## Reviewing the Sea Ice for Walrus Outlook (SIWO): Summary Findings 20 January 2023

The Sea Ice for Walrus Outlook (SIWO, www.arcus.org/siwo) is designed to address needs of those interested in sea-ice conditions and walruses. Since 2010, the SIWO has provided information from local observers in seven coastal communities in the Bering Strait region (Nome, Wales, Diomede, Brevig Mission, Shishmaref, Gambell, and Savoonga), the National Weather Service (NWS), and other relevant sources. The SIWO program was reviewed to identify ways to improve its usability. Key findings are summarized below.



## Key findings from reviewing the SIWO

- Marine mammal hunters use the SIWO mostly for general interest, referencing information for hunting, fishing, and traveling, policy-making, and emergency services.
- SIWO is helpful for better understanding weather and sea-ice conditions relevant to walruses, saving time by compiling relevant sea-ice information in one location, learning about walrus accessibility from experiences shared by local observers, and staying connected to subsistence activities in their home community.
- The SIWO has supported economic disaster claims relating to food security.
- The SIWO is accessed in many ways with Facebook being the primary source.
- Sea-ice information is the most important type of information provided by the NWS. The majority of walrus hunters surveyed considered satellite imagery to be *very or extremely valuable*.
- There were some concerns regarding the accuracy of NWS sea ice and weather forecasts. This is because they are only updated on the SIWO once per week.
- Information in the weekly SIWO is shared across groups including marine mammal hunters, other regional communities, and federal resource management agencies.
- Annual SIWO meetings are important for building working relationships among local observers, scientists, and the NWS.
- The SIWO's respectful and inclusive approach to bringing together local observers and scientists is viewed as beneficial for increasing equitable opportunities that benefit all members. However, scheduling conflicts and internet connectivity remain a barrier for some local observers to participate in meetings.

## **Recommendations to improve the SIWO**

- <u>Increase weekly stipends for local observers.</u> The current stipend pays local observers for some of their knowledge and experience, time, and resources but does not cover expenses.
- <u>Increase the number of participating communities in SIWO.</u> This will increase access to relevant information for other communities. Recommended places included coastal communities in the Yukon-Kuskokwim Delta region, Elim, and Shaktoolik.
- Extend the length of the SIWO season. Information provided during the sea-ice formation period in early winter is seen as useful for understanding sea-ice conditions and leading up to spring hunting season.
- <u>Provide additional content in the weekly SIWO.</u> Information on ocean currents and air visibility are viewed as valuable additions.
- Integrate information from other local observer and scientific monitoring networks. Expanding the types and frequency of environmental observations can provide a more holistic view of environmental conditions.
- <u>Reduce technical terms.</u> Less technical language in forecasts will be easier to understand and may increase information use.
- Increase local observer participation in annual SIWO meetings.
- <u>Synthesize SIWO local observations (2010-present)</u>. A historical record of observed changes may be useful for future generations to learn about local environmental changes and inform planning efforts.
- Develop a synthesis report of broader lessons learned about bringing together science and Indigenous Knowledge.
- Explore non-internet options for SIWO information access. Broadcasting weekly outlooks over local radio or TV stations may increase access to the SIWO. Posting printed copies of the SIWO at post offices, tribal offices, and local offices could also increase access.

**Ouestions and comments:** This SIWO review was conducted Hendricks. Several people supported this review by Amy including Nathan Kettle, Lisa Sheffield Guy, Vera Metcalf, Olivia Lee, Gay Sheffield, and Davin Holen. For more information on the methods or findings, or to share feedback on this project, Hendricks please contact Amy at ashendricks@alaska.edu or 907-388-9893 (call or text). Quyana!

