completed in collaboration with the Canadian Wildlife Service, and a report with findings and recommendations delivered to the Aulattiqatigiit Board by year three.



Objective 2: The sustainable use of marine and terrestrial resources in Tallurutiup Imanga NMCA respects Inuit rights, results in economic and social benefits for Inuit, and enhances the well-being of the associated communities.

Tallurutiup Imanga NMCA has seen significant increases in ship traffic related to commercial shipping and tourism over the past 25 years, with this growth projected to continue. Communities have expressed concerns about the impacts of ship activity on wildlife habitat and behaviour, and on the use, safety, and enjoyment of hunting, camping, and travel areas. Inuit access to wildlife resources found in Tallurutiup Imanga NMCA is essential to food sovereignty and Inuit well-being, and it is critical that the region continues to remain a source of healthy country food.

Ecologically sustainable economic activities are welcomed and encouraged in Tallurutiup Imanga NMCA. These activities will be managed to minimize adverse impacts on Inuit travel and rights; to provide benefits to the communities, and overall, to increase the wellbeing of those living in and around Tallurutiup Imanga. NMCA managers will actively work with communities and partners to identify and facilitate opportunities to realize social, economic, and cultural benefits from the NMCA. Community input will also be sought to develop and assess key indicators to measure and understand the impacts of the establishment of Tallurutiup Imanga NMCA on the wellbeing of the associated communities to better inform management decisions.

Achieving the following targets will help accomplish this objective:

Target 1. As part of the development of processes to issue authorizations (Objective 1, Target 3), terms and conditions are developed that require project proponents to document how their proposals respect Inuit rights and benefit the associated communities within two years.

Target 2. The tools needed to manage visitor behaviour in Tallurutiup Imanga NMCA and associated communities (for example, guidelines for cruise ships), to reduce the impact of visitation and increase the economic benefits to communities,

are developed in collaboration with the communities and stakeholders, implemented, and communicated to users within two years.

Target 3. An assessment of effective methods of informing communities about marine vessel movements (across the range of vessel size), commercial activity, and marine navigation matters in Tallurutiup Imanga NMCA is completed within two years. Upon completion, the recommendations from the assessment are ready to be implemented.

Target 4. A strategy that outlines opportunities to build local capacity to benefit from economic opportunities in Tallurutiup Imanga NMCA, including, but not limited to, ecologically





Photo: Jovan Simic

sustainable and culturally appropriate commercial tourism activities, is developed in partnership with communities and stakeholders within five years.

Target 5. Social, cultural, and economic indicators to assess the impact of Tallurutiup Imanga NMCA on the well-being of adjacent communities are co-developed with communities. The monitoring of these indicators commences within five years.

Target 6. In collaboration with the associated communities, an infrastructure plan is developed and ready to be implemented within two years to identify infrastructure needs to support operations and management of Tallurutiup Imanga NMCA (for example cabins or visitor reception center(s)). This infrastructure plan may include guidance on the implementation of the four infrastructure agreements made in 2019 related to Tallurutiup Imanga (community harbours in Grise Fiord and Resolute, Small Craft Harbours in Clyde River and Arctic Bay, multi-use infrastructure in the five associated communities, regional training center in Pond Inlet) if requested by one or more of the parties to those agreements. Such guidance is supplementary and not a prerequisite for implementation of those agreements.



Photo: Nicole McFadden

Objective 3: Collaborative research and monitoring increases awareness of Tallurutiup Imanga National Marine Conservation Area, informs decision making, and promotes knowledge collection and sharing.

Effective conservation of Tallurutiup Imanga NMCA requires current, sound information derived from a robust and active research and monitoring program. Inuit Qaujimajatuqangit and western science together will form the basis for decision making. Inuit Qaujimajatuqangit is an active knowledge base that must be used, applied, and shared on a continual basis to evolve and realize its full value. This emphasizes the importance of establishing opportunities for Inuit to participate in research and monitoring, and to share knowledge about Tallurutiup Imanga NMCA. Inuit in the associated communities have expressed

concerns about the way research has been conducted and the impacts on their communities. The active participation of communities is key to shaping research and monitoring initiatives in the NMCA, to ensure that community concerns are addressed, and community priorities are reflected.

The Inuit Qaujimajatuqangit principle of *Ikajuqtigiinni*q (working together for a common cause) will guide the work under this objective. Collaboration with communities to design and conduct research and monitoring will increase community capacity. Further, collaboration and community involvement will result in a better understanding of ecosystem health and threats, and ensure resources are used wisely. As data is collected, used, and shared, the level of awareness of Tallurutiup Imanga NMCA and its significance to the Arctic region and the world will increase. Information sharing provides an opportunity to communicate to visitors and the public the central role that Inuit have played since time immemorial, and continue to play, as stewards and knowledge keepers of this valuable area.

Achieving the following targets will help accomplish this objective:

Target 1. A minimum of three indicators to monitor ecological sustainability that are based on Inuit Qaujimajatuqangit and western science are co-developed with communities and approved by the Aulattiqatigiit Board. The monitoring of these indicators commences within five years.

Target 2. Ensure there is a Research and Monitoring Strategy for the NMCA that meets all the requirements as listed in Article 13 concerning Research and Monitoring of the IIBA. The implementation of the strategy starts in year one.

Target 3. A plan to increase Inuit participation in, and benefit from, research and monitoring activities and that further supports the implementation of Article 13 of the IIBA concerning Research and Monitoring is developed and implemented by year four.

Target 4. Beginning in year two, an annual event is held in one of the five associated communities each year on a rotating basis, in partnership with the communities, for sharing stories, knowledge, and experiences related to Tallurutiup Imanga. This event fosters direct community engagement and contributes to cultural and environmental awareness.

Target 5. Guidelines for reporting results from research and monitoring activities are co-developed with communities within four years. Aligned with guidelines, research authorizations include requirements for results to be shared with the involved communities within 12 months of the completion of the project and for community feedback to be documented so it can inform future research and monitoring activities within Tallurutiup Imanga NMCA.



Photo: Nicole McFadden

Objective 4: Collaborative and coordinated prevention, preparedness, and response planning increases safety of the associated communities and NMCA users and the protection of Tallurutiup Imanga.

Increased human activity, pollution, the threat of oil spills, and the effects of climate change all pose threats to the protection and conservation of the marine environment, and the users of Tallurutiup Imanga NMCA. Increased vessel traffic and visitation increase the likelihood of requiring search and rescue or emergency response. However, the current capacity to respond to incidents is limited. Incident response and the enforcement of rules and regulations in the NMCA is currently decentralized and must be coordinated among a variety of parties, including federal departments, the Government of Nunavut, local search and rescue teams, harvesters, the Canadian Rangers, and communities.

With the establishment of Tallurutiup Imanga NMCA, and the corresponding change in Parks Canada's responsibilities, there is an opportunity to work together to increase resourcing and reduce the challenges related to emergency preparedness and enforcement. Cooperation and coordination between parties will clarify roles and responsibilities, improve the use of resources and infrastructure, increase the capacity to respond to emergencies; allow for better enforcement of rules and regulations, and overall improve the safety of users and the protection of the environment. The knowledge and experience held in the communities associated with the NMCA are crucial to developing and implementing measures needed to protect the public and the environment. Marine safety will be further supported through clear communication of safety measures needed to reduce the chance of an emergency or search and rescue operation. Further, the implementation of appropriate navigation aids will contribute to the overall ongoing protection of the marine area, communities, and other users.

Achieving the following targets will help accomplish this objective:

Target 1. A plan to improve emergency preparedness and response is developed in collaboration with relevant partners and implemented within three years. This plan includes, at a minimum, marine environmental and hazard response, and search and rescue.

Target 2. Needed safety measures in Tallurutiup Imanga NMCA, for both open water and sea ice seasons, are identified with partners and communities and compiled in a report, and these measures are communicated to the NMCA users within two years.

Target 3. A strategy to align prevention, compliance, and enforcement across governments, agencies, and other partners, which includes stronger and increased Inuit presence and representation in compliance and enforcement roles, is developed by year three and implemented by year five.

Target 4. A method for communities to report suspicious vessel activities or observations in Tallurutiup Imanga NMCA (for example, incidents of wildlife disturbance, pollution, or illegal hunting), and inquire about shipping activities, is implemented by the end of year one.

Target 5. A plan to identify navigation and communication aids needed to improve navigational safety (for example, buoys, markers, identification of safe harbours, improved charting of navigation routes) in Tallurutiup Imanga NMCA is developed with communities and stakeholders within four years.



5.0 Zoning

5.1 Zoning Framework

Zoning is a spatial management tool that sets the management intent for different areas of an NMCA by dividing it into specific zones, each with a defined purpose and level of protection, objectives and categories of allowable uses and activities. As per the CNMCAA, each NMCA must have at least two zones, one that fosters and encourages ecologically sustainable use of marine resources, and one that fully protects special features or sensitive ecosystem elements. Ensuring that zones are of sufficient size and effective configuration is important to achieve the objectives of each zone. Zoning is implemented through a range of voluntary, policy, and regulatory measures by the appropriate authority or authorities (see section 2 and Appendix D).

Zoning provides certainty and predictability to managers and NMCA users and strives to minimize negative socio-economic impacts to Indigenous peoples,

stakeholders, and coastal communities. In addition to the primary objectives laid out for each zone, the zoning plan may incorporate objectives to reduce conflicting or competing uses. As part of Parks Canada’s regular management planning cycle, annual reporting and long-term monitoring studies are used to inform the evaluation of zoning efficacy within the NMCA and address conservation and ecosystem objectives and the needs of users.

This first zoning plan for Tallurutiup Imanga NMCA is based on the national Parks Canada NMCA zoning framework (Appendix A). The NMCA framework comprises four zones, each with a specific purpose, objectives, and set of allowable activities and uses. The purpose of each zone is described in Figure 5.1.

ZONE 1 STRICT PROTECTION	ZONE 2 GENERAL PROTECTION	ZONE 3 HABITAT PROTECTION	ZONE 4 MULTIPLE USE
PURPOSE Strictly protects special features and sensitive ecosystem elements that are susceptible to disturbance. Access and extractive uses are prohibited.	PURPOSE Protects special features, sensitive ecosystem elements and representative characteristics of the marine regions while providing for compatible access and non-extract uses. Extract use is prohibited.	PURPOSE Protects specific habitats while providing for compatible uses and extractive uses. Some uses are prohibited to support specific habitat conservation objectives.	PURPOSE Sustains the greatest range of uses that do not compromise, ecological sustainability, cultural resources, or heritage values.

Figure 5.1 The purpose of each zone in the NMCA zoning framework
(Source: Directive on the Management of National Marine Conservation Areas).

The following activities are prohibited in all zones:

- Use or disposition of public lands without authority (CNMCAA s. 12);
- Exploration and exploitation of non-renewable resources (CNMCAA s. 13); and
- Disposal of substances in waters except as authorized by a permit (CNMCAA s. 14) or as required for vessel safety and security.

In general, activities and uses that are consistent with the purpose and objectives of the zone are allowed, subject to applicable legislation, regulations, site-specific review processes, authorizations and permitting requirements. For all zones, impact assessments to assess and manage the impacts of proposed projects will be conducted as per the Nunavut Planning and Project Assessment Act and Parks Canada’s policies and guidance on impact assessment. Cumulatively, all activities and uses in an NMCA must be conducted in a manner and at a rate and scale that are ecologically sustainable. More details on the allowable activities and uses in each zone, and what additional permissions or authorizations may be required (for example a permit or license), are described in Appendix A.

Inuit rights, as set out in the Nunavut Agreement, and traditional use of the NMCA by Inuit are not subject to zone restrictions. Inuit rights are often exercised to support food sovereignty, cultural practices, and community health and well-being. The zoning regime for Tallurutiup Imanga NMCA recognizes and protects Inuit rights, particularly where use conflicts exist or are anticipated.

In addition, the zoning regime and management of Tallurutiup Imanga NMCA does not restrict, prohibit, or have the effect of restricting or prohibiting activities or uses with respect to national security or sovereignty, safe navigation, defence, law enforcement and activities allowing for the proper conduct of the external affairs of Canada, including navigation through the ice. Canadian Coast Guard activities shall not be restricted, including those related to the resupply of northern communities, icebreaking, vessel safety, marine pollution prevention and response, and in the event of an emergency or in relation to search and rescue. Additional exceptions for activities such as research, compliance monitoring and the placement of navigational aids may be warranted to avoid unintended impacts to these important activities. Resupply of northern communities by private shipping companies is not restricted. In addition, provisions are not to apply to an individual vessel movement if the sole purpose of the vessel movement is to engage in innocent passage through the waters of the Canadian Arctic, without intending to stop while engaging in said passage through the Arctic waters.

5.2 Tallurutiup Imanga NMCA Zoning Plan

The Tallurutiup Imanga NMCA zoning plan is based on currently available Inuit Qaujimajatuqangit, science, and discussions with local communities, stakeholders, Inuit organizations, and federal and territorial departments, who identified areas and ecosystems in greatest need of protection.

Given the seasonal differences between open water and sea ice coverage, and the annual migration patterns of wildlife in the area, Tallurutiup Imanga NMCA has been divided into two seasonal zoning plans: one for the time of year when the area is largely ice-covered and one for the time of year dominated by open water. This seasonal approach to zoning helps manage the range of anticipated uses and wildlife conservation needs within the NMCA throughout the year. The dates for the ice season and open water season zoning plans are based on the Inuit seasonal cycle, which in Nunavut consists of six seasons with dates varying by region (Figure 5.2) and on consultations with the five associated communities.

Both the ice and open water season zoning plans contain only zone 1, 3 and 4 areas (Figures 5.3 and 5.4). There are currently no zone 2 areas in the NMCA.

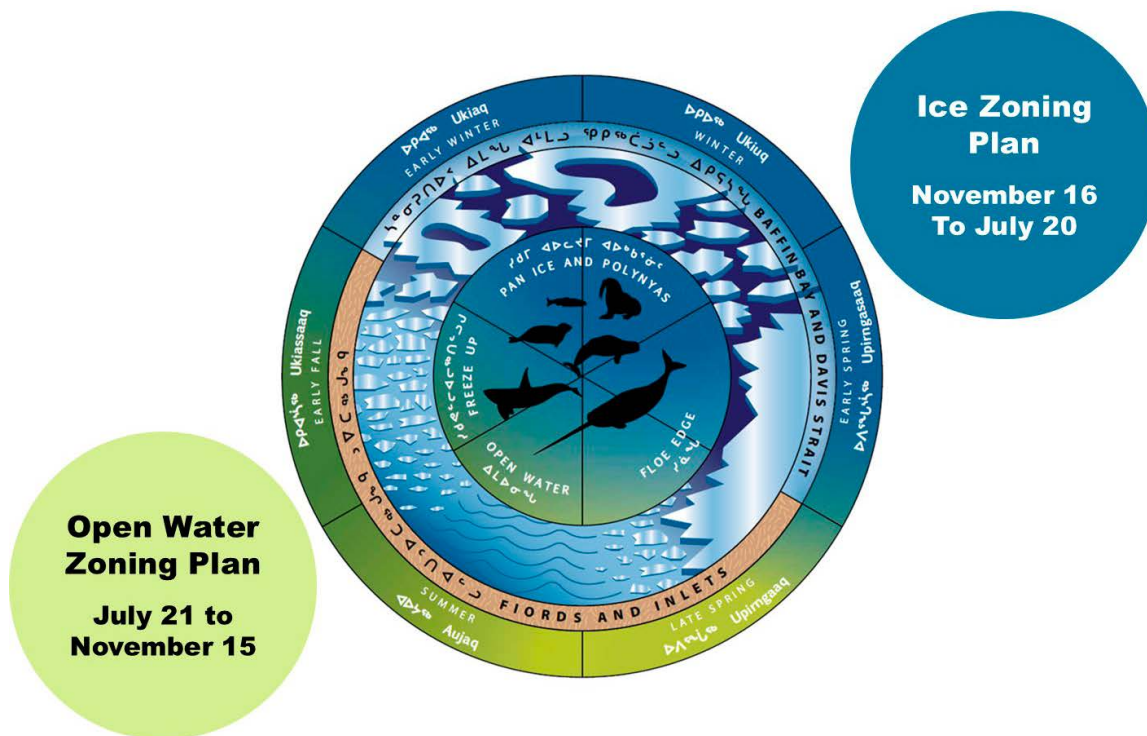


Figure 5.2 Effective dates and seasons for the ice season and open water season zoning plans for Tallurutiup Imanga NMCA based on the traditional Inuit cycle of seasons in the North Baffin region and community consultations.

5.2.1 Zone 1: Strict Protection

Zone 1 strictly protects special features and sensitive ecosystem elements that are susceptible to disturbance. Access and extractive use are prohibited. Research and monitoring activities consistent with the purpose and objectives of the zone and supporting the protection and conservation of the site may be permitted. Inuit rights, as set out in the *Nunavut Agreement*, and traditional use of the NMCA by Inuit are not subject to zone restrictions. Refer to Appendix A for details of allowable activities and applicable authorizations.

Zone Objectives:

- To protect special features and/or sensitive ecosystem elements in as undisturbed a state as possible.
- To restore or recover depleted or degraded special features and/or sensitive ecosystem elements.
- To provide reference areas for research.
- To contribute to maintaining biodiversity.

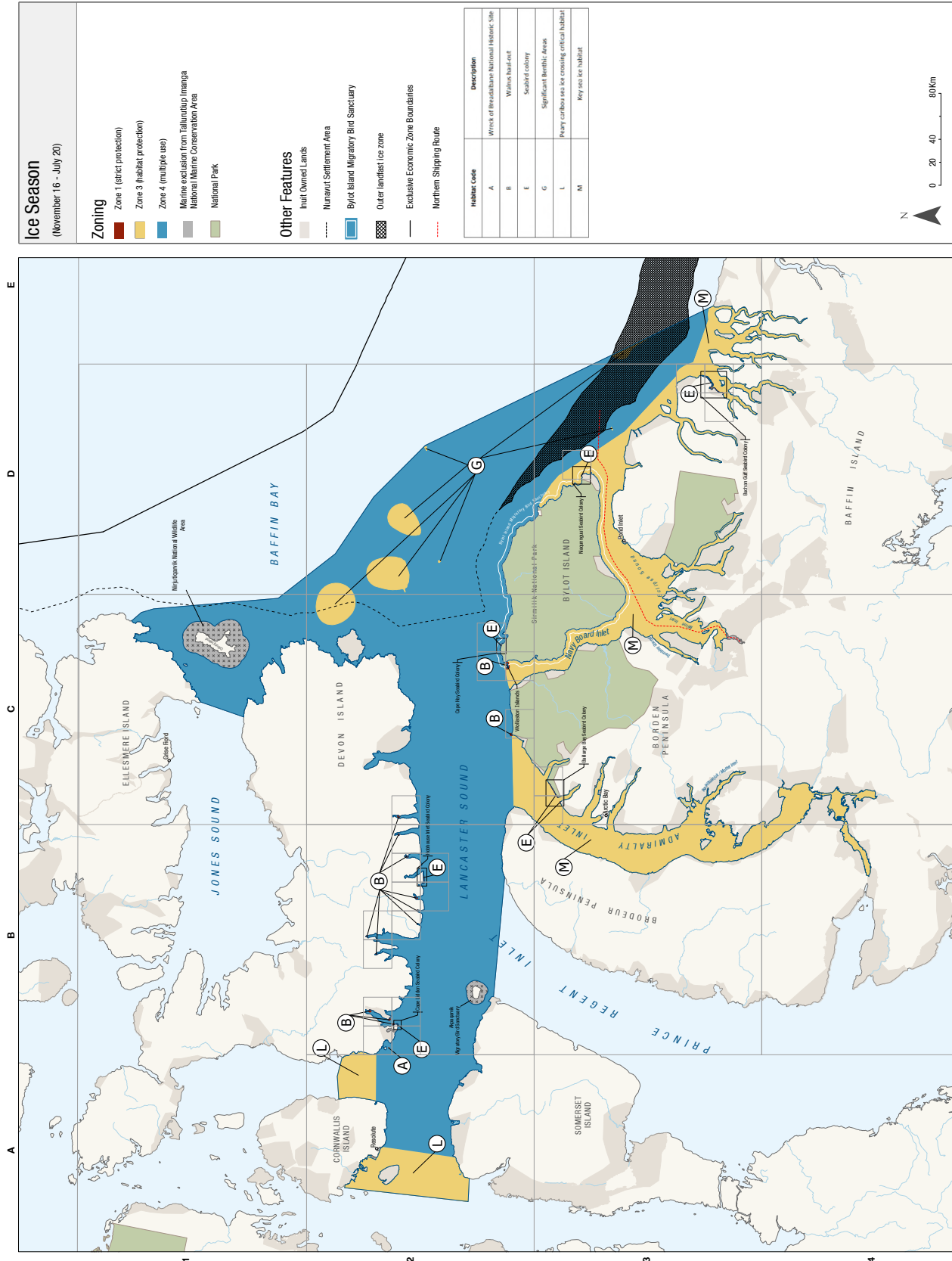
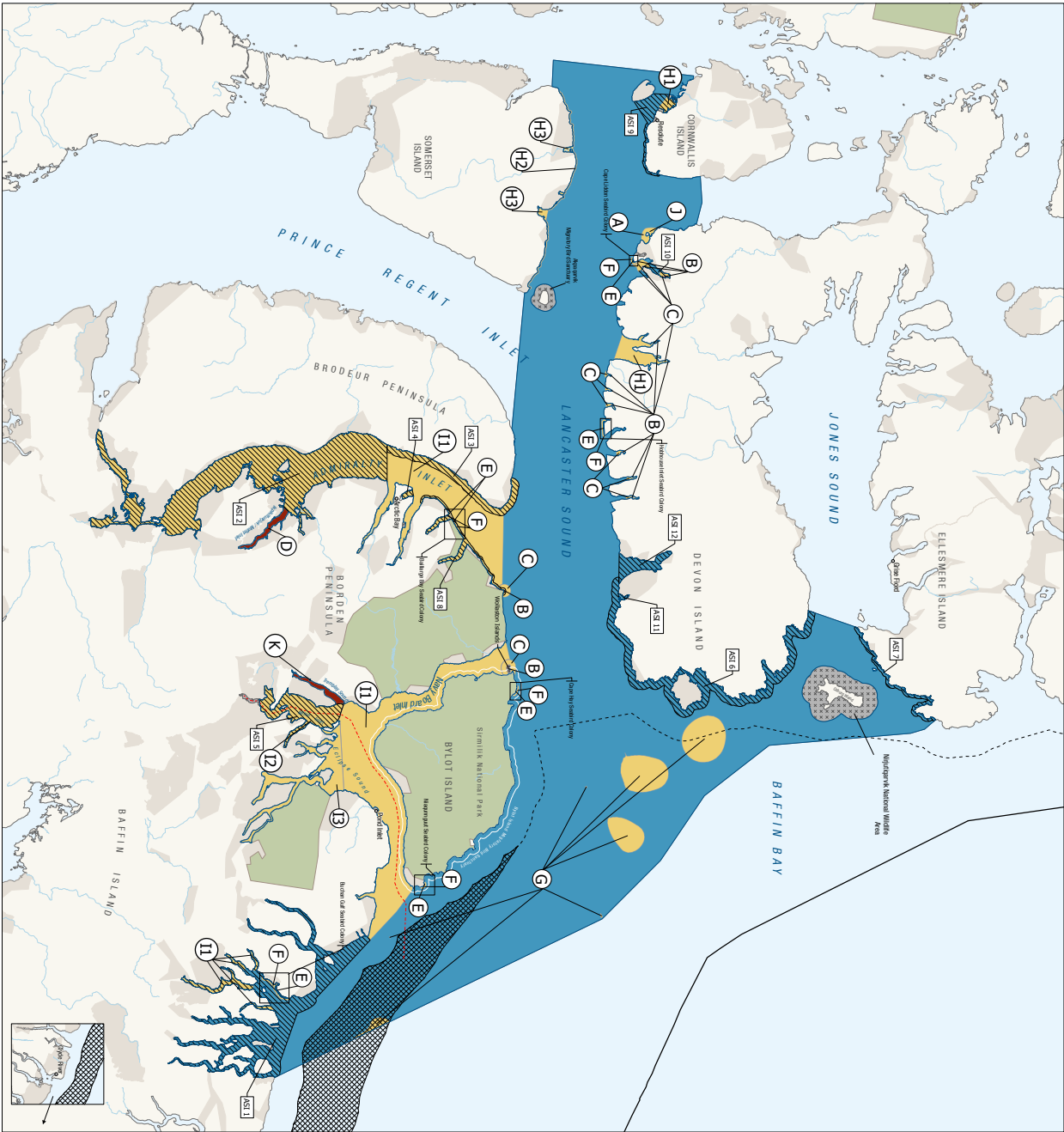


Figure 5.3 Tallurutiup Imanga NMCA ice season zoning plan.



Open Water Season

(July 21 - November 15)

Zoning

- Zone 1 (strict protection)
- Zone 3 (fisheries protection)
- Zone 4 (multiple use)
- Area of special importance to communities (AS)
- Marine exclusion from Tallurutiup Imanga
- National Marine Conservation Area
- National Park

Other Features

- Unsettled Lands
- Nunavut Settlement Area
- Bylot Island Migratory Bird Sanctuary
- Outer landfall ice zone
- Exclusive Economic Zone boundaries
- Northern Shipping Route

Habitat Code	Description
A	Wreck of pre-colonial Inuit site
B	Waterside outfall
C	Waterside outfall
D	Highly productive / Marine life
E	Scallop colony
F	Scallop colony buffer
G	Significant benthic areas
H1, H2, H3	Ringed summer aggregation area
I1, I2, I3	Northern summer aggregation area
J	Underwater cultural resource area
K	Therapeutic Sound

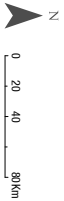


Figure 5.4 Tallurutiup Imanga NMCA open water season zoning plan.



The following areas are identified as requiring strict protection and thus have been designated Zone 1:

i. Wreck of Breadalbane National Historic Site of Canada (A in Figures 5.3 and 5.4): The Wreck of Breadalbane National Historic Site of Canada is located off the southeast coast of Beechey Island, at 74° 40' 51" north latitude and 91° 48' 57" west longitude. It is comprised of the wreckage of *Breadalbane*, a 19th-century, 500-ton sailing ship, including the hull, fragments of the vessel and the debris field caused by the sinking of the ship. It was designated a national historic site in 1983 because the ship was involved in the search for Captain John Franklin's lost expedition, and it is a well-preserved example of a mid-19th century merchant transport ship uniquely adapted for an Arctic voyage. The site is strictly protected to limit further deterioration of the archaeological site. The zone 1 area is a 250-m radius circle centered on the mid-point of the hull.

ii. Walrus haul-out sites (B in Figures 5.3 and 5.4): Walrus use pack ice for much of the year, but when suitable sea ice is unavailable, walrus haul out in herds ranging from several individuals to thousands of animals at terrestrial haul-out sites that offer easy access to the water for feeding and escape from predators or other disturbances. Walrus are known to show strong site fidelity to established haul-out sites. However, prolonged, or repeated disturbances may cause walrus to abandon their haul-outs. Their ability to recolonize these areas is unknown. Human disturbances that cause walrus to leave their haul-outs may impact population dynamics by causing stampedes (which result in mortality); interfering with feeding and increasing energy expenditures; masking walrus communications; impairing thermoregulation and increasing stress levels. Thirteen walrus haul-out sites are identified in Tallurutiup Imanga NMCA as "active" by Fisheries and Oceans Canada

and/or by associated communities. For these sites, year-round strict protection has been applied as follows:

- For the Wollaston Islands (group of islands off the northeast corner of Bylot Island), the zone 1 area includes the islands themselves, plus a 1-km buffer around the perimeter of the islands.
- For all other haul-outs, the terrestrial haul-outs themselves are located on land outside the boundary of the NMCA. In these cases, any area that is located both within 1 km of the haul-out and within the NMCA boundaries is a zone 1.

The purpose of the year-round strict protection for these areas is to protect walrus and their habitat from disturbance; maintain habitat integrity and prevent abandonment.

iii. Seabird colonies (E in Figures 5.3 and 5.4): There are six key migratory bird habitat sites within and adjacent to Tallurutiup Imanga NMCA supporting multiple species of colonial seabirds:

- Cape Liddon seabird colony (southwest coast of Devon Island):** Supports approximately 4% of the national population of Northern Fulmar.
- Hobhouse Inlet seabird colony (south coast of Devon Island):** Supports approximately 11% of the national population of Northern Fulmar.
- Baillarge Bay seabird colony (northwest coast of Borden Peninsula):** Supports approximately 13% of the national population of Northern Fulmar.
- Cape Hay seabird colony (northwest Bylot Island):** Approximately 83 000 pairs of Thick-billed Murres and 12 000 pairs of Black-legged Kittiwakes, representing about 4% and 5% of the Canadian population, respectively, nest at Cape Hay.
- Niaqunnguut seabird colony (southeast Bylot Island):** Approximately 52,000 pairs of Thick-billed Murres and 3,000 pairs of Black-legged Kittiwakes, representing 2.3% and 1.1% of the Canadian populations, respectively, nest about 7 km north of Niaqunnguut.
- Buchan Gulf seabird colony (east coast of Baffin Island, southeast of Pond Inlet):** Supports approximately 4% of the national population of Northern Fulmar.

For three of these sites, the terrestrial coastal cliffs where the seabirds breed are included within the NMCA boundary: Cape Liddon seabird colony (southwest coast of Devon Island), Hobhouse Inlet seabird colony (south coast of Devon Island) and a portion of Buchan Gulf seabird colony (east coast of Baffin Island) (Figure 1.2).

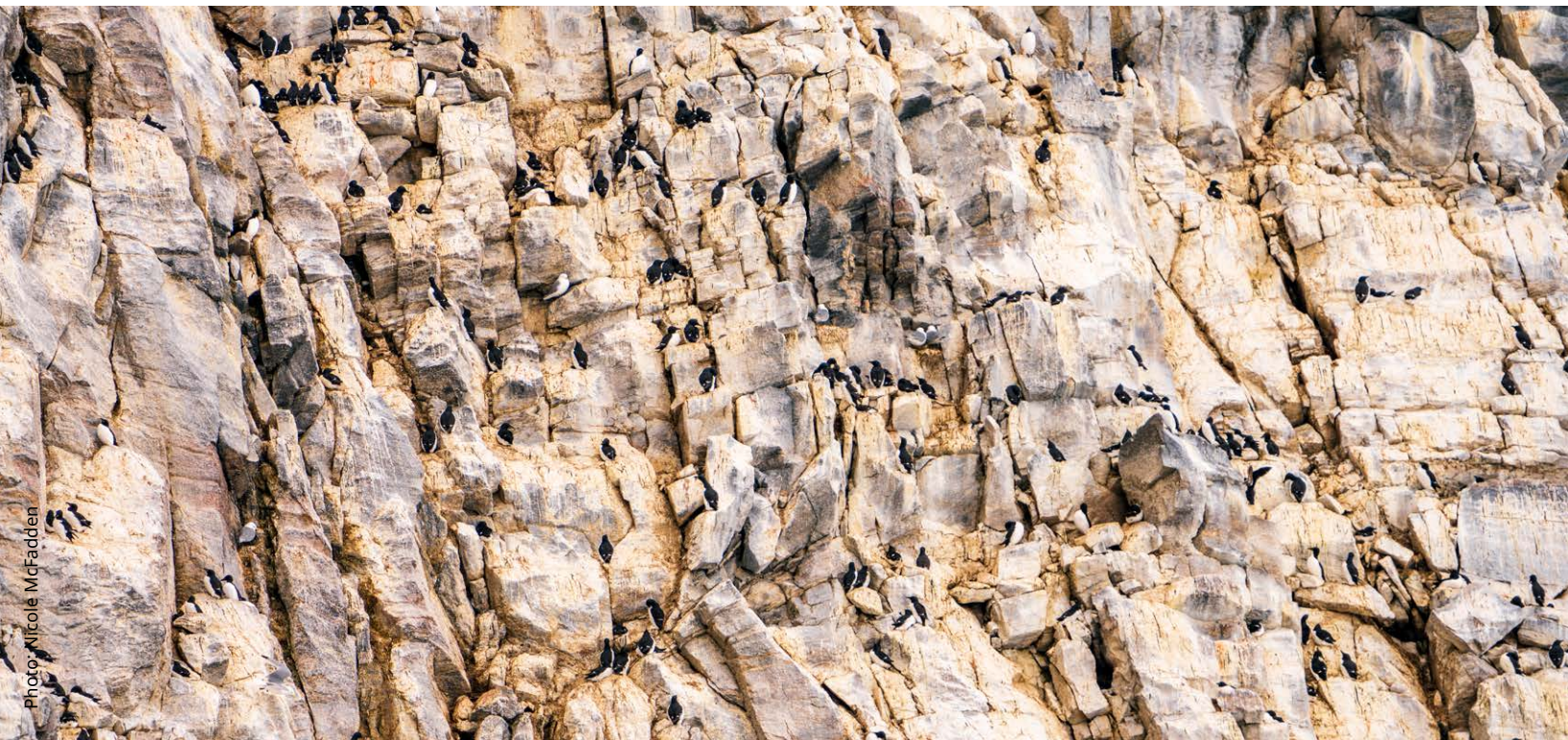
These seabird colonies have high conservation value and are moderately to highly risk-intolerant. Seabirds use these areas from their spring arrival in the Arctic (starting about April 15) until their departure at the end of summer (about October 1) for nesting, chick rearing and foraging. The high concentrations of seabirds at these discrete sites, combined with their high-energy demands and sensitivity to disturbance during this life cycle stage, means that conservation of these Arctic seabird colonies has significant implications for the long-term survival of several species. The main threats to these seabird colonies are increasing disturbances from marine ship traffic, including human disturbance related to cruise ship tourism, and

the risk of oil spills and operational releases originating from ships. A risk of bycatch from commercial fishing activities may become a future threat if fisheries expand in the Arctic and further into Tallurutiup Imanga NMCA.

To protect these seabird colonies, the nesting cliffs located within the NMCA boundary, where applicable, plus a 100-m buffer extending seaward from the cliff, for all colonies, are designated zone 1. Colonial seabirds exhibit strong nesting site fidelity, so zone 1 prohibitions are in place year-round to protect the nesting habitat for when the birds return.

iv. Ikpikittuarjuk/Moffet Inlet (D in figure 5.4): Ikpikittuarjuk/Moffet Inlet is valued by local communities, specifically Arctic Bay, for its abundance of bowhead whale, narwhal, walrus, and Arctic char. Local Inuit have observed a decline in char abundance in Ikpikittuarjuk/ Moffet Inlet. The area is zone 1 during the open water season (July 21 to November 15) to allow the population time to recover.

v. Tremblay Sound (K in figure 5.4): Eclipse Sound is used by narwhal during the open water season as a migration corridor between their summering and overwintering areas. Within the Eclipse Sound summer aggregation area, narwhal are concentrated within Milne Inlet and Tremblay Sound. These areas may provide refuge from killer whales which feed in Eclipse Sound. Tremblay Sound experiences little to no large vessel traffic and is an important harvesting area for Inuit. This is a contrast to Milne Inlet, where the Baffinland Iron Mine Corporation Mary River Port and associated vessel traffic is located. To maintain Tremblay Sound as a quiet refuge for narwhal, the area has been identified as zone 1 during the open water season (July 21 to November 15). Tremblay Sound has also been an important site for several narwhal research and monitoring studies. Research and monitoring activities consistent with the purpose and objectives of this zone and supporting the protection and conservation of the site will continue to be permitted when supported by the Aulattiqatigiit Board.





5.2.2 Zone 2: General Protection

Zone 2 protects special features, sensitive ecosystem elements and representative characteristics of the marine region while providing for compatible access and non-extractive uses. Extractive use is prohibited. Inuit rights, as set out in the *Nunavut Agreement*, and traditional use of the NMCA by Inuit are not subject to zone restrictions. Refer to Appendix A for details of allowable activities and applicable authorizations.

Zone Objectives:

- To protect representative characteristics of the marine region and contribute to maintaining biodiversity.
- To protect special features and/or sensitive ecosystem elements.
- To restore or recover depleted species or degraded habitats.
- To provide research opportunities.
- To provide opportunities for education and non-extractive recreation.
- To foster awareness, understanding and enjoyment of NMCAs.

There are currently no zone 2 General Protection areas in Tallurutiup Imanga NMCA. Through Article 16 of the IIBA for Tallurutiup Imanga NMCA, the Parties made a commitment to explore the potential for new sustainable fishing opportunities within and adjacent to Tallurutiup Imanga NMCA if compatible and consistent with management planning and the principles of conservation. Considering that there is little commercial fishing pressure in Tallurutiup Imanga NMCA at the present time, and that a prohibition on extractive uses through large zone 2 areas could negatively impact the outcome of Article 16 and potential economic opportunities stemming from sustainable fisheries, no zone 2 areas are designated in Tallurutiup Imanga NMCA.

While the Parties are implementing Article 16 commitments, an alternative approach has been taken with respect to zoning. Rather than implementing the concept of a large area with full protection as envisioned in zone 2, zone 3 has been

used to protect sensitive ecosystem elements and representative characteristics of Tallurutiup Imanga NMCA without unduly limiting potential fisheries opportunities. The use of zone 2 will be reconsidered in the next management plan when recommendations on where any future potential fishery activity may be compatible with the management objectives of the NMCA are available (IIBA s.16.4.2).

5.2.3 Zone 3: Habitat Protection

Zone 3 protects specific habitats while providing for compatible access and extractive uses. Some uses are prohibited to support specific habitat conservation objectives. Inuit rights, as set out in the Nunavut Agreement, and traditional use of the NMCA by Inuit are not subject to zone restrictions.

Zone Objectives:

- To protect, conserve or restore a specific habitat.
- To support a range of uses that do not conflict with the specific conservation objective(s) of the zone.
- To provide opportunities for research, education and appreciation of the habitat protected by the zone.

Zone 3 allows for a customizable approach to allowable uses and activities. Therefore, most of the activities and uses are identified as conditional ('C') in zone 3 in the national framework (Appendix A). The list of allowable activities was assessed during zoning development based on the habitat being protected. The list of compatible activities and uses for each zone 3 area is specific to Tallurutiup Imanga NMCA; details on the allowed and prohibited activities are identified in tables 5.1 and 5.2. The limits, permits, and exceptions outlined in Appendix A apply within zone 3. The specific prohibitions and restrictions are different between seasonal zoning plans to account for the environmental changes between the ice and open water season and corresponding wildlife migration patterns and their relationship to Inuit use of the NMCA (Figure 5.2).

1. ICE SEASON (NOVEMBER 16 TO JULY 20)

During the ice season zoning plan, the following areas have been identified as Zone 3 – Habitat Protection:

i. Key sea ice habitat (L and M in Figure 5.3): The key sea ice habitat areas described below have been identified as zone 3 to protect the structure and function of sea ice habitat important for several wildlife species (for example, seals, polar bears, Peary caribou) and the exercising of Inuit rights (such as travel, access, and harvesting). All shipping activity is prohibited in these zone 3 areas during the ice season (November 16 to July 20), subject to safe navigation, and except for:

- 1) activities and uses listed in section 5.1;
- 2) shipping activity in a project approved on or before the date the amendment to add Tallurutiup Imanga NMCA to Schedule I of the CNMCAA comes into force,

when conducted in accordance with the terms and conditions of the project certificate in effect at that date¹; and

- 3) valid conservation reasons that are assessed on a case-by-case basis (for example to free trapped whales).

The dates during which the prohibition on shipping activity is in effect may be varied to allow shipping before July 21 or after November 16 in all or part of these zones if the variation will not negatively impact:

- the structure and function of ice habitat and associated ecosystems;
- exercise of Inuit rights in the area;
- public safety; or
- recovery of species at risk².

The key sea ice areas included in the above are:

- a) **Peary caribou sea ice crossing critical habitat (L in figure 5.3):** Peary caribou are listed as threatened under the *Species at Risk Act*. The final Recovery Strategy* for Peary caribou included the identification of two sea ice crossings within Tallurutiup Imanga NMCA as critical habitat. The critical habitat in Tallurutiup Imanga NMCA is the only bridge connecting two local populations. Under the *Species At Risk Act*, it is illegal to destroy any part of the critical habitat; any activity that inhibits the safe movement of caribou between islands when needed is considered destruction of critical habitat. This includes activity that prevents ice from forming, that breaks up the critical sea ice habitat immediately prior to anticipated caribou crossings, or that leaves an open channel for a length of time that blocks caribou movement. This includes any shipping activity that breaks sea ice or prevents ice from forming.
- b) **Other key sea ice habitat (M in figure 5.3):** Admiralty Inlet, Navy Board Inlet, Eclipse Sound, and the fjords north of Clyde River have all been identified as key sea ice habitat. These areas are important wildlife habitat and valued by communities as on-ice travel routes and hunting grounds.
- **Admiralty Inlet:** Significant to Inuit especially for Arctic Bay residents who hunt narwhal, polar bear, seal, caribou, geese, and fish in the southern portions of the inlet.
 - **Navy Board Inlet:** Characterized by several short, protected bays and Sirmilik National Park on either side, this narrow inlet is lined with Inuit camps.
 - **Eclipse Sound and Milne Inlet:** Valued by communities as hunting grounds and characterized by temporal features such as the floe edge. The attraction and subsequent abundance of wildlife to the floe edge draws hunters, visitors, and tour operators alike. Ice and wildlife found here are susceptible to disturbances such as early ice breaking and disturbance through ship passage.
 - **Fjords north of Clyde River:** Valued by communities as important wildlife habitat and for hunting grounds.

1. Such as Baffinland Iron Mines Corporation Mary River Project certificate term and condition no. 185

2. Sea ice can promptly reform (within a few days) after disturbance under specific conditions (such as weather conditions, and timing and frequency of the disturbance) and as such, it may be possible to transit through sea ice within areas identified as critical habitat without destroying critical habitat, if the sea ice critical habitat is available to Peary caribou when needed.

* www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/recovery-strategies/peary-caribou-2022.html

Activities and Uses	ICE SEASON ZONE 3 AREAS			Specific prohibitions and restrictions
	Peary Caribou sea ice crossings (L)	Other key sea ice habitat (M)	Significant Benthic Areas (G)	
Indigenous traditional use	✓	✓	✓	None
Research, monitoring, and restoration	✓	✓	✓	None
Recreational activities (non-extractive)	✓	✓	✓	None
Commercial tourism (non-extractive)	✓	✓	✓	Key sea ice habitat (L and M) - Commercial tourism activities that include shipping activity (for example, cruise ships) are prohibited. - Ice-based commercial tourism activities must not disturb Peary caribou.
Coastal and in-water infrastructure	✓	✓	✓	Key sea ice habitat (L and M) - Infrastructure that significantly breaks ice or prevents/ temporarily prevents ice from forming may not be permitted. Significant Benthic Areas (G) - Bottom-contact infrastructure not permitted.
Commercial shipping	✗	✗	✓	Not applicable
Recreational fishing	✓	✓	✓	Significant Benthic Areas (G): Mobile bottom contact gear prohibited.
Commercial fisheries	✓	Recreational allowed	✓	Key sea ice habitat (L and M) - Commercial fishing activities that break ice or prevent/temporarily prevent ice from forming is prohibited. Significant Benthic Areas (G): - Mobile bottom contact gear prohibited.
Hunting, trapping, and gathering (non-rights based)	✓	✓	✓	None
Placement of artificial reefs for recreational purposes	✗	✗	✗	Not applicable
Bottom trawling	✗	✗	✗	Not applicable
Oil and gas and mineral exploration and exploitation	✗	✗	✗	Not applicable

Table 5.1 Allowable and prohibited activities and uses in ice season zone 3 areas. Applicable limits, permits and exceptions listed in Appendix A apply. Letters in column headings refer to Figure 5.3.

ii. Significant Benthic Areas (G in Figure 5.3): Seven 'Significant Benthic Areas' have been identified in Tallurutiup Imanga NMCA by Fisheries and Oceans Canada due to the presence of dense aggregations of sea pens, a type of colonial coral. Sea pen stands provide valuable structure and habitat diversity; alter flow regimes leading to nutrient retention and a more favourable environment for benthic invertebrates; and are often considered to be essential nursery habitat. Bottom contact fishing gear has been identified as a habitat threat as they can remove or damage sea pens and other species of corals and sponges. This is particularly true for organisms adapted to low natural disturbance levels, such as those found in the deep, cold waters of the Canadian Arctic. It may take some coral and sponge species decades or even centuries to fully recover from bottom trawling. Mobile bottom contact fishing gear is prohibited in these zone 3 areas to protect sea pen aggregations.

2. OPEN WATER SEASON (JULY 21 TO NOVEMBER 15)

During the open water season zoning plan, the following areas have been identified as Zone 3 Habitat Protection:

i. Walrus haul-out buffers (C in Figure 5.4): A further zone 3 buffer extending 4 km seaward from the outer edge of the zone 1 boundary is applied to walrus haul-outs to provide additional protection from disturbance during the open water season when walrus are congregating. Commercial shipping, and commercial and recreational fishing are prohibited. Recreational activities and commercial tourism are allowed in the zone 3 area, with the following restrictions based on vessel size (Figure 5.5):

- Vessels under 50 ft in length, such as kayaks and zodiacs, may navigate anywhere within the zone 3 area.
- Vessels 50 to 100 ft in length may enter the zone 3 area but must always remain at least 2 km from the haul-out (1 km from the outer edge of the zone 1 boundary).
- Vessels greater than 100 ft in length are prohibited from accessing or transiting through these zone 3 areas.

In addition, it is prohibited to pilot an aircraft at an altitude lower than 5 000 ft within walrus haul-out buffers, except as required for the safe operation of the aircraft, including take offs and landings.

Exceptions may apply for the following activities:

- Scientific research vessels or scientific research activities through the research permitting process.
- Commercial tourism operators with vessels > 100 ft seeking to enter the following areas on the southern coast of Devon Island, subject to permit conditions as stipulated in their business license. Commercial tourism operators seeking this exception must demonstrate community support for the exception.
 - o **Radstock Bay.** This exception will allow vessels to transit through the Zone 3 areas associated with the two walrus haul-outs at the entrance of Radstock Bay.

These transits must maintain the maximum possible distance from the Zone 1 areas associated with these two walrus haul-outs, subject to safe navigation.

- o **Graham Harbour, Parry Channel, and Blangley Bay.** This exception will allow vessels safe shelter in these bays. Vessel must shelter as far as possible from Zone 1 areas associated with walrus haul-outs in these bays.

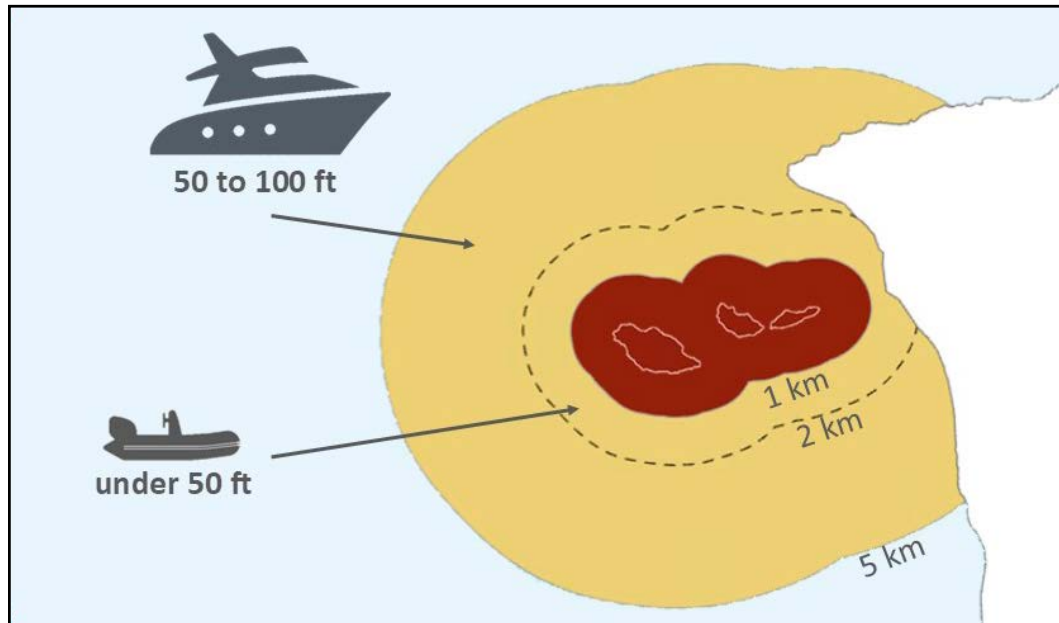


Figure 5.5 Approach distance restrictions based on vessel size for activities allowed in zone 3 walrus haul-out buffers. Dark red is zone 1, yellow is zone 3. There is no access to the zone 1 area, except with a research permit.

ii. Seabird colony buffers (F in Figure 5.4): A zone 3 buffer starting at the zone 1 boundary and extending 1.5 km seaward further protects seabird colonies during the open water season when birds are present. Commercial fishing, commercial shipping and transiting vessels are prohibited in zone 3 seabird colony buffer areas, other than as required for safety. Recreational activity, recreational fishing and commercial tourism vessels are allowed in the zone 3 area with the following restrictions based on vessel size (Figure 5.6):

- Vessels under 50 ft, such as kayaks and zodiacs, may navigate anywhere within the zone 3 area.
- Vessels 50 ft and greater in length may enter the zone 3 areas but must always remain at least 500 m from the colony.

A 500-m setback from the colony shall be observed by community resupply vessels when birds are present, except when adhering to it would prevent safe community resupply. In addition, it is prohibited to pilot an aircraft at an altitude lower than 1 100 m (3 500 ft) within the zone, except as required for the safe operation of the aircraft. Additional aerial, marine, and terrestrial migratory bird setbacks may apply for some authorized activities and uses.

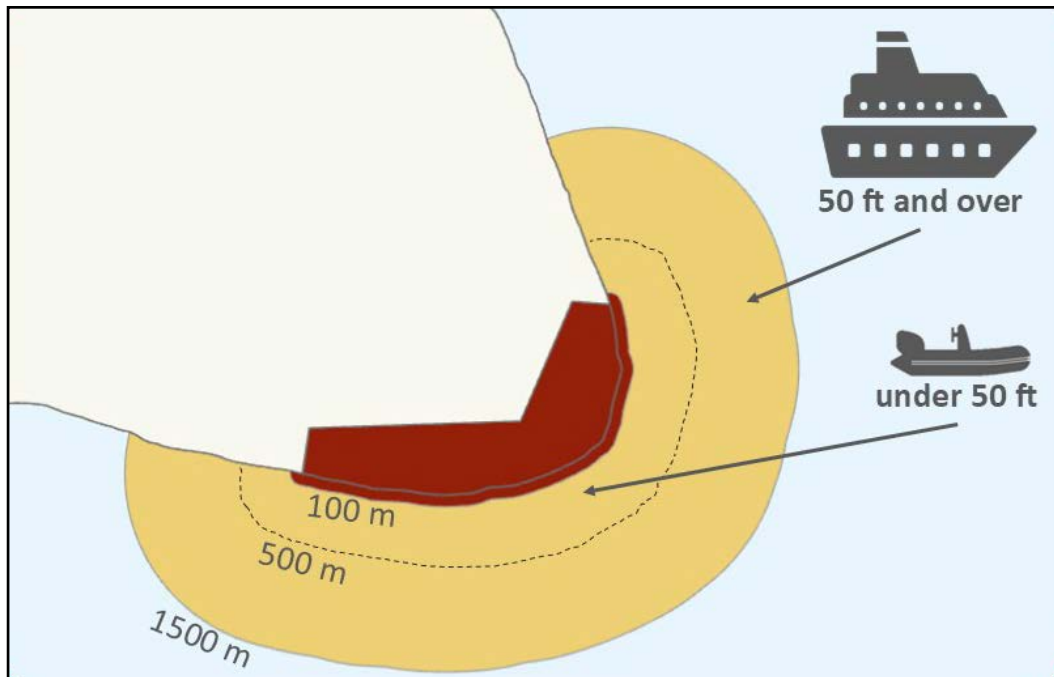


Figure 5.6 Approach distance restrictions for different vessel sizes for activities allowed in zone 3 seabird colony buffers. Dark red is zone 1, yellow is zone 3. There is no access to the zone 1 area, except with a research permit.

iii. Significant Benthic Areas (G in Figure 5.4): The seven ‘Significant Benthic Areas’ protected in the ice season are also protected in the open water season. Mobile bottom contact fishing gear is prohibited in these zone 3 areas to protect sea pen aggregations.

iv. Beluga summer aggregation areas (H1, H2, and H3 in Figure 5.4): Beluga whales from the Eastern High Arctic-Baffin Bay population spend the summer (approximately July to September) in the fiords and inlets around Somerset and Devon Islands before migrating to Sarvarjuaq (North Water Polynya) and west Greenland for the winter (approximately November to April). This beluga population has been assessed by the Committee On the Status of Endangered Wildlife In Canada as ‘Special Concern’ (November 2020). Belugas are sensitive to noise and disturbance and therefore can be negatively affected by some human activities (for example, icebreaking, boat and ship traffic, seismic surveys, low-flying aircraft). Noise propagates easily in shallow water estuaries. Four shallow estuaries known to be beluga summer aggregation areas have been identified in Tallurutiup Imanga NMCA and designated zone 3 to protect beluga habitat: Kippaarittuq/Cunningham Inlet, Garnier Bay, Maxwell Bay, and Allen Bay. These areas are important beluga molting and calving grounds that are revisited annually by large groups of belugas. In addition, a 1-km strip stretching along the entire northern coast of Somerset Island has been designated as zone 3 to protect aggregations of belugas. Activity restrictions in these areas are as follows:

- **Kippaarittuq/Cunningham Inlet and Garnier Bay (H3 in Figure 5.4):** To protect beluga in these small, shallow bays, no motorized access is permitted in these areas. Commercial shipping and commercial fishing are prohibited. It is prohibited to pilot an aircraft at an altitude lower than 2 000 ft except for safety reasons and for specified operational purposes such as take-offs and landings. The installation of coastal and in-water infrastructure is prohibited.
- **Maxwell Bay and Allen Bay (H1 in Figure 5.4):** In these larger bays, motorized access is allowed for commercial tourism and recreational activities. Commercial shipping and commercial fishing are prohibited. It is prohibited to pilot an aircraft at an altitude lower than 2 000 ft except for safety reasons and for specified operational purposes such as take offs and landings. The installation of coastal and in-water infrastructure is prohibited.
- **Northern coast of Somerset Island (H2 in Figure 5.4):** Motorized access is allowed for small vessels, so as not to impede terrestrial access along the coast. Commercial shipping and commercial fishing are prohibited. It is prohibited to pilot an aircraft at an altitude lower than 2 000 ft except for safety reasons and for specified operational purposes such as take-offs and landings. Small scale coastal and in-water infrastructure that would support access to terrestrial sites for commercial tourism or recreation activities may be permitted.



Photo: N. Boisvert



Photo: Diane Blanchard

v. Narwhal summer aggregation areas

(I1, I2, I3 in Figure 5.4): The narwhal that inhabit Tallurutiup Imanga NMCA are a part of the Baffin Bay population; the largest narwhal population in the world. Narwhals from the Baffin Bay population overwinter in Baffin Bay and Davis Strait before migrating to recurring summer aggregation areas in the fiords and inlets of northeastern Canada and northwest Greenland. For harvest management purposes, the Baffin Bay population is divided into four summering stocks (Admiralty Inlet, Eclipse Sound, Somerset Island, and East Baffin) and two tentative stocks (Jones Sound and Smith Sound) based on these recurring summer aggregation

areas. Although it was previously assumed that narwhal stayed in their summer aggregation area, more recent telemetry data suggests some mixing, especially between Eclipse Sound and Admiralty Inlet. Four summer aggregation areas fully or partially within the NMCA have been identified as zone 3:

- 1) Northern Eclipse Sound and Navy Board Inlet (I1) and Milne Inlet (I2);
- 2) the southern fiords of Eclipse Sound (I3);
- 3) Admiralty Inlet (I1); and
- 4) the portion of the East Baffin stock within Tallurutiup Imanga NMCA (fiords north of Clyde River (I1).

There is a voluntary maximum speed limit of 9 kn for all vessels of 300 GT or more in these zone 3 areas. Tremblay Sound, which is part of the Eclipse Sound summer aggregation area, has been identified as a zone 1 (see section 5.2 Zone 1). In addition, the southern fiords of Eclipse Sound (I3) and Milne Inlet (I2) have additional prohibitions to limit the level of disturbance, including a prohibition on cruise ship access in both and a prohibition on commercial shipping in the southern fiords.

vi. Underwater cultural resource area (J in Figure 5.4): There are cultural resources in the shallow waters in the waters surrounding Beechey Island. To protect known and potential cultural resources, diving and submersible use are prohibited, to prevent disturbance of the ocean floor or underwater artefacts.

Table 5.2 Allowable and prohibited activities and uses in open-water season zone 3 areas. Applicable limits, permits and exceptions listed in Appendix A apply. Letters in column headings refers to Figure 5.4.

Activities and Uses	OPEN-WATER SEASON ZONE 3 AREAS					
	Walrus haul-out buffer (C)	Seabird colony buffers (F)	Significant Benthic Areas (G)	Beluga summer aggregation areas (H1, H2, H3)	Narwhal summer aggregation areas (I1, I2, I3)	Underwater cultural resource area (J)
Indigenous traditional use	✓	✓	✓	✓	✓	✓
	Activity- and use- specific prohibitions and restrictions: None					
Research, monitoring, and restoration	✓	✓	✓	✓	✓	✓
	Activity- and use- specific prohibitions and restrictions: None					
Recreational activities (non-extractive)	✓	✓	✓	✓	✓	✓
	Activity- and use- specific prohibitions and restrictions: Walrus haul-out buffer (C) • Vessels greater than 100 ft in length are prohibited. • Vessels 50 to 100 ft in length must remain at least 1 km from the outer edge of the zone 1 area around the haul-out. • Vessels under 50 ft may navigate anywhere in the zone 3 area. • A minimum flying altitude of 5000 ft (1500 m) must be maintained, except for safety reasons and for specified operational purposes such as take offs and landings. Seabird colony buffers (F) • Transiting vessels are prohibited. • Authorized vessels 50 ft in length and greater must remain at least 500 m from the colony. • Authorized vessels under 50 ft may navigate anywhere in the zone 3 area. • A minimum flying altitude of 3500 ft (1100 m) must be maintained, except for safety reasons and for specified operational purposes such as take offs and landings. Beluga summer aggregation areas (H1, H2, H3): • A minimum flying altitude of 2000 ft (610 m) must be maintained in H1, H2, H3, except for safety reasons and for specified operational purposes such as take offs and landings. • Vessel access to H2 limited to small vessels. • No motorized vessel access in H3 (Kipparittuq/Cunningham Inlet and Garnier Bay). Narwhal summer aggregation areas (I1, I2, I3): • Voluntary speed limit of 9kn for all vessels of 300 GT or more. Underwater cultural resource area (J): • Diving and submersible use are prohibited.					

Activities and Uses	OPEN-WATER SEASON ZONE 3 AREAS					
	Walrus haul-out buffer (C)	Seabird colony buffers (F)	Significant Benthic Areas (G)	Beluga summer aggregation areas (H1, H2, H3)	Narwhal summer aggregation areas (I1, I2, I3)	Underwater cultural resource area (J)
Commercial tourism (non-extractive)	✓	✓	✓	✓	✓	✓
	Activity- and use- specific prohibitions and restrictions: Walrus haul-out buffer (C) • Vessels greater than 100 ft in length are prohibited. • Vessels 50 to 100 ft in length must remain at least one km from the outer edge of the zone 1 area around the haul-out. • Vessels under 50 ft may navigate anywhere in the zone 3 area. • A minimum flying altitude of 5000 ft (1500 m) must be maintained, except for safety reasons and for specified operational purposes such as take offs and landings. Seabird colony buffers (F) • Transiting vessels are prohibited. • Authorized vessels 50 ft in length and greater must remain at least 500 m from the colony. • Authorized vessels under 50 ft may navigate anywhere in the zone 3 area. • A minimum flying altitude of 3500 ft (1100 m) must be maintained, except for safety reasons and for specified operational purposes such as take offs and landings. Beluga summer aggregation areas (H1, H2, H3) • A minimum flying altitude of 2000 ft (610 m) must be maintained in H1, H2, H3, except for safety reasons and for specified operational purposes such as take offs and landings. • Vessel access to H2 limited to small vessels. • No motorized vessel access in H3 (Kipparittuq/Cunningham Inlet and Garnier Bay). Narwhal summer aggregation areas (I1, I2, I3): • Voluntary vessel speed limit of 9 kn for all vessels of 300 GT or more. • Cruise ships are prohibited in the southern fiords of Eclipse Sound (I3) and in Milne Inlet (I2). Underwater cultural resource area (J): • Diving and submersible use are prohibited.					
Coastal and in-water infrastructure	X	X	✓	✓	✓	✓
	Activity- and use- specific prohibitions and restrictions: Beluga summer aggregation areas (H1, H2, H3): • The installation of coastal and in-water infrastructure in areas H1 and H3 is prohibited; coastal and in-water infrastructure for the purpose of access to terrestrial sites for commercial tourism or recreational activities may be permitted in area H2. Significant Benthic Areas (G) • Bottom-contact infrastructure not permitted. Underwater cultural resource area (J): • Bottom-contact infrastructure not permitted.					

Activities and Uses	OPEN-WATER SEASON ZONE 3 AREAS					
	Walrus haul-out buffer (C)	Seabird colony buffers (F)	Significant Benthic Areas (G)	Beluga summer aggregation areas (H1, H2, H3)	Narwhal summer aggregation areas (I1, I2, I3)	Underwater cultural resource area (J)
Commercial shipping	X	X	✓	X	✓	✓
	Activity- and use- specific prohibitions and restrictions: Narwhal summer aggregation areas (I1, I2, I3): • Voluntary vessel speed limit of 9 kn for vessels of 300 GT or more. • Commercial shipping is prohibited in the southern fiords of Eclipse Sound (I3).					
Recreational fishing	X	✓	✓	✓	✓	✓
	Activity- and use- specific prohibitions and restrictions: Seabird colony buffers (F): • Transiting vessels prohibited. • Authorized vessels 50 ft in length and greater must remain at least 500 m from the colony. • Authorized vessels under 50 ft may navigate anywhere in the zone 3 area. Significant Benthic Areas (G): • Mobile bottom contact gear prohibited. Beluga summer aggregation areas (H1, H2 H3): • No motorized vessel access in area H3. • Vessel access to H2 limited to small vessels. Underwater coastal resource areas (J): • Mobile bottom contact gear prohibited					
Commercial fisheries	X	X	✓	X	✓	✓
	Activity- and use- specific prohibitions and restrictions: Significant Benthic Areas (G): • Mobile bottom contact gear prohibited. Narwhal summer aggregation areas (I1, I2, I3): • Voluntary vessel speed limit of 9 kn for vessels of 300 GT or more. Underwater coastal resource areas (G): • Mobile bottom contact gear prohibited.					
Hunting, trapping, and gathering (non-rights based)	X	X	✓	X	X	X
	Activity- and use- specific prohibitions and restrictions: None					
Placement of artificial reefs for recreational purposes	X	X	X	X	X	X
	Activity- and use- specific prohibitions and restrictions: Not applicable					
Bottom trawling	X	X	X	X	X	X
	Activity- and use- specific prohibitions and restrictions: Not applicable					
Oil and gas and mineral exploration and exploitation	X	X	X	X	X	X
	Activity- and use- specific prohibitions and restrictions: Not applicable					

5.2.4 Zone 4: Multiple Use

Zone 4 sustains the greatest range of uses that do not compromise ecological sustainability, cultural resources, or heritage values. Inuit rights, as set out in the Nunavut Agreement, and traditional use of the NMCA by Inuit are not subject to zone restrictions.

Zone Objectives:

- To foster a range of uses that do not compromise ecological sustainability, cultural resources, or heritage values.
- To provide research opportunities in areas with multiple uses.
- To provide opportunities for education and recreation.
- To foster awareness, understanding and enjoyment of NMCAs.

All other remaining areas within Tallurutiup Imanga NMCA are zoned as Zone 4 Multiple Use. The spatial extent of this zone is different in the ice and open water season zoning plans because of variations in the extent of zone 1 and 3 areas between the two plans. A broad range of ecologically sustainable activities and uses are allowed within this zone, including fishing, shipping, and commercial tourism, subject to applicable legislation, regulations, site-specific review processes, authorizations and permitting requirements. Activities and uses that enhance opportunities for local businesses and contribute to the well-being of Inuit and the associated communities are promoted in this zone. Limits, permits and exceptions outlined in Appendix A apply within zone 4.

5.3 Area of Special Importance

Several areas have been identified as being of special importance to communities predominantly for subsistence harvesting and camping (Area of Special Importance or ASI). These activities are part of Inuit cultural practices and maintaining cultural continuity. These activities are important for passing on knowledge and skills between generations through observation and practice and for making room for new approaches or practices to achieve the same ends. The disturbance of wildlife, of traditional camping areas, and of Inuit harvesting activities by recreational activities and commercial tourism during the open water season have been identified as concerns for these areas. The management of activities in these areas require more flexibility than is provided in the zoning plan to adapt to changing conditions and patterns of use. The designation of an ASI is a way to highlight that an area is of particular importance and requires a particular management focus to reduce disturbances to Inuit activities. **ASI designation complements zoning: any prohibitions and restrictions associated with the underlying zoning also applies in an ASI.**

Initial management strategies are identified in Table 5.3. This approach may be adjusted over time, with community consultation. Strategies could range from, for example, educating visitors on best practices to respect the reasons areas are important to the communities and avoid disruption of Inuit activities, to area

closures. The approach to managing individual areas can be changed as needed. For activities requiring permits, conditions specific to an area may be added to the permit.

- **ASI 1 (fjords north of Clyde River):** Historically, this area was used by Pond Inlet and Clyde River Inuit for hunting and fishing. Currently the area is predominantly used by Inuit from Clyde River. There are also important camping sites in this area.
- **ASI 2 (southern Admiralty Inlet):** This is an area of abundant wildlife. It is significant to Inuit, especially for Arctic Bay residents, who hunt narwhal, polar bear, seal, caribou, geese and fish in the southern portions of the inlet. This area is also a Zone 3.
- **ASI 3 (strip along eastern shore of Brodeur Peninsula):** Valued by Arctic Bay residents as an important area for wildlife and as a hunting ground with traditional camping areas. The shallow waters off Cape Crawford, at the northeastern tip of Brodeur Peninsula, are a walrus feeding area. This area is also a Zone 3.
- **ASI 4 (Victor Bay):** Important hunting and camping area for Inuit from Arctic Bay. Ice stays in Victor Bay longer than in Arctic Bay, providing longer access to the floe edge. Victor Bay may become more heavily used with changing ice conditions. This area is also a Zone 3.
- **ASI 5 (Milne Inlet):** Abundant wildlife; current and historical harvesting area for Pond Inlet residents. Koluktoo Bay is a calving area, animals used to be more abundant in Milne Inlet. There are concerns that high levels of commercial shipping, low flights and use of acoustic devices are disturbing wildlife in the area; recreational use and commercial tourism add to the effects on wildlife. This area is also a Zone 3.
- **ASI 6 (southeast and northeast coasts of Devon Island):** Important hunting grounds for polar bear, narwhal, and walrus. There are also archaeological sites here.
- **ASI 7 (southeast coast of Ellesmere Island):** Abundance of wildlife in this area (walrus, polar bears, seals, narwhal, beluga). Although there is some hunting in this area, poor travel conditions limit use by Inuit. Archaeological sites show evidence of Inuit occupation; Greenlanders used this area.
- **ASI 8 (western shore of Borden Peninsula):** This area is rich in cultural resources, including traditional Inuit campgrounds (sod houses, tent rings) and ancient burial sites, demonstrating its continued use by Inuit over centuries. It is still used by Inuit today for hunting and camping. The area is used by marine mammals (bowhead, narwhal, seals, orcas) and is a polar bear denning area. This area is also a Zone 3.
- **ASI 9 (Resolute area and along coast of Cornwallis Island):** This area is used by Inuit from Resolute for harvesting and camping. The area is characterized partially by kelp beds. This area is also a Zone 3.

- **ASI 10 (Radstock Bay):** An important hunting area, both historically and at present, with an abundance of seals, walrus, and narwhal. There are also important cultural areas located on land around the bay.
- **ASI 11 (Dundas Harbour):** There is abundant wildlife in this area, and it is an important hunting area for walrus and for access to muskox. There are important cultural sites located on the shores of Dundas Harbour and it is historically important for its history with relocation.
- **ASI 12 (Croker Bay):** There is an abundance of whales (narwhal and beluga) in this area. There are also cultural resources (for example, ancient burial sites) on the shores.

Management approach	1	2	3	4	5	6	7	8	9	10	11	12
Recreational activities will be managed to reduce impact on Inuit use of area and valued components of the area	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
All permits will require registration and orientation, and area specific conditions may be added as needed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Restrictions may be developed as needed for recreational and commercial tourism activities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recreational activities, commercial tourism operators and recreational fishers are encouraged to hire a local guide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Potential impacts of vessel traffic are of concern: support enhanced communications between communities and other users to respect communities' interests	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recreational fishing: catch and release discouraged									✓	✓	✓	✓
Preferred routing to community for cruise ships and commercial shipping is identified									✓			
Closure at start of open water season	✓											
No taking of glacier ice												✓

Table 5.3 Management approach for the Areas of Special Importance (ASI). Blank cells signify that the management approach does not apply for an area.



Photo: Diane Blanchard

6.0

Appendix

APPENDIX A – NMCA Zoning Framework

The NMCA zoning framework is comprised of four zones, each with a specific purpose, objectives and set of allowable activities and uses. Table A1 indicates the allowable activities and uses in each zone, and Table A2 lists the limits, permits, and exceptions to these activities and uses. Indigenous traditional use and rights-based activities consistent with section 35 of the *Constitution Act* continues in all zones.

Table A1. NMCA Allowable Uses and Activities³

✓ **Allowed.** Activity or use is generally consistent with the purpose and objectives of the zone and is allowed, subject to applicable legislation, regulations, site-specific review processes, authorizations and permitting requirements.

C Conditional. Activity or use is assessed at the site level during zoning development. Activity may be allowed (✓) if it aligns with the purpose and objective(s) of the zone. Section 5 describes what conditional activities (marked with **C** in the tables below) are allowed (✓) or not (X) in Tallurutiup Imanga NMCA zones.

X Not allowed. Activity is inconsistent with the purpose of the zone or the NMCA and is not allowed.

Activities and Uses	FULL PROTECTION ZONES		ECOLOGICALLY SUSTAINABLE USE ZONES		Limits/Permits/Exceptions
	Strict Protection	General Protection	Habitat Protection	Multiple Use	
	Zone 1	Zone 2	Zone 3 ⁴	Zone 4	
Indigenous traditional use	✓	✓	✓	✓	Traditional use of an NMCA by Indigenous peoples will not be subject to zoning restrictions except for conservation, public health or public safety reasons, determined in consultation with Indigenous rights holders.
Research, monitoring, and restoration	C	✓	✓	✓	A research and collection permit from Parks Canada, and other applicable permits, are required.
Recreational activities (non-extractive)	X	✓	✓	✓	Permits may be required.
Commercial tourism (non-extractive)	X	✓	C	✓	A business license is required.
Coastal and in-water infrastructure	X	C	C	✓	Authorization from Parks Canada is required.
Commercial shipping	X	✓	C	✓	Conducted in accordance with Transport Canada's legislative and regulatory framework and consistent with international maritime law. Anchoring may be restricted to ensure bottom protection.
Recreational fishing	X	X	C	✓	Conducted in accordance with Transport Canada's legislative and regulatory framework and consistent with international maritime law. Anchoring may be restricted to ensure bottom protection.
Commercial fisheries	X	X	C	✓	Conducted in accordance with the Fisheries Act and its regulations, provincial/territorial regulations (for example, stated limits and licensing requirements) and the Interdepartmental Principles for Fisheries Management in Federal Marine Protected Areas.
Hunting, trapping, and gathering (non-rights based)	X	X	C	✓	Conducted in accordance with applicable regulations, including stated limits and licensing requirements.
Placement of artificial reefs for recreational purposes	X	X	X	X	Not permitted in NMCAs.
Bottom trawling	X	X	C	✓	Bottom trawling is not permitted in all zones in the national NMCA zoning framework as per the Government of Canada marine protected areas protection standard. The bottom trawling protection standard currently does not apply within Tallurutiup Imanga NMCA.
Oil and gas and mineral exploration and exploitation	X	X	X	X	Prohibition under the <i>Canada National Marine Conservation Areas Act</i> .

3. Activities related to Canadian sovereignty or security, other activities that are consistent with the purposes of the CNMCAA (for example, public safety, environmental protection, law enforcement) and emergency activities are not restricted by NMCA zoning.

4. Zone 3 is a customizable zone. The list of allowable activities depends on what habitat is being protected. Therefore, most of the activities and uses are identified as conditional (C) in zone 3 in the national framework. Refer to tables 5.1 and 5.2 for list of allowable activities and uses within each zone 3 area in Tallurutiup Imanga NMCA.

APPENDIX B – Summary of Environmental Assessment

A strategic environmental assessment (SEA) was conducted on the Tallurutiup Imanga National Marine Conservation Area interim management plan. The purpose of the SEA is to incorporate environmental and socio-cultural considerations into the development of the interim management plan. Individual projects undertaken to implement management statement objectives at the site will be evaluated separately to determine if an impact assessment is required under the appropriate impact assessment regime.

The scope of this assessment includes the area within the boundary of Tallurutiup Imanga NMCA, and the period considered is five years from the date of the plan, at which time the interim plan will be replaced by the first management plan. The valued components considered include natural and cultural resources, visitor experience and the well-being of the associated communities.

The primary effects of this plan will be to increase protection in the marine area, and increase Inuit involvement, capacity, and benefit from the implementation of the NMCA objectives. Multiple customized processes, and guidelines will be developed in the next few years. All these tools will be developed collaboratively to inform decision-making and promote knowledge collection and sharing. The zoning in the interim management plan or new authorization of activities may be perceived as restrictive to some users, however, predictability in authorization processes or land or seabed use is beneficial for all users. This will protect and conserve the natural and cultural heritage of Tallurutiup Imanga and assure that sustainable use of marine and terrestrial resources in Tallurutiup Imanga NMCA respects Inuit rights, results in economic and social benefits for Inuit, and enhances the well-being of the associated communities.

There are positive environmental or sociocultural effects from providing a holistic vision and protection for Tallurutiup Imanga NMCA and no important negative environmental or sociocultural effects anticipated from the implementation of the interim management plan.



Photo: Hugues Michaud

APPENDIX C – Supporting Regulations

Adapted from NMCA Policy document.

This appendix outlines the major pieces of Government of Canada legislation, formal agreements, regulations, and other policy instruments that inform or guide general NMCA establishment and management, as well as documents that guide the establishment of Tallurutiup Imanga NMCA establishment and management more specifically.

Legislation and Regulations

Arctic Waters Pollution Prevention Act and associated regulations
Canada National Marine Conservation Areas Act and associated regulations
Canada Shipping Act, 2001 and associated regulations
Canadian Environmental Protection Act, 1999 and associated regulations
Canadian Navigable Waters Act and associated regulations
Coastal Fisheries Protection Act and associated regulations
Fisheries Act and associated regulations
Migratory Birds Convention Act, 1994 and associated regulations
Nunavut Planning and Project Assessment Act
Species at Risk Act and associated regulations
United Nations Declaration on the Rights of Indigenous Peoples Act
Wrecked, Abandoned or Hazardous Vessels Act

Among the regulations that deal with shipping in the Canadian Arctic, the following are of note for Tallurutiup Imanga NMCA:

- *Arctic Shipping Safety and Pollution Prevention Regulations*
- *NordREG (Arctic Canada Traffic Zone)*
- *Arctic Waters Pollution Prevention Regulations*
- *Navigation Safety Regulations*

Formal Agreements

Nunavut Land Claims Agreement (1993)
Tallurutiup Imanga National Marine Conservation Area Inuit Impact and Benefit Agreement (2019)
Inuit Impact and Benefit Agreement for National Wildlife Areas and Migratory Bird Sanctuaries in the Nunavut Settlement Area (2016)
Inuit Impact and Benefit Agreement for Auyuittuq, Quttinirpaaq and Sirmilik National Parks (1999)

Parks Canada Policy Instruments

Directive on the Management of National Marine Conservation Areas (2022)
Directive on Impact Assessment (2019)
Mapping Change: Fostering a Culture of Reconciliation within Parks Canada (2019)
Policy and Directive on Partnering, Sponsorship and other Forms of Collaboration (2019)
Policy on the Establishment and Management of National Marine Conservation Areas (2022)

Other Policy Instruments

Government of Canada marine protected areas protection standard (announced in 2019)
Interdepartmental Principles for Fisheries Management in Federal Marine Protected Areas (2019)
Principles Respecting the Government of Canada's Relationship with Indigenous Peoples (2018)
Canada's Arctic and Northern Policy Framework (2019)
Inuit Nunangat Policy (2022)

APPENDIX D – Zoning and Management Tools

A variety of management tools may be used in the management of Tallurutiup Imanga NMCA in addition to zoning. These tools include:

- Regulatory tools administered by other federal departments (for example, *Fisheries Act*, *Oceans Act*, *Canada Shipping Act (2001)* or *Arctic Waters Pollution Prevention Act*)
- NMCA regulations under the CNMCAA. General regulations are nationally consistent and enforceable tools that will apply to all NMCAs established under the *Act* from coast to coast to coast and including the Great Lakes. These regulations are anticipated to come into force during the life of this interim management plan.
- Permits and other authorizing instruments that give individuals, organizations, or businesses the authority to carry out an activity or use in an NMCA, subject to conditions.
- The designation of special management areas to allow for customized activity prohibitions or restrictions within a specific part of an NMCA to manage specific activities on a temporary, seasonal, or longer-term basis. Special management areas are identified and implemented with Indigenous governing bodies, relevant government departments and other partners in NMCA management.
- Temporary closures to restrict specific activities or access to certain areas on a case-by-case basis in response to an urgent issue (for example, temporary prohibition on access to an area due to a temporary public safety hazard).
- Voluntary measures (for example voluntary vessel speed reduction).
- The development and publication of best practices and guidelines (for example, Cruise Industry guidelines, mariner's guides) to guide user behaviour.
- Pro-active education, awareness, and communication with users.
- Notice to Mariners (NOTMAR): monthly and annual publications for mariners that provide important information for marine navigation in Canada, published by Canadian Coast Guard.
- NAVWARNs (Navigational Warnings) – information for mariners about changes to navigational aids and current marine activities or hazards, published by Canadian Coast Guard.
- Ship Safety Bulletins published by Transport Canada.
- Program development for users such as mariners, cruise ship operators, resupply companies, and private vessels.
- Other information products for mariners – for example Low Impact Shipping Corridor charts from the Canadian Hydrographic Services, electronic navigational charts, GPS shapefiles showing zoning.
- International Maritime Organization protocols and guidance for mariners.



Summary Statement

National Marine Conservation Areas are established and managed to protect and conserve representative marine areas for the benefit, education and enjoyment of the people of Canada and the world. They create enjoyable experiences for visitors, promote awareness and understanding among Canadians, and provide benefits for Indigenous peoples and coastal communities.

Tallurutiup Imanga National Marine Conservation Area (NMCA) Interim Management Plan (IMP) establishes the initial framework for the protection and management of one of the most ecologically and culturally significant marine regions in the Canadian Arctic. Located in Nunavut, Tallurutiup Imanga NMCA encompasses approximately 108,000 km² of marine waters stretching from Resolute in the west to Baffin Bay in the east and extending into Canada's Exclusive Economic Zone. The area plays a critical ecological role within the eastern Arctic marine ecosystem, and it has sustained Inuit for generations by providing access to wildlife resources, essential to food sovereignty and Inuit well-being. The interest in protecting international, national, and regional values of Tallurutiup Imanga by community members has been a recurring theme since the late 1970's, largely due to Inuit concerns over the prospect of future oil and gas development at that time.

This IMP provides strategic direction for the management of Tallurutiup Imanga NMCA while a ten-year management plan is developed within five years after the establishment of the NMCA. The interim plan outlines the vision, guiding principles, management objectives and associated targets and a zoning plan that will guide operations and consensus-based decision-making for Tallurutiup Imanga by the Inuit-Canada joint management board, the Aulattiqatigiit Board.

The plan was developed collaboratively by the Qikiqtani Inuit Association, the Government of Nunavut, and the Government of Canada (Parks Canada with support from Transport Canada and Fisheries and Oceans Canada). Extensive consultations were conducted from 2018 to 2025 with the five associated communities—Resolute, Grise Fiord, Arctic Bay, Pond Inlet, and Clyde River - as well as with stakeholders including industry representatives, environmental organizations, researchers, and the Canadian public.

Purpose and Scope

The IMP aims to protect Tallurutiup Imanga NMCA's ecosystems and cultural heritage while supporting sustainable use and respecting Inuit rights. It provides guidance for managing marine ecosystems, regulating activities, and supporting collaborative research, monitoring, and stewardship.

Key priorities include:

- Protecting marine biodiversity and critical habitats
- Supporting ecologically sustainable use of marine resources, in a manner consistent with the *Nunavut Agreement* and the *Canadian National Marine Conservation Areas Act*
- Protecting Inuit rights and harvesting practices
- Integrating Inuit knowledge in management decisions

- Supporting responsible economic activity and tourism while promoting community wellbeing
- Promoting collaborative research and monitoring

Ecological and Cultural Importance

Tallurutiup Imanga NMCA holds deep cultural and historical significance for Inuit communities. Inuit have relied on the region's marine resources for thousands of years. Today, communities adjacent to the NMCA continue to use the area for subsistence harvesting and travel. Access to wildlife resources within the NMCA remains essential to food security, cultural continuity, and community well-being.

Tallurutiup Imanga NMCA is widely recognized as one of the most biologically productive marine ecosystems in the Arctic and serves as an ecological driver for the eastern Canadian Arctic. The region supports a wide range of marine species and provides essential habitat for polar bears, walrus, seals, bowhead whales, beluga whales, narwhal, and migratory seabirds.

Governance and Co-Management

Management of Tallurutiup Imanga NMCA is based on a collaborative governance model established through the Inuit Impact and Benefit Agreement (IIBA) signed in 2019 between the Qikiqtani Inuit Association and the Government of Canada. The agreement ensures that Inuit rights, knowledge, and interests are central to the management of the NMCA.

A key component of the co-governance structure is the Aulattiqatigiit Board, a joint Inuit–Canada management board composed of equal representation from the Qikiqtani Inuit Association and the Government of Canada. The Board operates through consensus and is responsible for overseeing the planning, operation, and management of the NMCA.

Management also involves coordination with the Government of Nunavut and among several federal departments, including Parks Canada, Fisheries and Oceans Canada, the Canadian Coast Guard, Transport Canada, and Environment and Climate Change Canada, each of which retains responsibilities related to fisheries management, marine safety, environmental protection, and wildlife conservation.

Vision, Management Objectives and Zoning

The long-term vision for Tallurutiup Imanga NMCA is a thriving, globally significant ecosystem that sustains and empowers Inuit for generations to come and welcomes visitors to experience, appreciate, and respect its meaning to Inuit, Canada, and the Arctic region. Through collaborative governance, responsible stewardship, and ongoing research and monitoring, the NMCA will continue to support biodiversity, cultural heritage, and sustainable livelihoods for generations to come.

The IMP establishes four management objectives and associated targets to guide activities over the next five years. The objectives focus on the protection of Tallurutiup Imanga's natural and cultural environment; the sustainable use of natural resources while protecting Inuit rights and promoting community well-being; collaborative research and monitoring; and prevention, preparedness and response planning to increase public safety and the protection of the NMCA. In addition, a zoning framework is utilized as a spatial management tool that sets the management intent for different areas of the NMCA by dividing it into specific zones, each with a defined purpose and level of protection, objectives, and categories of allowable uses and activities.

As per the *Canada National Marine Conservation Areas Act*, the following activities are prohibited in all zones: use or disposition of public lands without authority; exploration and exploitation of non-renewable resources; and disposal of substances in waters except as authorized by a permit or as required for vessel safety and security.

Inuit rights, as set out in the *Nunavut Agreement*, and traditional use of the NMCA by Inuit are not subject to zone restrictions. The zoning regime for Tallurutiup Imanga NMCA recognizes and protects Inuit rights, particularly where use conflicts exist or are anticipated. In addition, the zoning regime does not restrict activities with respect to national security or sovereignty, safe navigation, defense, law enforcement, innocent passage and resupply of communities.

Guiding Principles

Management of Tallurutiup Imanga NMCA is guided by several key principles identified in the IMP:

- **Integration of Inuit Knowledge:** Inuit Qaujimajatuqangit (Inuit knowledge, values, and experience) informs research, monitoring, and management decisions.
- **Inuit Stewardship:** Inuit are part of the land and sea where healthy ecosystems sustain Inuit physical, mental and spiritual well-being and support cultural practices. Inuit are recognized as long-standing stewards of the region whose cultural practices support ecological sustainability.
- **Adaptive and Collaborative Management:** Management approaches will evolve in response to new scientific information, Inuit knowledge, and environmental change.
- **Precautionary and Ecosystem-Based Approaches:** Decision-making prioritizes ecosystem and human health and applies precaution where uncertainty exists.
- **Whole of Government Approach:** A coordinated approach involving federal and territorial departments to guide the management of Tallurutiup Imanga NMCA and support consistent decision-making, efficient resource use, and streamlined administration.
- **Alignment with Legal Frameworks:** Management is consistent with the Nunavut Agreement, the Canada National Marine Conservation Areas Act, and other applicable legislation.

Conclusion

The IMP for Tallurutiup Imanga NMCA is based on currently available Inuit Qaujimajatuqangit, western science, and discussions with local communities, stakeholders, Inuit organizations, and federal and territorial departments. The associated communities played an essential role in the development of the plan, by identifying their vision for the area, the values important to them and the potential threats to these values. The IMP also balances the protection of the environment and the respect of Inuit rights with the interests of stakeholders, where collaboration and adaptive management will be central to the ongoing management of Tallurutiup Imanga. The Aulattiqatigiit Board will work directly with the associated communities for the ongoing implementation the IMP, to ensure that their input inform the collaborative and adaptive management of Tallurutiup Imanga.

**What We Heard:
Tallurutiup Imanga
National Marine Conservation Area
Interim Management Plan**

Consultation Report

January 2026

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1.0 Introduction

This report provides a summary of consultation process conducted between May 2018 and November 2025 while developing the Interim Management Plan (IMP) for Tallurutiup Imanga National Marine Conservation Area (NMCA), located in Nunavut. The development of an IMP for Tallurutiup Imanga NMCA is required by the *Canada National Marine Conservation Areas Act* (the Act) to finalize the establishment of Tallurutiup Imanga as an NMCA through an Order in Council. It will remain in place until a full management plan for the NMCA is developed and tabled in parliament, within five years following establishment under the Act, as required per section 9(1).

This Interim Management Plan (IMP) was developed by a Planning Committee consisting of representatives from the Qikiqtani Inuit Association, the Government of Nunavut, and the Government of Canada (Parks Canada with Fisheries and Oceans Canada and Transport Canada playing a supporting role). To draft the IMP, extensive consultation with Inuit, partners, stakeholders, and the Canadian public was conducted by the Tallurutiup Imanga NMCA Planning Committee. Perspectives shared through the various meetings, workshops, open houses, and community events played an integral role in the development of the IMP and associated vision, management objectives, and interim zoning plan. The consultation process for the Interim Management Plan is complete. However, the Aulattiqatigiit Board, the Inuit-Canada management board for Tallurutiup Imanga, will continue to work closely with rights holders, stakeholder groups, partners, and the associated communities (see Table 1), on the implementation of the Interim Management Plan and the overall management of Tallurutiup Imanga NMCA.

2.0 Background

Located in Nunavut, the boundaries of Tallurutiup Imanga NMCA encompass the length of Lancaster Sound, stretching from Qausuittuq (Resolute) in the west to Baffin Bay in the east, beyond the territorial waters into Canada's Exclusive Economic Zone. At approximately 108,000 km², Tallurutiup Imanga NMCA represents nearly 2% of Canada's total marine area. This area is the ecological driver for much of the eastern Arctic and provides important habitat for nearly all Arctic marine species. Its waters are a migratory corridor for numerous species and essential habitat for polar bears, seals, walrus, bowhead and beluga whales, narwhal, and migratory birds. The area has sustained Inuit for generations and is an artery connecting communities and allowing travel throughout the High Arctic. Access to wildlife resources found in Tallurutiup Imanga NMCA is essential to Inuit food sovereignty and Inuit well-being and is critical for the region to retain a source of healthy country food.

As required by the *Nunavut Agreement*, an Inuit Impact and Benefit Agreement (IIBA) for Tallurutiup Imanga NMCA was signed in 2019 between the Qikiqtani Inuit Association (QIA) and the Government of Canada, as represented by Parks Canada, Fisheries and Oceans Canada, and Transport Canada. In addition to providing benefits to Inuit (e.g. QIA's Inuit Stewardship Program, Nauttiqsuqtiit), the IIBA establishes a consensus-based Canada-Inuit governance structure for Tallurutiup Imanga NMCA: the Aulattiqatigiit Board. This Board advises the Minister on any matters pertaining to NMCA management.

The Planning Committee conducted extensive consultations with the five communities associated with Tallurutiup Imanga NMCA identified in the IIBA, as seen in Table 1: Mittimatalik (Pond Inlet), Ikpiarjuk (Arctic Bay), Kangiqtugaapik (Clyde River), Qausuittuq (Resolute), and Aujuittuq (Grise Fiord) in 2018, 2019, 2024, and 2025.

Table 1: Communities associated with Tallurutiup Imanga NMCA

Qausuittuq Resolute	Aujuittuq Grise Fiord	Mittimatalik Pond Inlet	Ikpiarjuk Arctic Bay	Kangiqtugaapik Clyde River
<i>the place with no dawn</i>	<i>the place that never thaws</i>	<i>the place where the landing place is</i>	<i>the pocket</i>	<i>nice little inlet</i>
Located on Cornwallis Island. One of Canada's northernmost inhabited communities.	Located on Ellesmere Island, the northernmost inhabited community in Canada.	Located in northern Qikiqtaaluk, on the shores of Tasiujaq (Eclipse Sound).	Located in northern Qikiqtaaluk, on the shores of Admiralty Inlet.	Located in the Baffin Mountains along the northeastern coast of Baffin Island
Population (2021 Census)				
183	144	1,555	994	1,181
91.7% Inuit 67.7% Inuktitut-speaking	93.1% Inuit 85.7% Inuktitut-speaking	93.2% Inuit 92.9% Inuktitut-speaking	96.5% Inuit 97.5% Inuktitut-speaking	97.5% Inuit 97% Inuktitut-speaking
Average Age				
31.8 years	30.8 years	26.6 years	24.8 years	26.3 years

3.0 Consultation and Engagement Process

Consultation has been a core priority of the work to draft the Tallurutiup Imanga NMCA Interim Management Plan. Open and transparent consultations have facilitated awareness and understanding, fostering respect, and enhancing informed and balanced decision-making. Inclusive planning processes established important channels for ongoing dialogue, which in turn strengthened relationships between various levels of government, Inuit communities, partners, stakeholders, and the public. Legislative requirements for consultation are found in the Act (2002).

3.1 Phase I: Drafting the Interim Management Plan (2018- 2019)

3.1.1 Community Consultation

3.1.1.1 How We Consulted

Between May and July 2018, a series of community consultations were organized with the goal of gathering initial community input for the development of the IMP. In-person meetings were held in Mittimatalik (Pond Inlet), Ikpiarjuk (Arctic Bay), Kangiqtugaapik (Clyde River), Qausuittuq (Resolute), and Aujuittuq (Grise Fiord) with community representatives from Hamlet Councils, Hunters and Trappers Organizations, and the QIA established Community Lands and Resources Committees (CLARC). Meetings included

ample time for discussion and comments. Open houses were also held at public spaces in each of the communities. These meetings were flexible, informal sessions where community members could drop in, view a short presentation, ask questions, and meet with Planning Committee members. In total, the Tallurutiup Imanga NMCA Planning Committee met with 181 community members.

In April and May 2019, a second in-person consultation updated community members on the IMP process, confirmed what was heard in the initial round of consultations, and asked for feedback on the vision, the draft management objectives and interim zoning. Similar to the 2018 consultations, the Planning Committee visited Mittimatalik (Pond Inlet), Ikpiarjuk (Arctic Bay), Kangiqtugaapik (Clyde River), Qausuittuq (Resolute), and Aujuittuq (Grise Fiord) and met with community representatives from Hamlet Council, Hunters and Trappers Organizations, and CLARC. There were also in-person open houses held in each community. In total, the Tallurutiup Imanga NMCA Planning Committee met with 158 community members through this round of engagement.

A full list of community consultation details for engagements in 2018 and 2019 can be found in Appendix A.

3.1.1.2 What We Heard

Discussions throughout consultations in Phase I revealed a strong community desire to use Inuit Qaujimajatuqangit (traditional knowledge) in management and decision-making and that an increased understanding of Tallurutiup Imanga NMCA would be important to move forward and guide research priorities. Climate change was identified as a driver for information gathering and research. In addition, the following key issues were identified:

3.1.1.2.1 Wildlife and Ecosystems Protection/Conservation

Numerous discussions with Mittimatalik (Pond Inlet) community members highlighted the importance of Tremblay Sound, Koluktoo Bay, Navy Board Inlet, and Milne Inlet as having high conservation value for narwhal calving grounds, post-calving and harvesting areas, and a desire to restrict or reduce shipping in these areas. Communities expressed that they were seeing wildlife declines and varying population levels associated with human industrial activities and would like those impacts to be reduced. . There were also concerns related to the effects that climate change was having on habitat and wildlife populations over the decades.

Many comments were heard in support of actions to reduce impacts on mammal migration routes, to prevent chasing/harassment of wildlife and intrusion into breeding areas. Research studies were also identified as being intrusive to communities and impacting wildlife populations; communities felt that research study methods tended to scare away wildlife and that these activities would impact both wildlife and hunting activities.

There was a direct relationship seen between the protection of wildlife and protection of the Inuit way of life. Food security was recognized as an important issue for communities along with access to healthy country meat for consumption. Communities want to ensure that wildlife continue returning and do not get diverted beyond community hunting grounds, which they have come to rely on. Communities specifically wanted to see

better protection for walrus and other marine mammals, which they depend on for their livelihood.

There was a concern over the noise created by marine vessels and there is a perception that sonar devices in the ocean, as part of research studies, tend to scare off wildlife. It was felt that the noise resulted in reductions in population levels especially within seal populations. Many of the communities reported apparent declines in seal populations.

Marine mammals in the Qausuittuq (Resolute) area share migratory routes with Mittimatalik (Pond Inlet) and other communities. However, these wildlife routes also share the same pathway as shipping routes. These communities identified a need for more research monitoring related to wildlife populations in Tallurutiup Imanga NMCA calving areas, marine mammal migration, timing of migration, and associated changes over time. Community members warned against using historical data to describe current conditions since both physical and biological environments have changed.

Community members suggested using temporary/seasonal closures for portions of the year to protect important habitats or to protect wildlife at critical life stages. Critical areas were identified including polynyas where wildlife tended to congregate for feeding. Marine setbacks for ships from coastal migratory birds, including seabirds and sea ducks, were also recommended.

3.1.1.2.2 Management of Marine Shipping/Increased Vessel Traffic

Communities saw ship activities as a disturbance to the peaceful mind of the hunter and the natural activities of marine animals. Concern was expressed over the opening of Lancaster Sound to increased national and international shipping traffic and recommended improved monitoring, vessel speed restrictions, ice-breaking limitations, concentrated shipping routes, and other preventative measures. Communities were uncertain how to manage shipping traffic and wanted to ensure that a good plan is developed to address shipping-related concerns. There was also a desire by communities to be involved and aware of vessel and small craft movement within Tallurutiup Imanga NMCA and recommended improving communications and monitoring capabilities.

Communities expressed strong concern over potential spills, anchoring, ballast water release, and grey and black water dumping both inside and outside of NMCA boundary. There was strong concern with the proposed increase of the number of ships transiting between the Milne Port and Mittimatalik (Pond Inlet) and the disturbance of hunting areas due to the congregation of vessels waiting to dock at the Milne Inlet port. There was recognition that at that time many vessels were transporting iron ore through waters adjacent to their communities and there was worry over the potential increased number of vessels proposed in Phase 2 of the Baffinland project.

The communities saw a need for greater management of small boats (sailboats, yachts and zodiacs) and a desire to see ships using corridors to help reduce the negative impacts on marine mammals from vessel sounds. Other concerns included the production of wakes by large or fast-moving vessels that can be dangerous to hunters.

The community outlined concern that conditions and marine life in Oliver Sound and other areas, have changed due to shipping traffic. They had observed changes in

migration routes and habitat and indicated that fewer species were moving through their usual areas, and that overall, fewer species were observed while hunting. There was fear that this would also happen in Ikpiarjuk (Arctic Bay), especially with cod and marine mammals. Community participants suggested that camera-based monitoring should increase to monitor vessel traffic.

The Aujuittuq (Grise Fiord) community observed more whales in their area. It was perceived that whales were taking an alternate route through the Aujuittuq area due to ship traffic.

3.1.1.2.3 Ice Breaking/Sea Ice Protection

Mittimatalik (Pond Inlet) community members expressed that their area was suffering the most impacts from shipping activities and as a result were extremely concerned with ice breaking activities and associated impacts. Inuit use the ice from freeze-up to break-up for seasonal outings, on-ice transportation routes/travel between communities, hunting, etc. The community viewed ice breaking as interfering with ice-related activities (due to loss of ice) and decreased opportunities for and the length of time available to utilize the ice.

Navy Board Inlet was identified as an area where a seasonal zone restricting ice breakers is desired. Some suggested not allowing any ice breakers within the NMCA to protect and maintain floe edges.

Concern was expressed related to the continuity of the floe edge, which prevents marine mammals from going west. Ice blocks movement of marine mammals who therefore do not go west but stay on the eastern side of the floe. The community indicated that they would like to prevent ships from going through these iced areas as ice breaking could allow the animals to continue west rather than stay in the area. Communities suggested restricting ships from ice breaking in the area during May and June.

3.1.1.2.4 Management of Cruise Tourism

There was concern over increased tourism and zodiac traffic associated with the cruise ship industry. Communities felt that many cruise ships do not follow speed limits and often chase or harass wildlife and interfere with hunting activities.

Community members from Mittimatalik indicated that recently there had been a lot of cruise ship activity along the southern Eclipse Sound fjords. Members wanted to see cruise ships excluded from these areas throughout the summer months. Mittimatalik (Pond Inlet), Kangiqtugaapik (Clyde River), and Ikpiarjuk (Arctic Bay), communities were concerned about the increasing cruise tourism activities.

Community members indicated that they would prefer not to see tourists in the area at all during bird nesting season, however at the time, tourists and vessels were allowed to approach nesting birds (Murres). Cape Hay and Croker Bay were identified as areas where cruise ships visit, and as a result, community members are concerned about potential impacts.

It was emphasized that community members do not go to an area if it has been disturbed by a cruise ship passing by because they know that the whales would be gone as a result of the disturbance. At the time, the Mittimatalik (Pond Inlet) Hamlet was being pro-active by working with the Parks Canada regional office to raise concerns about

cruise ships. It was also felt that walrus haul-out sites have also been affected due to cruise ship activities.

3.1.1.2.5 Coordination of Emergency Response

Communities indicated that they were unsure of what to do if there was an incident with a ship, an oil spill or leak, or if a cargo ship became punctured. They identified a need for better spill response planning and training and community emergency management plans. An interest was expressed by communities to be involved in emergency responses near their communities, especially as they are often seen as first responders due to their proximity. They felt that better delineation of responsibilities could help with improved emergency response.

3.1.1.2.6 Improved Communications with Local Communities

Community members felt that they were not made aware of vessels coming into their areas, which was an ongoing concern. Improved communication between communities and users of the marine environment was recommended. Cruise ships and small vessels/sail boats often appear unannounced and usually provide no information prior to their arrival. Several communities indicated that they only find out about their presence when vessels are spotted or if they get into trouble and need assistance. This is thought to result from shifts in cruise ship itineraries, or inconsistent communication about these itineraries within communities.

Permitting was another concern raised. Communities indicated that they often do not know who has a permit and who is required to have a permit. Communities were keen to see organizations cooperate in this regard.

3.1.1.2.7 Enforcement/Pollution Control

Communities were concerned that regulations for the NMCA would not be enforceable and that infractions would go unnoticed (i.e. no consequences for people who do not follow regulations). For example, different regulations govern different parties transiting through and within Navy Board Inlet/Baffin Bay. Though Transport Canada regulations exist, the application of these rules varies by vessel groups (e.g., ships associated with industry/mining companies). Also, often research vessels were able to transit with no issues, while local search and rescue vessels were not allowed (or appear not to be allowed) in some areas. Community members were seeing activities that should not be occurring and felt that all vessel-types should be required to follow the rules without exemptions.

Communities were very concerned over enforcement on spills, ballast water, and dumping. They suggested introducing local community monitors and observation posts, which would be beneficial to enforcement goals.

Communities noted an increase in vessel traffic entering or transiting through Canadian waters. Foreign sailboats had been observed fishing (recreationally) in Ikpiarjuk (Arctic Bay) and in community fishing areas. These activities were a major concern for communities, particularly since it appeared to many that there was no regulation, enforcement, or permitting involved. Vessels were anchoring and were engaging in whatever activities they wanted with no consequences. As a result, the community recognized the need for monitoring and photo evidence of infractions or suspicious

activity. There was strong support to have more on-site community observers through improved stewardship programs and increased powers to enforce restricted activities.

3.1.2 Stakeholder Consultation

A record of meeting dates and consulted stakeholder groups was established in 2018 and maintained throughout Phase I, while developing the draft IMP.

3.1.2.1 How We Consulted

From 2018 to 2020, stakeholders in the cruise, shipping, mining, fishing and tourism industries along with Nunavut Institutions, were engaged through presentations, meetings, and workshops. NGOs, research groups and academia were also similarly engaged to obtain input for the development of the IMP.

Nineteen engagement workshops, presentations, and meetings were held during Phase I with 81 attending organizations. Fourteen email exchanges were sent and received, with 64 organizational contacts who expressed support and concern for the types of restrictions that were being considered for inclusion in the IMP. Overall 443+ individual engagements were tracked during Phase I stakeholder consultation.

An overview of the stakeholders engaged, and the consultations undertaken in Phase I can be found in Appendix B.

3.1.2.2 What We Heard

Industry stakeholders brought forth the following key themes and topics:

- Concern about permitting processes with added layers of regulation, increased timing for issuing permits, and increased administration, costs and complexity
- Wanting anchoring restrictions that allow for flexibility due to safety reasons
- Ensuring proper and adequate enforcement
- Looking for flexibility with travel due to changing weather and ice conditions, for safety reasons
- Vessel size restrictions for inlets
- Assurance that zoning will not be overly restrictive to fisheries and future fisheries operations
- Clarification of the role of the Government of Nunavut for economic decisions in the area

NGOs and academia brought forth the following key themes and topics:

- Avoiding shipping industry breaking sea ice and crossing community transportation routes
- Inclusion of buffers and restrictions around areas where walrus, caribou, seal, seabird and narwhal live, and in consideration of these locations across the seasons
- Respect for community right of way, hunting rights by restricting area entry, uses, and activities allowed
- Vessel speed restrictions
- Bottom trawling

3.1.3 Developing the First Draft of the Interim Management Plan (IMP)

Development of the IMP slowed between Phase I and Phase II due to restrictions imposed during the Covid-19 pandemic. During this period, QIA and the Government of Canada continued discussions about the intended use of the IMP, reaching a resolution in 2023 before preparing the first draft.

Feedback gathered from communities and stakeholders during Phase I consultations informed the Planning Committee's work in developing this initial draft. The draft IMP outlined a vision, management objectives and targets, and a proposed zoning framework.

3.2 Phase II: Reviewing the Interim Management Plan (2024-2025)

Phase II involved another round of consultations with the five associated communities, as well as additional validation meetings to ensure that community and partners' goals and objectives for the IMP were correctly reflected in the draft. Phase II also included stakeholder and public consultation.

3.2.1 Community Consultation

3.2.1.1 How We Consulted

In March 2024, the Tallurutiup Imanga NMCA Planning Committee returned to each of the five communities with a first draft of the IMP: Mittimatalik (Pond Inlet), Ikpiarjuk (Arctic Bay), Kangiqtugaapik (Clyde River), Qausuittuq (Resolute), and Aujuittuq (Grise Fiord).

In-person meetings with community representatives from Hamlet Council, Hunters and Trappers Organizations, Nauttiguqtiit (Inuit stewards) and Community Land and Resource Committees (CLARC) were undertaken in each community. These meetings were in-depth, 2-day sessions that covered the entire IMP with the majority of time allotted for discussion and comments. Participants were asked to identify what values they would like to see protected and what were the threats to these values. In-person open houses were held at public spaces in each of the communities. These meetings were flexible, informal sessions for community members to drop in, view a short presentation, ask questions, and meet with Planning Committee members regarding the IMP. A total of 103 people were engaged at these sessions. A number of additions and changes were made to the IMP following this round of consultations.

The revised IMP was then taken back to the five communities again in December 2024/January 2025. The purpose of these meetings was to validate that what was said in the March 2024 consultations had been properly understood and correctly addressed in the revised IMP. These in-person validation meetings were attended by community representatives from Hamlet Councils, Hunters and Trappers Organizations, and Nauttiguqtiit, for a total of 51 people. These community representatives asked questions and provided insights on the management of Tallurutiup Imanga NMCA. No further concerns were raised on the revised draft of the IMP.

A full list of consultation details from Phase II can be found in Appendix C.

3.2.1.2 What We Heard

Feedback and input gathered during the March 2024 consultations raised the following key points:

3.2.1.2.1 Changes to Vision and Management Targets

The Vision is an inspiring description of what Tallurutiup Imanga NMCA should be like in 15-20 years. The key feedback heard on the Vision was that Tallurutiup Imanga NMCA is a special place, where visitors can come but need to be respectful of the natural and cultural environments, and that mental health benefits from the NMCA should be mentioned.

Based on community feedback, changes were made to the Vision to better emphasize that visitation must be respectful, and that Inuit must help to shape and manage tourism activities. A statement was added to make it clear that the NMCA must support Inuit self-determination and enhanced wellbeing, which includes mental health along with economic, social, and cultural development.

Management targets are a list of specific actions that need to be accomplished over the first five years. They were designed to address community priorities. When asked if anything was missing from the targets, participants expressed that programs and infrastructure for hunters were needed, including visitor centre or a food processing centre. The IIBA for Tallurutiup Imanga and related infrastructure agreements already commit to establishing QIA's Nauttiqsuqtiit program and the construction of harbours and multi-use facilities. However, the Planning Committee added targets to the Interim Management Plan to support the implementation of these commitments. The communities also raised concerns about the enforcement of rules, especially on matters related to visitors and shipping, and the need for better coordination between the law enforcement agencies. Similarly, the Planning Committee added a target in the Interim Management Plan to address this issue.

3.2.1.2.2 Ice and Open Season Zoning Date Adjustments

There are differences in the environment, uses/activities, and wildlife migration between the time of the year when the area is mostly ice-covered and when open water dominates. A two-season zoning plan for each of the ice and open water seasons was presented at the community consultations in March 2024. Communities shared that it is getting harder to predict when freeze up and break up happens and there is a lot of variability from year to year. Most communities said freeze up and break up is happening a bit earlier than the proposed dates. Therefore, based on this community input, the dates for each zoning plan were adjusted to November 16 – July 20 for the ice zoning plan and July 21 – November 15 for the open water plan, with the Field Unit Superintendent having flexibility to change the dates if conditions warrant it and with the support from the communities.

3.2.1.2.3 Changes to Protection for Sea Ice

Icebreaking was listed in the draft as being prohibited during the ice season in certain areas, to protect species and critical ice habitat. Community consultations in March 2024 revealed that there was a need to extend the protection for sea ice further east off the entrance of Eclipse Sound to better protect the floe edge.

The draft IMP also had a list of exceptions for when travel through ice during the ice season could be allowed in certain circumstances in those areas. As a result of community input, an additional exception was added to the IMP to allow ice breaking for valid conservation reasons, such as freeing trapped whales.

3.2.1.2.4 Expanded Bird Colony Protection

In the draft IMP, bird colonies were given a strict year-round protection for nesting areas and additional habitat protection for foraging areas in the open water season. The Mittimatalik (Pond Inlet) community advised that the protection for bird colonies should be expanded along the coast of Buchan Gulf as there were additional bird nesting areas there. The IMP was revised to expand protection along the coast in the Buchan Gulf with a 100m strip of strict protection seaward of the cliffs, based on this community input.

We also heard that ballast water exchange should not be allowed in bird foraging areas, and that ships should be required to do ballast exchange before entering Nunavut. There was agreement with the proposed zoning, that there should be no sport hunting within 100 m of bird cliff at Cape Liddon.

3.2.1.2.5 Protection for Additional Walrus Haul-Out Areas

Within the draft IMP, there were habitat protection measures proposed for one walrus haul-out within the NMCA. Feedback was received that all additional walrus haul-out areas within the NMCA classified as 'confirmed' or 'uncertain' by DFO should be protected with the same measures to ensure that walrus are not disturbed. Hunters were concerned that there should be no access to haul-outs when hunting is in progress.

Based on community input, the IMP was revised to include protection for thirteen haul-outs including all known active haul-outs and three additional ones, as identified during the Qikiqtaaluk Wildlife Board consultations.

3.2.1.2.6 Increased Protection for Beluga Habitat

In the draft IMP, protection for beluga habitat including no commercial shipping, no installation of in-water infrastructure, no commercial fisheries, no non-rights-based hunting or trapping, was outlined for several areas in the NMCA. During consultations, communities told us that there was an additional beluga aggregation area along the northern coast of Somerset island. Further, participants recommended that there be no motorized access during the open water season to prevent disturbance of beluga in the shallow waters. Based on this community input, the IMP was revised to add a new 1 km buffer along the north Somerset coastline. An aircraft buffer was also put in place in these zones, to reduce noise disturbance.

3.2.1.2.7 Increased protection for Narwhal

Concerns were raised at the March 2024 consultation sessions about increasing protection for narwhal. Communities recommended the addition of speed restrictions to narwhal habitat areas.

Based on what was heard from communities, the IMP was revised to include increased protection for areas where narwhal gather in the open water season. A speed recommendation of 9 knots was added for all identified narwhal habitat areas. Cruise ships were prohibited in Milne Inlet. Cruise and commercial ships were prohibited south

of Eclipse Sound. Trembley Sound was designated as zone 1 with strict protection as a quiet refuge area for narwhal.

3.2.1.2.8 Addition of Areas of Special Importance (ASI)

During Phase I community meetings, specific areas were identified by communities for their importance to camp and hunt. During Phase II of consultations, the Planning Committee asked community members for more information about why the areas are important and what the threats to these areas were. All communities identified concerns about the disturbance of wildlife, traditional camping areas, cultural artefacts, and Inuit harvesting activities due to recreational activities and commercial tourism during the open water season.

Based on what was heard from communities about these important areas, the Planning Committee determined that these areas required a more tailored management approach and more flexibility than zoning could offer. As a result, the IMP was revised to designate these areas as 'Areas of Special Importance' (ASIs). ASIs were then added to the zoning maps to highlight their importance. The aim of these measures is to reduce impacts and to mitigate wildlife disturbances near areas of cultural significance, traditional campsites, and Inuit use of the area (e.g. harvesting, camping activities). The approach to managing ASIs will be ongoing and can be monitored and adapted with input from the individual communities.

In March 2024, communities recommended that Croker Bay and Dundas Harbour be strictly protected as zone 1, due to community concerns about damage to cultural areas on the shores of these bays, and general disturbance to wildlife. However, Parks Canada and the Aulattiqatigiit Board have no control over areas outside Tallurutiup Imanga NMCA jurisdiction and it would not be appropriate to use zoning to cut off access to land that is not under Parks Canada or QIA's administration. Therefore, it was determined that zoning was not an appropriate tool in these cases. This was explained to communities at the follow up validation meetings in December 2024 and January 2025 and there was understanding about why the request could not be addressed through zoning.

To address some concerns by communities, the IMP was revised to include Dundas Harbour as an ASI where visitors will require an orientation, be encouraged to hire a local guide, and discouraged from catch and release fishing. Ships will be encouraged not to travel into the area unless for safety reasons. Also, support will be provided for enhanced communication between communities and users so that the area will be used in a way that is respectful to the needs of the communities.

3.2.2 Stakeholder Consultation

3.2.2.1 How We Consulted

In Phase II, stakeholder consultation was open from May 22 until August 1, 2025. This included sector-specific meetings with stakeholder groups from mining, shipping, cruise ship, tourism, and fisheries industries. These industry groups were categorized as Teir 1 stakeholders. Prior to meetings, a draft copy of the IMP was distributed to 78 Teir 1 stakeholders across these industries.

During Tier 1 stakeholder meetings, a comprehensive presentation provided attendees with a walk-through of the draft IMP including an overview of Tallurutiup Imanga NMCA, key management goals/tools, and activities that are allowed/not allowed. The presentation also covered the work that took place to develop the draft IMP and an overview of the IMP contents (vision, objectives targets, and zoning). An explanation of inclusions and exclusions for Tallurutiup Imanga NMCA and the co-governance model was also provided. An overview of zoning was provided with some specific implications for each industry. There were 38 attendees to the draft IMP walk-through meetings.

Tier 2 stakeholder groups included non-government organizations (NGOs) and academia. They were sent an email with the draft IMP and asked to submit their feedback.

All stakeholders were encouraged to send feedback on all aspects of the draft IMP, for consideration by the Planning Committee.

At the request of the Association of Arctic Expedition Cruise Operators (AECO) and Baffinland Iron Mines Corporation, subsequent meetings were held to discuss their feedback and to ask questions of clarification regarding the draft IMP.

3.2.2.2 What We Heard

The Planning Committee heard back from 15 stakeholders in 8 industry sectors with feedback on the draft IMP. In total, 125 comments were submitted, that included the following key themes:

- Uncertainty about permitting
- Interest in being involved in other aspects of TI, especially research, search & rescue and ASI management
- Request to be consulted for future developments in TI
- Concerns about wildlife and habitat buffers
- Protection for marine mammals and limiting underwater noise
- Request for more bottom trawling restrictions
- Concerns about the level of restrictions on potential future industrial activities
- Comments about adaptive management approach
- Comments about conformity process (regulations, wastewater discharge, innocent passage)
- Request for more climate change planning

A full list of stakeholder consultation details for Phase II can be found in Appendix D.

3.2.3 Public Consultation

3.2.3.1 How We Consulted

The draft IMP was posted online for public consultation from June 23 to July 21, 2025. It was available at parks.canada.ca in English, French, and Inuktitut. The IMP website was visited 258 times and 173 of those views were considered, 'engaged' with a pageview lasting longer than 10 seconds. The Inuktitut version was visited 25 times.

The public was encouraged to review the draft IMP and send comments/feedback. It was posted on the Consulting with Canadians website and three Facebook and 'X' (formerly Twitter) posts were published during the consultation period via the

@ParksCanadaNunavut profile in both English and Inuktitut. These posts were also shared with @ParksCanada @QikiqtaniInuit @GovofNunavut profiles to extend coverage and reach. On the @ParksCanadaNunavut Facebook profile, the posts received 13,589 post views, 31 shares, and 43 link clicks through to the website.

3.2.3.2 What We Heard

One comment was received during public consultation that did not result in changes to the IMP.

“Please ban all sport and commercial hunting, trapping, and fishing and create this park as a safe place for animals.”

3.2.4 Recommended Final Changes to IMP

After consideration of all stakeholder and public comments, the Planning Committee recommended the following eight changes to the IMP:

- Added the terms “Commercial tourism” and “Recreational activities” to the Glossary of Terms
- Clarified role of the Aulattiqatigiit Board (AB) in the Introduction
- Clarified Guiding Principle #3 about adaptive management and how it will be done cooperatively
- Clarified the responsibilities of the Canadian Coast Guard in Table 2.1
- Changed the zoning of Significant Benthic Areas during the ice season, so they have the same protection as during the open water season
- Added an exception to the zoning of Walrus Haul-out buffers to allow cruise ships to enter Radstock Bay and 3 other small inlets on the southern coast of Devon Island, with community support
- Changed the flight altitude restriction over Beluga summer aggregation areas during the Open Water Season from 5,000 ft to 2,000 ft
- Made the 9-knot speed limit voluntary in Narwhal summer aggregation areas

3.2.5 Community Check-ins

Before changes were accepted by the Aulattiqatigiit Board to the draft IMP, the Planning Committee connected back with communities in Fall 2025 to validate that these changes were accepted by communities.

3.2.5.1 How We Consulted

Each of the five community’s Hamlet Councils and Hunter & Trapper Organizations (HTO) were sent a letter that provided an overview of the proposed changes. They were also offered an opportunity to meet and discuss the changes with the Planning Committee, ask questions, and clarify any of the edits.

Meetings were arranged with the Mittimatalik (Pond Inlet) Hamlet Council and HTO, the Qausuittuq (Resolute) Hamlet Council, and Kangiqtugaapik (Clyde River) HTO to discuss the recommended changes. The Planning Committee received confirmation from all five community Hamlet Councils that the changes were agreeable.

Confirmations were also received from four HTOs that the changes were agreeable. The Planning Committee made many attempts to engage the Qausuittuq (Resolute) HTO and was able to confirm they received our message and passed it on to their members.

4.0 Next Steps / Conclusion and Recommendations

The Aulattiqatigiit Board, the Inuit – Canada joint management board for Tallurutiup Imanga, is satisfied with the amount of consultation conducted and has agreed to the changes made to the IMP in response to feedback received. On December 3, 2025, the Aulattiqatigiit Board approved the final version of the IMP to be submitted to the Nunavut Wildlife Management Board (NWMB) and forwarded to the Minister. Internal approvals have also been obtained from the Qikiqtani Inuit Association, Parks Canada, Transport Canada, Fisheries and Oceans Canada, and the Government of Nunavut (including cabinet approval).

The IMP will be forwarded to the NWMB for their review and approval at their regular meeting scheduled for June 24, 2026. In accordance with the *Nunavut Agreement*, the decision made by the NWMB will be forwarded to the Minister responsible for Parks Canada. The IMP will then be signed by the President of QIA, the Ministers for Parks Canada, Transport Canada and Fisheries and Oceans Canada, and the Minister of Environment for the Government of Nunavut.

The IMP will guide the management of Tallurutiup Imanga NMCA while a comprehensive 10-year Management Plan is developed within five years of the establishment of Tallurutiup Imanga NMCA. It will also be part of the report submitted to Parliament to finalize the establishment of Tallurutiup Imanga NMCA under the *Canada National Marine Conservation Areas Act*, by adding the boundary of Tallurutiup Imanga NMCA to Schedule 1 of the Act. Throughout the implementation of the IMP, the Aulattiqatigiit Board will continue collaborating with communities, partners, and stakeholders.

5.0 Appendix

Appendix A – Who We Heard From: Phase I Community Consultations

Table 1. Community members consulted from May to July 2018

Location	Date	Group	Type of Consultation	Estimated Number of Individuals
Clyde River	2018-07-04	Community Land and Resource Committee (CLARC)	In-person	4
Clyde River	2018-07-04	Hamlet Council	In-person	13
Clyde River	2018-07-05	CLARC and Hunters and Trappers Organization, QIA community liaison officer	In-person	7 (11-4 from previous CLARC meeting)
Clyde River	2018-07-05	Open house*	In-person	41
Arctic Bay	2018-05-25	Hunters and Trappers Organization, QIA community liaison officer, Inuit knowledge working group, Sirmilik National Park Joint Inuit/Government Park Planning and Management Committee	In-person	9 (11-2 overlapping with the open house)
Arctic Bay	2018-05-25	Hamlet Council	In-person	6
Arctic Bay	2018-05-25	Open house*	In-person	33
Resolute	2018-06-05	Hamlet Council, Hunters and Trappers Organization	In-person	7 (12-5 overlapping with the open house)
Resolute	2018-06-05	Open house*	In-person	8
Pond Inlet	2018-05-23	Hunters and Trappers Organization, CLARC, QIA community liaison officer, Sirmilik National Park Joint Inuit/Government Park Planning and Management	In-person	11

		Committee		
Pond Inlet	2018-05-24	Asungasungaat Area Co-Management Committee	In-person	12
Pond Inlet	2018-05-24	Open house*	In-person	13
Grise Fiord	2018-06-06	Hamlet Council, Hunters and Trappers Organization, Nirjutiqarvik National Wildlife Area Co-Management Committee	In-person	5 (10-5 overlapping with open house)
Grise Fiord	2018-06-06	Open house*	In-person	12
TOTAL				181

**Indicates events that were open to the public.*

Table 2. Community members consulted in April to May 2019

Location	Date	Group	Type of Consultation	Estimated Number of Individuals
Clyde River	2019-04-15	Hamlet Council, Hunters and Trappers Organization, QIA community director	In-person	11 (13-2 overlapping with CLARC)
Clyde River	2019-04-16	CLARC, QIA community liaison officer	In-person	7
Clyde River	2019-04	Open house*	In-person	Unknown
Arctic Bay	2019-04-26	CLARC, Sirmilik National Park Joint Inuit/Government Park Planning and Management Committee, QIA community liaison officer, Nauttiqsuqtiit	In-person	19 (21-2 overlapping with Hamlet Council)
Arctic Bay	2019-04-25	Hamlet Council	In-person	15 (16-1 overlapping with Hunters and Trappers)

Arctic Bay	2019-04-25	Hunters and Trappers Organization	In-person	8
Arctic Bay	2019-04-26	Open house*	In-person	20
Resolute	2019-05-02	Hamlet Council, Hunters and Trappers Organization, Qausuittuq National Park Joint Inuit/Government Park Planning and Management Committee, QIA community liaison officer	In-person	11 (14-3 overlapping with the open house)
Resolute	2019-05-02	Open house*	In-person	17
Pond Inlet	2019-04-24	Hunters and Trappers Organization, Sirmilik National Park Joint Inuit/Government Park Planning and Management Committee, Inuit knowledge working group	In-person	8 (9-1 person overlapping with Hamlet Council)
Pond Inlet	2019-04-24	Hamlet Council	In-person	5
Pond Inlet	2019-04-24	Open house*	In-person	20-25
Grise Fiord	2019-04-30	Hamlet Council, Hunters and Trappers Organization, QIA community liaison officer	In-person	9
Grise Fiord	2019-04	Open house*	In-person	8
TOTAL				158

**Indicates events that were open to the public.*

Appendix B – Who We Heard From: Phase I Stakeholder Consultations

Table 2. Stakeholders who were engaged in Tallurutiup Imanga NMCA IMP development sessions from 2018-2023

Date	Engagement Type	Industry Sector	Attending Organizations	# of Attending Organizations (#Attendees/ Contacts)
2018-04-23	Meeting (In person) Iqaluit, NU	NGO	WWF	1 (3 attendees)
2018-05-28	Workshop (Virtual)	NGO	Nature Conservancy of Canada Canadian Wildlife Service	2 (5 attendees)
2018-07-13	Meeting (In person) Iqaluit, NU	Nunavut Institutions	Nunavut Impact Review Board	1 (2 attendees)
2018-08-30, 31	Workshop (In-person) Dalhousie University, Halifax, NS	Academia	Dalhousie University Researchers ENGOS Indigenous Organizations	(50+ attendees)
2019-09-04	Meeting (In person) Iqaluit, NU	Nunavut Institutions	Nunavut Wildlife Management Board Submission and Presentation	1
2018-09-04	Meeting (Virtual)	Cruise	Adventure Canada AECO (Denmark) One Ocean Expedition Travel Nunavut Crystal Cruises (west coast) Arctic Adventures	5 (9 attendees)
2018-09-05	Meeting (Virtual)	Mining	Baffinland	1 (3 attendees)
2018-09-12	Workshop (In person) Iqaluit, NU and Gatineau, QC	Shipping	Aporta (Dalhousie University) NEAS Petronav Desgagnes Shipping Federation of Canada Fednav Woodwards Martech Polar Tactical Marine Solutions Ltd.	9 (12 attendees)
2018-09-17	Meeting	Fisheries	Nunavut Fisheries Association	4

	(Virtual)		AFA Qikiqtaaluk Corporation Baffin Fisheries	(9 attendees)
2018-10-17	Presentation (In person) Iqaluit, NU	Tourism	Travel Nunavut Industry Association AGM: Travel and tourism operators	10 (40+ attendees)
2018-10-17	Presentation (In person) Iqaluit, NU	Tourism	Association of Arctic Expedition Cruise Operators (AECO) Forum at Travel Nunavut AGM: AECO Travel and tourism operators	10 (25+ attendees)
2018-10-18	Letter to Minister	Nunavut Institutions	Asungasungat Area Co-Management Committee (Bylot Island Migratory Bird Sanctuary)	1
2018-10-18	Letter to Minister	Nunavut Institutions	Nirjutiqarvik Area Co-Management Committee (Nirjutiqarvik National Wildlife Area/Coburg Island)	1
2018-10-30	Workshop (In person) Montreal, QC	Cruise and Shipping	Fednav Desgagnes Nunavut Eastern Arctic Shipping Inc. (NEAS) Shipping Federation of Canada Petro Nav Inc. Northwest Passage Marine (NWP) Hurtigruten Association of Arctic Expedition Cruise Operators (AECO) Baffinland Crystal Cruises Tactical Marine Solutions Ltd. Arctic Kingdom One Ocean Expeditions Adventure Canada Woodwards	16 (18 attendees)
2019-02-15	Letter to Minister	Nunavut Institutions	Sulukvaut Area Co-Management Committee (Prince Leopold Migratory Bird Sanctuary)	1
2019-03-07	Meeting (In person) Iqaluit, NU	Nunavut Institutions	Nunavut Wildlife Management Board Submission and Presentation	1
2019-04-14	Workshop (In person) Iqaluit, NU	Cruise	Quark Expeditions Adventure Canada Spirit of the Arctic Tourism Summit:	13 (20 attendees)

			One Ocean Expeditions Silversea Cruises Seabourn Holland America Abercrombie and Kent Eyos Expeditions Hurtigruten Lindblad Expeditions Association of Arctic Expedition Cruise Operators (AECO) Travel Nunavut Nunavut Development Corporation	
2019-04-16	Email (Incoming)	Nunavut Institutions	Qikiqutaaluk Wildlife Management Board Nunavut Inuit Wildlife Secretariat Grise Fiord, Arctic Bay, Pond Inlet, Clyde River, Resolute HTOs	6 (8 contacts)
2019-05-15, 16	Presentation (In person) Montreal, QC	Shipping	Canadian Marine Advisory Council (CMAC) Prairie and Northern Region: Shipping, resupply, navigational captains, operators, and Indigenous organizations	(80+ attendees)
2019-05-17	Meeting (Virtual)	Mining	Baffinland	1 (3 attendees)
2019-06-11	Email (Outgoing)	All	TriNav Mining North NWT & Nunavut Chamber of Mines Baffin Fisheries Arctic Fishery Alliance Eyos (cruise industry) Arctic Watch Arctic Kingdom (tourism) Arctic Bay Adventures Travel Nunavut Tides Canada Canadian Parks And Wilderness Society (CPAWS) Inuit Heritage Trust Nunavut Marine Council	14
2019-06-11	Letter (Outgoing)	Nunavut Institutions	Nunavut Wildlife Management Board	1
2019-06-18	Email (Incoming)	Fisheries	Nunavut Fisheries Association	1
2019-08-02	Email (Outgoing)	All	Travel Nunavut Industry Assoc. Arctic Bay Adventures Ltd.	33 (60+ contacts)

			Arctic Kingdom Arctic Watch/Weber Arctic Black Feather Polar Sea Adventures Quest Nature Tours Complete Expeditions EYOS – Yacht Expeditions Canada North Outfitting Association of Arctic Expedition Cruise Operators (AECO) One Ocean Expeditions Adventure Canada Oceans North Hurigruten Crystal Cruises Quark Expeditions Tactical Marine Solutions Ltd. Baffinland NWT-Nunavut Chamber of Mines Arctic Fishery Alliance Baffin Fisheries Coalition Nunavut Fisheries Association TriNav Fisheries FedNav Nunavut Eastern Arctic Shipping Inc. (NEAS) Desgagnes Transarctik, Inc Woodward Petro-Nav Inc. Northwest Passage Marine Students on Ice University of Ottawa Quluq School	
2019-12-04	Letter (Outgoing)	Nunavut Institutions	Nunavut Wildlife Management Board Submission	1
2020-03-11	Letter (Outgoing)	Nunavut Institutions	Nunavut Wildlife Management Board Submission	1
2020-03-18	Meeting (Virtual)	Mining	NWT and Nunavut Chamber of Mines Baffinland Agnico Eagle Mines Ltd.	3 (7 attendees)
2020-11-03	Presentation (Virtual)	Shipping	Canadian Marine Advisory Council (CMAC) Prairie and Northern Region: Shipping industry, resupply, navigational captains, operators, and Indigenous organizations	(80+ attendees)
2021-01-28 – 2021-04-26	Emails (Incoming)	NGO	Oceans North	1 (3 contacts)

2021-04-29	Email (Incoming)	Tourism	Weber Arctic	1
2022-01-19	Letter (Outgoing)	Nunavut Institution	Nunavut Tunngavik Incorporated	1
2022-03-22	Presentation (Virtual)	Fisheries	Eastern Arctic Groundfish Stakeholder Advisory Committee: Northern Coalition Oceans North Qikiqtaaluk Corp	3 (4 attendees)
2023-03-31	Letter (Incoming)	NGO	Oceans North (with Mittimatalik HTO)	1
	TOTAL			145 (443+ attendees)

Appendix C – Who We Heard From: Phase II Community Consultations and Validation

Table 1. Community members consulted in March 2024

Location	Date	Group	Type of Consultation	Estimated Number of Individuals
Clyde River	2024-03-18 2024-03-19	Hamlet Council, Hunters and Trappers Organization, Nauttiguqtiit	In-person	10
Clyde River	2024-03-18	Open House*	In-person	12
Arctic Bay	2024-03-27 2024-03-28	Hamlet Council, Hunters and Trappers Organization, Nauttiguqtiit	In-person	12 (14-2 people overlap with the open house)
Arctic Bay	2024-03-27	Open House*	In-person	20
Resolute	2024-03-30 2024-03-21	Hunters and Trappers Organization, Nauttiguqtiit, CLARC**	In-person	8
Resolute	2024-03-20	Open House*	In-person	7
Pond Inlet	2024-03-26	Hamlet Council, Hunters and Trappers Organization, Nauttiguqtiit	In-person	5 (7-2 people overlapping with the open house)
Pond Inlet	2024-03-26	Open House*	In-person	10
Grise Fiord	2024-03-22	Hamlet Council, Hunters and Trappers Organization	In-person	9 (10-1 person overlapping with the open house)
Grise Fiord	2024-03-22	Open House*	In-person	10
TOTAL				103

*Indicates events that were open to the public.

**The Resolute Hamlet Council was invited but did not attend the meeting.

Table 2. Community members consulted in validation meetings in November 2024, December 2024, and January 2025

Location	Date	Group	Type of Consultation	Estimated Number of Individuals
Clyde River	2024-11-26	Hamlet Council, Hunter and Trappers Organization	In-person	10
Arctic Bay	2024-12-02	Hunter and Trappers Organization, Nauttiguqtiit**	In-person	9
Resolute	2024-12-04	Hamlet Council, Hunter and Trappers Organization, Nauttiguqtiit	In-person	8
Pond Inlet	2025-01-13	Hamlet Council, Hunter and Trappers Organization, Nauttiguqtiit	In-person	14
Grise Fiord	2025-01-16	Hamlet Council, Hunter and Trappers Organization	In-person	10
TOTAL				51

***The Arctic Bay Hamlet Council was invited and had confirmed their presence but did not attend the meeting.*

Appendix D – Who We Heard From: Phase II Stakeholder Consultations

Table 1. Number of stakeholders who were sent draft IMP and whose feedback was requested

Industry Sector	Number of Stakeholder Organizations Contacted
Tier 1	
Mining	3
Fisheries	29
Cruise	4*
Tourism	19
Shipping	13
Tier 2	
Non-Government Organization (NGO)	9
Research/Academia	6
Nunavut Institutions	3
TOTAL	86

**Also distributed further to Association's membership*

Table 2. Number of tier 1 stakeholders who attended draft IMP virtual walk-through meetings

Date	Industry Sector	Attending Organizations	Number of Attending Organizations
2025-05-27	Mining	Baffinland Mining Association of Canada	2
2025-05-27	Fisheries	Arctic Fisheries Alliance Northern Coalition Nunavut Fisheries Association	3

2025-06-03	Cruise	Adventure Canada Association of Arctic Expedition Operators (AECO) Aurora Expéditions EYOS Expéditions FK Warren Ltd. Hapag-Lloyd Cruises Holland America Hurtigruten HX (Hurtigruten) Cruise Expeditions Mystic Cruises Ponant Expedition Group Quark Expéditions Royal Caribbean Group Seabourn Secret Atlas Viking Cruises	16
2025-06-04	Tourism	Weber Arctic	1
2025-06-04	Shipping	Fed Nav Petro Nav – Desgagnes	2
TOTAL			38

Table 3. Summary of responses received during Phase II stakeholder and public consultation, May 22 to August 1, 2025.

Industry Sector	Stakeholder	Number of Comments
Tier 1		
Mining	Baffinland	31
	Mining Association of Canada	7
	NWT & Nunavut Chamber of Mines	9
Fishing	Makivvik Corporation	1
Cruise	Association of Arctic Expedition Operators (AECO)	11
Tourism	Black Feather	1
	Travel Nunavut	8

	Weber Arctic	4
Shipping	FedNav	1
Tier 2		
NGO	Canadian Parks and Wilderness Society (CPAWS)	10
	Oceans North	20
	SeaBlue Canada	4
	WWF Canada	14
Academia	Amundsen Science	1
	Researcher, Carleton University	3
TOTAL		125

Summary Statement

This report summarizes the consultation process undertaken between May 2018 and November 2025 to inform the development of the Interim Management Plan (IMP) for Tallurutiup Imanga National Marine Conservation Area (NMCA), in Nunavut. The IMP is a legislative requirement under the *Canada National Marine Conservation Areas Act* and is a key step toward formal establishment of the NMCA. It will guide management for up to five years until a full management plan is developed and tabled in Parliament.

Tallurutiup Imanga NMCA spans approximately 108,000 km² across Lancaster Sound and surrounding waters, representing nearly 2% of Canada's marine area. It is ecologically significant, supporting diverse Arctic marine species and serving as a critical migratory corridor. The area is also central to Inuit culture, subsistence, and food security, providing essential access to country food and sustaining traditional ways of life.

The IMP was developed collaboratively by a Planning Committee composed of the Qikiqtani Inuit Association (QIA), the Government of Nunavut, and the Government of Canada, with support from federal departments. Governance of the NMCA is guided by the Inuit Impact and Benefit Agreement (IIBA), signed in 2019, which established a co-management framework through the Aulattiqatigiit Board.

Consultation Approach

The consultation process was conducted in two phases:

- **Phase I (2018–2019):** Focused on gathering initial input to inform the draft IMP.
- **Phase II (2024–2025):** Focused on reviewing, refining, and validating the draft plan.

Engagement included extensive consultations with five Inuit communities (Pond Inlet, Arctic Bay, Clyde River, Resolute, and Grise Fiord), as well as stakeholders from industry, NGOs, academia, and the general public. Methods included in-person meetings, workshops, open houses, online engagement, and written submissions.

Across both phases, hundreds of participants contributed input, ensuring the IMP reflects a broad range of perspectives.

What We Heard - Key Themes from Consultations

1. Protection of Wildlife and Ecosystems

Communities emphasized the importance of safeguarding marine ecosystems and species such as narwhal, beluga, seals, walrus, and seabirds. Concerns were raised about declining wildlife populations, habitat disruption, and the cumulative impacts of industrial activity and climate change. The communities requested conservation measures

such as seasonal closures, habitat buffers, and protection of critical areas (e.g., calving grounds and polynyas).

2. Management of Marine Shipping and Vessel Traffic

Increased shipping activity was identified as a major concern due to noise, pollution risks, and interference with wildlife and hunting practices. Communities called for stricter controls, including vessel speed limits, designated shipping areas, improved monitoring, and enhanced communication about vessel movements.

3. Sea Ice Protection and Icebreaking

Sea ice is essential for travel, hunting, and ecological balance. Participants expressed concern about icebreaking activities disrupting traditional use and wildlife patterns. Recommendations included restricting icebreaking in sensitive areas and seasons to preserve floe edges and migration dynamics.

4. Tourism Impacts

Growing cruise tourism raised concerns about wildlife disturbance, particularly during sensitive periods such as bird nesting. Communities supported stricter management of tourism activities, including limiting access to certain areas and seasons and ensuring respectful visitor behaviour.

5. Emergency Preparedness and Response

Communities highlighted gaps in preparedness for marine incidents, such as oil spills. There was a strong desire for improved emergency response planning, training, and clear roles for local involvement.

6. Communication and Enforcement

A lack of timely information about vessel activity and uncertainty around permitting were recurring issues. Participants emphasized the need for stronger enforcement mechanisms, consistent regulations across vessel types, and greater community involvement in monitoring and stewardship.

7. Integration of Inuit Knowledge and Governance

The incorporation of Inuit Qaujimajatuqangit and local knowledge was identified as essential to effective management. Communities stressed the importance of Inuit leadership, co-management, and alignment with cultural values and practices.

IMP Review and Validation - Key Changes to the Interim Management Plan

Feedback from Phase II consultations led to several important revisions to the IMP, that were validated by the associated communities:

- Enhanced vision to emphasize respect for Inuit culture, support for self-determination, and recognition of mental health and well-being.

- Adjusted seasonal zoning dates to reflect changing ice conditions.
- Expanded protections for sea ice, bird colonies, walrus haul-outs, and beluga and narwhal habitats.
- Introduction of Areas of Special Importance (ASIs) to protect culturally and ecologically significant sites with flexible management approaches.
- Strengthened management targets related to enforcement, infrastructure, and community programs.
- Refinements to zoning, including speed recommendations, access restrictions, and activity prohibitions in sensitive areas.

Additional updates clarified governance roles, improved definitions, and adjusted certain operational measures (e.g., flight altitude restrictions, voluntary vessel speed limits).

Conclusion

The consultation process integrated diverse perspectives and strengthened relationships among Inuit communities, governments, stakeholders, and the public. The resulting IMP reflects a balance between conservation objectives, Inuit rights and priorities, and sustainable use.

The Aulattiqatigiit Board will continue to guide management, working collaboratively with partners and communities to ensure adaptive, responsive, and culturally appropriate stewardship of Tallurutiup Imanga NMCA.

The IMP establishes a strong foundation for long-term conservation and co-management, ensuring that this ecologically and culturally vital region is protected for future generations while supporting Inuit livelihoods and well-being.

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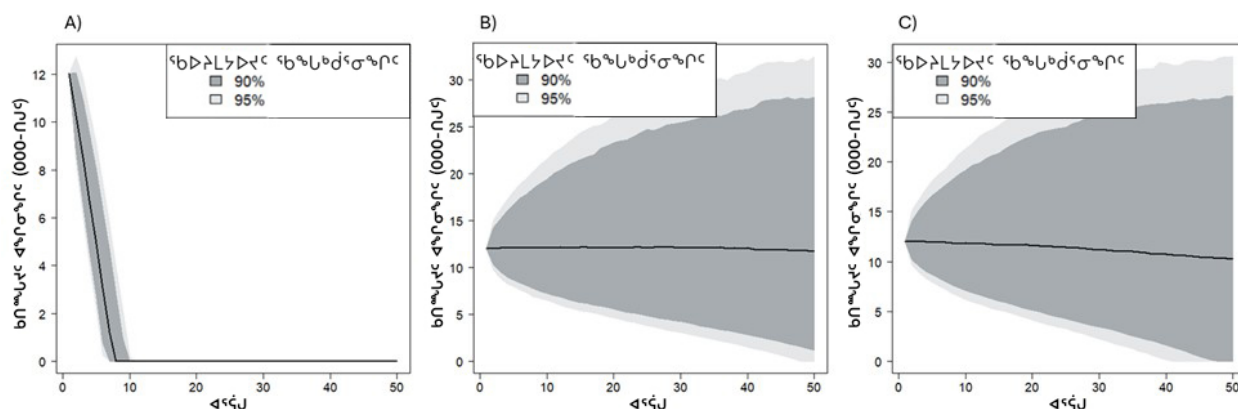
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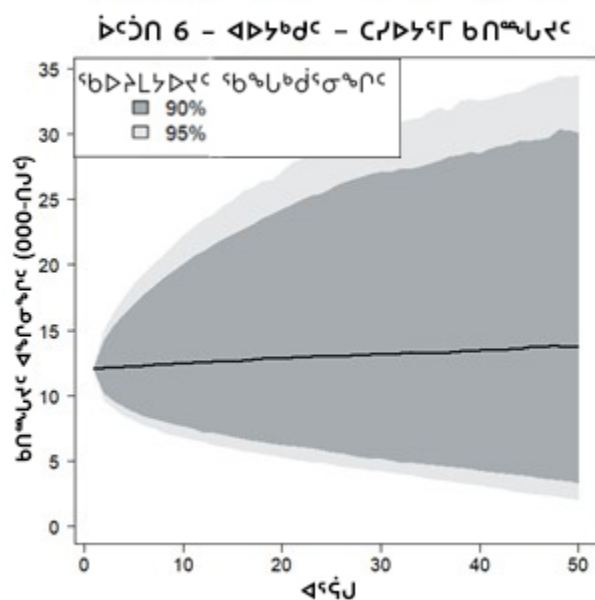
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ክፍል/ዓይነት	የጥያቄው ቁጥር	የጥያቄው ቀን (ሰኞ/ሐሙስ/ዓርቢ)	የጥያቄው ዓመት (በዓ.ም)	# የጥያቄው ቀን (በዓ.ም 24-ኛው ቀን)
AI	16	2004-08-15*	140	10*
AI	17	2004-08-13	280	12
AI	18	2004-08-24*	161	1*±
AI	19	2004-08-22	128	3
AI	20	2004-08-22	169	3
AI	21	2004-09-07*	23	NA*±
AI	22	2004-09-07*	21	NA*±
AI	23	2004-09-10*	12	NA*±
AI	24	2005-08-17*	148	8*
AI	25	2005-08-17*	175	8*
AI	26	2005-08-18*	132	7*
AI	27	2005-08-18*	220	7*
AI	28	2005-08-19*	133	6*
AI	29	2005-08-20*	15	5*
AI	30	2005-08-21*	64	4*
AI	31	2005-08-22*	117	3*
AI	32	2005-08-22*	24	3*
AI	33	2005-08-22*	9	3*
AI	34	2005-08-22*	95	3*
AI	35	2005-08-22*	163	3*
AI	36	2005-08-23*	151	2*
AI	37	2005-09-02*	18	NA*±
AI	38	2009-08-15	193	10
AI	39	2009-08-15	260	10
AI	40	2009-08-17	291	8
AI	41	2009-08-17	299	8
AI	42	2009-08-18	145	7
AI	43	2009-08-17	320	8
AI	44	2009-08-16	176	9
AI	45	2009-08-17	723	8
ES	1	1997-08-22*	16	4*
ES	2	1997-08-08	30	17
ES	3	1998-08-19	46	6
ES	4	1997-08-21	14	4
ES	5	1997-08-24	76	1
ES	6	1998-08-14	7	11
ES	7	1998-08-21	165	4

የጥያቄው ቁጥር	የጥያቄው ዓላማ	የጥያቄው ቀን (ሰኞ/ሐሙስ/ረቡዕ)	የጥያቄው ዓመት (በዓ.ም)	# የጥያቄው ዓመት (በዓ.ም 24-ኛው ዓመት)
ES	8	1998-08-25	71	0
ES	9	1998-08-25	40	0
ES	10	1999-08-12	80	13
ES	11	1999-08-13	69	12
ES	12	1999-08-15	80	10
ES	13	1999-08-15	84	10
ES	14	1999-08-21	45	4
ES	15	1999-08-21	211	4
ES	16	1999-08-21	5	4
ES	17	2010-08-21	252	4
ES	18	2010-08-21	292	4
ES	19	2010-08-22	410	3
ES	20	2010-08-22	189	3
ES	21	2010-08-24	151	1
ES	22	2011-08-16	128	9
ES	23	2011-08-16	180	9
ES	24	2011-08-16	314	9
ES	25	2011-08-19	126	6
ES	26	2011-08-19	302	6
ES	27	2011-08-18	201	7
ES	28	2011-08-18	221	7
ES	29	2012-08-13	30	12
ES	30	2012-08-14	128	11
ES	31	2012-08-17	128	8
ES	32	2012-08-18	124	7
ES	33	2012-08-19	119	6
ES	34	2016-08-22	81	3
ES	35	2016-08-18	3	7
ES	36	2016-08-22	86	3
ES	37	2016-08-29	9	NA [±]
ES	38	2016-08-29	20	NA [±]
ES	39	2017-07-31	126	25
ES	40	2017-08-01	57	24
ES	41	2017-07-31	78	25
ES	42	2017-08-03	84	22
ES	43	2017-08-03	84	22
ES	44	2017-08-03	218	22



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$\dot{C}^a{}_a \triangleright \sigma^b \dot{b}^c \gamma_L \gamma^b \triangleright^c b \dot{c} \dot{L} \dot{c} \triangleleft n \triangleright \gamma_L \dot{c} \dot{L}^c \triangleright d \dot{a} \sigma$ $\Lambda \delta^b \gamma \triangleright n^c n \gamma^c \dot{L} \triangleleft \dot{L}^b \dot{d}^c \wedge \gamma^a \dot{a} \triangleright n \dot{c} - b \dot{a} \dot{c}$


$$\Delta_m^b \cap \mathcal{D}^c \triangleleft \mathcal{D} \Delta_m^a \triangleright^a \Gamma \mathcal{V}^c.$$
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Also Available in English:

DFO. 2026. Considerations for a New Narwhal Management System: Sustainability of Narwhal Around Northern and Eastern Baffin Island. DFO Can. Sci. Advis. Sec. Sci. Resp. 2026/002.

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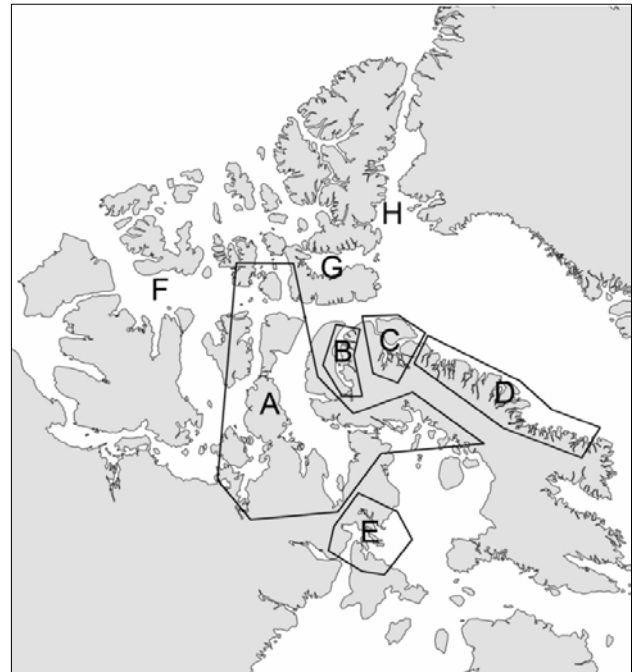
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የፍጥነት ልማት ስርዓት ለፍጥነት ለፍጥነት ከፍተኛ የቴክኖሎጂ ምርት ለፍጥነት ለፍጥነት (የቴክኖሎጂ ምርት ለፍጥነት ለፍጥነት *Monodon monoceros*)



ጎረቤት (ፍጥነት *Monodon monoceros*)
ፎካል ስርዓት ለማ. ለፍጥነት *R. Phillips*.



ርዕስ፡ 1. የፍጥነት ልማት ስርዓት ለፍጥነት ለፍጥነት
ርዕስ፡ A - ልማት ስርዓት ለፍጥነት ለፍጥነት
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ጥበቃና ሥራ ልማት ምክር ቤት ለጥበቃና ሥራ ልማት ምክር ቤት:

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[illegible]

ΔΛ^εΚ^ε

כִּלְגִּיל^{9b}: X

 $\Delta r_L \ll r_L \ll r_H \ll r_H^b$

ለኅዳር ፲፭ ቀን ስራና ጥያቄዎች

‘ḅṁΔ^cḵṛLσ^aṛ^c:

- [illegible]

[illegible]

ΛΓΔΕΖΗΘΙΚΑ

- [illegible]

በበኛኞቻችን፡ ከፈርገው ማረጋገጥና ለጥናትና ምርምር፡

▶ ڊيٽ: ڊسمبر 4, 2026

[illegible]

ΛΓΗ΄ΒΠ΄Β΄Σ΄:

- [illegible]

በበኛፍጥነት፡ ቴሌቪዥን ማሳተፍ ለሚችሉት ልዩ ልዩ ሰዎች፣ ልዩ ልዩ ጉዳዮች

▶ ڊيٽ: ۲۰۲۶، ۴

