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- Research Coordination Committee



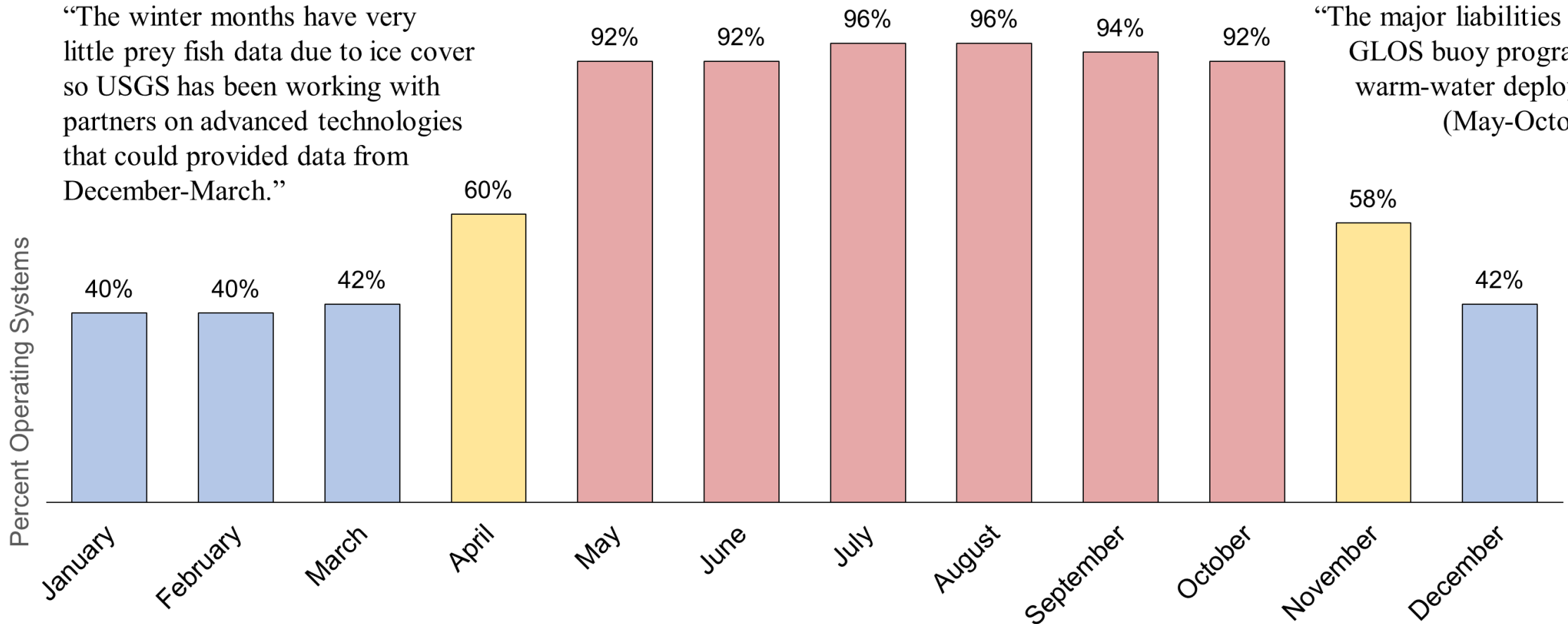
MODIS, January 31, 2022

“The Great Lakes are scientifically blind during the harsh winter months. We are working with our Canadian partners to develop hybrid, cabled observatories for all season scientific observations throughout the Great Lakes.”

“Use of winter-monitoring and cloud-penetrating remote sensing (e.g. SARS) is also highly recommended, to complement winter array deployment.”

“The winter months have very little prey fish data due to ice cover so USGS has been working with partners on advanced technologies that could provided data from December-March.”

“The major liabilities of the GLOS buoy program are warm-water deployment (May-October).”



From: Twiss, Michael R., and Kinga M. Stryszowska. "State of emerging technologies for assessing aquatic condition in the Great Lakes-St. Lawrence River system." *Journal of Great Lakes Research* 42, no. 6 (2016): 1470-1477.



OBJECTIVES of the Great Lakes Winter Science (GLWinS) Project

- Survey of the status of winter science as it affects the quality of the waters of the Great Lakes and their watersheds**
- Assess existing research needs and proposed solutions**
- Provide recommendations (Specific, Measurable, Attainable, Relevant, and Timely)**

Planned Outcomes

1. Describe the importance of winter processes and provide recommendations to consider during the next scheduled review of the GLWQA.
2. Recognition by state/provincial and federal agencies of the need to address winter processes as part of routine monitoring - explicit mention of winter in agency mandates: encouragement for institutional effectiveness by facilitating coordination and shared long-term goals and strategies re. winter science
3. Update and expand on 2019 CIGLR Workshop synthesis: include viewpoints from many disciplines (e.g., social science, limnology, groundwater hydrology) and Indigenous perspectives.
4. Assess the feasibility of forming a subcommittee on Great Lakes Winter Science to inform activities of the Annex committees (Annexes 2, 4, 8, 9, 10).





Planned Tasks

1. **Create a Working Group** from among the Great Lakes community
2. **Literature review and database summary**
3. **Input** from stakeholders & rights holders: e.g., state & provincial surveillance policies and surveys required for a white paper, gathering input from key voices
4. **Workshop 1: Winter Science Priorities: *What we need to know in order to meet the purpose of the GLWQA***
5. **Workshop 2: Winter Science Coordination: *What is needed - from infrastructure, to training, to coordination amongst agencies - to meet science priorities***

Lessons Learned from winter limnology on the Great Lakes

Moderator: Casey Godwin, CIGLR

- Jerry Popiel, USCG-Ninth District
- Mike McKay, University of Windsor, GLIER
- Peter Esselman, USGS
- Steve Ruberg, NOAA/GLERL
- Michael Twiss, IJC-SAB, Clarkson University

