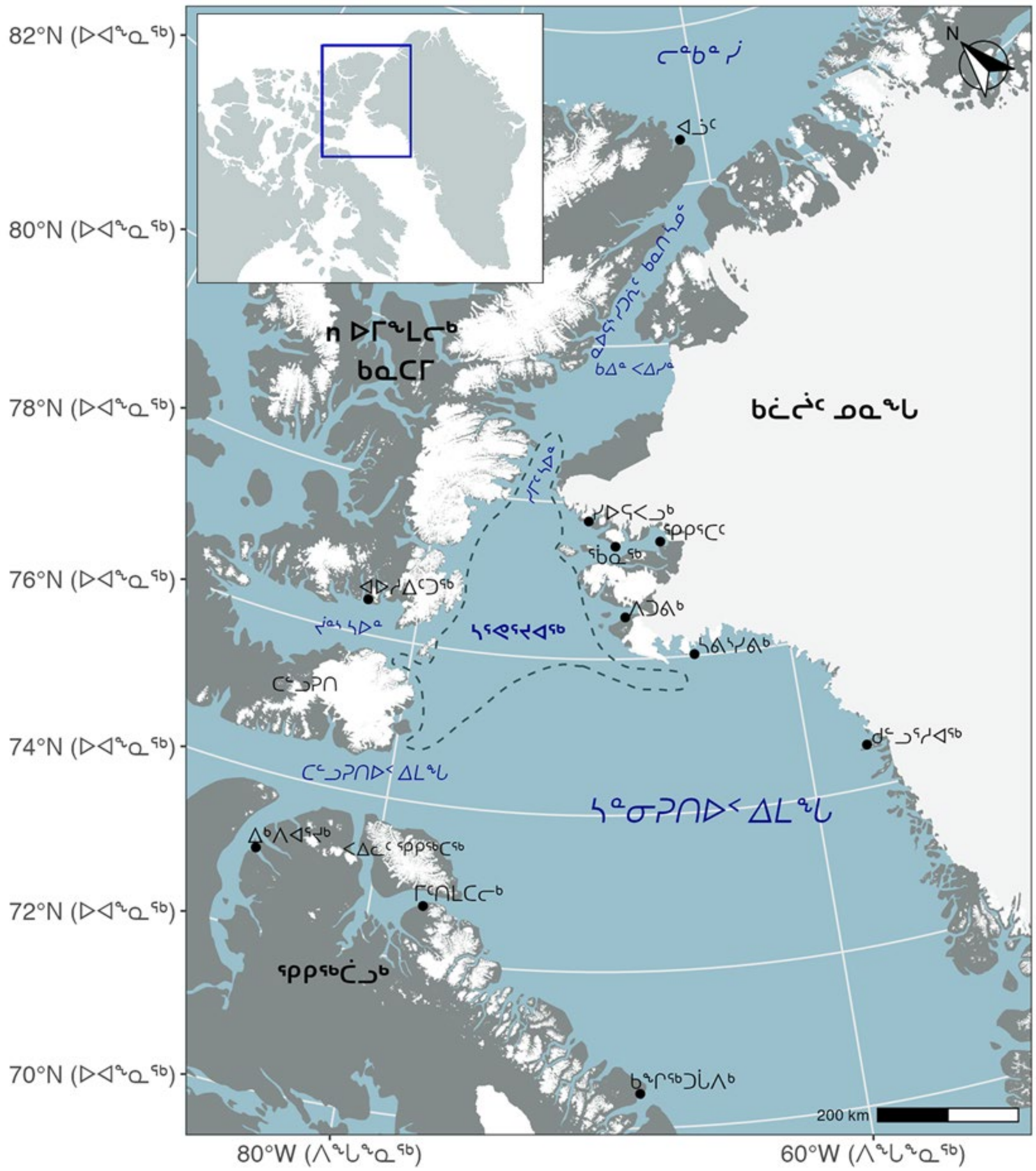
Fisheries and Oceans Canada | Pêches et Océans Canada

Ecosystems and Oceans Science | Sciences des écosystèmes et des océans



# ᓇᓗᓇᐃᖅᓯᓂᖅ ᐱᕈᖅᐸᓪᓕᐊᔪᓕᕆᓂᕐᒧᑦ ᐅᔾᔨᕐᓇᖅᑐᓂᒃ, ᖃᐅᔨᒪᓂᕆᔭᐅᔪᑦ ᐱᑕᖃᙱᑦᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔾᔪᑕᐅᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᐊᒻᒪᓗ ᐊᑭᐊᓂᑦ ᐃᓂᐅᔪᑦ




*ᐊᔾᔨ 1. ᐅᓇ ᓴᕿᕝᔭᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᒥᒃᓯᖓ, ᐃᓚᐅᓪᓗᓂ ᐊᑭᐋᓂᑦᑐᖅ ᐃᒪᐃᑦ ᐊᒃᑐᐊᔪᑦ ᖃᐅᔨᓴᖅᕕᐅᔪᓂᒃ ᐊᒻᒪᓗ ᓯᒡᔭᒃᑯᑦ ᐊᒃᑐᐊᔪᑦ ᐅᕙᓂ ᐅᓂᒃᑳᒥ ᐅᖃᐅᓯᐅᖃᑕᐅᖕᒥᔪᑦ. ᐊᐅᒃᑲᕐᓂᖅ (ᑐᖑᔪᕈᔪᒃᑐᖅ ᑐᑭᓕᐊᖓᔪᖅ) ᓇᓗᓇᐃᖅᓯᓯᒪᔪᖅ ᒪᐃᒥ ᖃᓄᐃᓕᐅᕐᓂᐅᕙᒃᑐᓂᒃ, ᐅᕙᙳᖅᑐᖅ ᑕᓐᓀ (1969).*



Canada

**ᐃᓗᓕᖏᑦ:**

*ᐅᐊᖕᓇᖕᒐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ (ᓴᕿᔪᐊᖅ/ᐱᑭᐊᓚᕐᓯᐊᖅ) ᐆᒪᓂᖃᖅᑐᖅ, ᐃᓄᐃᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖏᓐᓂᕐ, ᐊᒻᒪᓗ ᐱᖁᓯᕆᔭᐅᔪᒃᑯᑦ ᐱᒻᒪᕆᐅᒋᔭᐅᔪᖅ ᐅᐊᖕᓇᖅᐸᓯᖕᒐᓂᑦ ᕿᑭᖅᑖᓅᑉ ᐃᒪᖕᒐᓂᑦ ᐊᑯᓐᓂᖕᒐᓂᑦ ᑲᓇᑕᐅᑉ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑑᑉ. ᑕᒪᓐᓇ ᐆᒪᔪᓂᑦ ᐱᑕᖃᐅᕐᓂᖓ ᐱᒻᒪᕆᐅᔪᖅ ᐊᔾᔨᐅᖏᑦᑑᓂᖓᓄᑦ ᓄᓇ ᖃᓄᐃᖓᓂᖓᓄᑦ, ᑕᕆᐅᑉ ᓯᑰᑉ ᖄᖓᓂᕐ, ᑕᕆᐅᕐᒥᑦ ᐊᐅᓚᓃᑦ ᖃᓄᐃᑦᑐᐅᕐᓂᖏᓐᓄᕐ, ᐊᒻᒪᓗ ᐱᒋᐊᖃᑦᑕᖅᑐᖅ ᐱᒋᐊᕌᖅᑎᓪᓗᒍ (ᓲᕐᓗ ᑎᓇᒡᓗᐃᑦ (ᐄᐳᑎ)- ᓄᕐᕋᐃᑦ (ᒪᐃ)) ᐊᒻᒪᓗ ᐆᒪᔪᐅᑎᓂᖃᕐᑎᐊᖅᑐᖅ. ᐱᒋᐊᕚᖅᑐᑦ ᐊᒻᒪᓗ ᓇᓗᓇᙱᑦᑐᑦ ᐱᕈᖅᑐᐃᑦ ᑕᒫᓂ ᐃᑲᔪᐃᔪᑦ ᐊᒥᓯᓂᒃ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᐊᓗᐊᓂᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᖃᑦᑕᖅᑐᓂᕐ, ᐃᖃᓗᖕᓂᕐ, ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ (ᓲᕐᓗ, ᐊᕐᕕᕐ). ᖃᐅᔨᒪᔭᐅᑉᓗᓂ ᐃᓚᒋᔭᐅᔪᖅ ᐊᖏᖁᖅᑲᑕᐅᔪᓂᑦ ᓯᑯᓂᒃ ᐊᐅᓚᓂᖃᐅᕐᓂᖓᐅᑭᐅᖅᑕᖅᑐᒥᕐ, ᐊᐅᓚᓐᓂᖏᑦ ᐊᒻᒪᓗ ᐊᔾᔨᐅᖏᑦᑐᑦ ᐱᕙᓪᓕᐊᓂᖏᑦ ᐊᑐᖅᑐᑦ ᐊᓄᑎᑐᓂᕐᒥᑦ ᑕᕆᐅᑉ ᓯᑯᖏᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓯᑯᑲᑦᑕᕐᓂᖓ (ᐃᑳᕐᕖᓪᓘᓐᓃᕐ) Nares Strait-ᒥᑦ ᐊᒻᒪᓗ Kane Basin-ᒥᕐ, ᑭᓪᓕᖃᖅᑎᑦᑎᔪᖅ ᒥᒃᓕᕆᐊᖅᑎᑦᑎᑉᓗᓂᓗ ᓯᑯᓂᒃ ᖄᖓᓐᓂᑦᑐᓂᒃ ᐅᐊᖕᓇᖅᐸᓯᐊᓂᑦ Smith Sound-ᒥᕐ. ᑕᕆᐅᕐᒥᐅᑕᐃᑦ (ᑑᒑᓖᕐ, ᕿᓇᓗᒐᐃᕐ, ᐊᕐᕕᕐ, ᓇᓄᐃᕐ, ᐊᐃᕖᕐ, ᐊᒻᒪᓗ ᓇᑦᑏᑦ ᐊᒻᒪᓗ ᐅᒡᔪᐃᕐ) ᐊᑐᖃᑦᑕᖅᑕᖕᓚᑦ ᑕᒪᓐᓇ, ᐊᒻᒪᓗ ᐃᓚᖏᑦ ᐆᒪᔪᑦ ᐃᒪᐃᒥᓕᓐᓇ ᖀᖃᑦᑕᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐅᑭᐅᑦ ᑕᖅᑭᖏᓐᓂᕐ. ᒥᓕᔭᓐᖏᓐᓂᑦᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ (ᐱᕐᓯᐅᒌᕐ, ᐊᖅᐸᐃᕐ, ᓇᐅᔭᔾᔭᐊᕐ, ᒥᑏᑦ ᐊᓯᖏᓪᓗ) ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖏᓐᓄᐊᖃᑦᑕᖅᑐᑦ ᐅᐱᕐᙶᒃᑯᕐ, ᓯᒡᔭᖅᐸᓯᖕᓂᖃᑦᑕᖅᓱᑎᓪᓗ, ᐱᐊᓛᓕᐅᕐᓂᐊᕐᓗᑎᒃ, ᓂᕆᔭᒃᓴᖅᓯᐅᖅᓱᑎᒃ ᐊᒻᒪᓗ ᐅᑉᓗᓕᐅᖅᓱᑎᒃ.*

*2011-ᒥᕐ, ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖏᓐᓂᑦ ᐃᓕᑕᕆᔭᐅᓚᐅᖅᑐᖅ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᐅᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐆᒪᔩᑎᖃᐅᕐᓂᖓᓂᑦ (EBSA) ᑲᓇᑕᒥᑦ ᐃᖃᓗᓕᕆᔨᒃᑯᓐᓄᑦ. ᐊᒻᒪᓗ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖏᑦ ᖃᐅᔨᔭᐅᓯᒪᔪᖅ ᐊᔾᔨᐅᖏᑦᑑᓂᖓᓄᑦ ᐊᒥᓱᓄᑦ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐱᕙᓪᓕᐊᓂᕐᓂᕐ, ᐃᓚᐅᑉᓗᑎᒃ ᓄᓇᕐᔪᐊᕐᒥᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ ᓄᓇᒥᐅᑕᓂᒃ ᐊᓯᐅᔨᑦᑕᐃᓕᔨᒃᑯᑦ, ᑖᒃᑯᐊ 2017-ᒥᕐ, ᐱᓕᕆᖃᑎᖃᖅᓱᑎᒃ UN ᐱᓕᕆᖃᑎᒌᓐᓂᑦ ᐃᓕᓐᓂᐊᖅᑎᑦᑎᓂᕐᒧᕐ, ᓯᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᕐ, ᐱᖁᓯᓕᕆᓂᕐᒧᑦ ᐊᒻᒪᓗ ᑐᓴᐅᒪᑎᑦᑎᔨᒃᑯᓐᓂᑦ (UNESCO), ᐃᓕᑕᕆᓚᐅᖅᑕᖕᓚᑦ ᐃᓂᐅᔪᖅ ᐃᓂᓕᐊᖑᓗᓂ ᓄᓇᕐᔪᐊᕐᒥᑦ ᑕᐃᑉᓯᒪᓂᑐᖃᓄᑦ ᐃᓂᐅᔪᑦ (WHS) UNESCO-ᑯᑦ ᐃᓱᒪᒋᔭᖏᓐᓄᕐ. ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ ᓄᓇᒥᑦ ᐱᕝᕕᐅᔪᓕᕆᔨᒃᑯᑦ ᐃᓂᑖᖅᑎᓚᐅᕐᔭᖏᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖏᑦ ᐊᒃᑐᖅᑕᐅᔪᓐᓇᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᓱᓂ ᐊᒥᓱᓄᑦ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐊᑐᖅᓱᒋᑦ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐃᒪᕐᓂᑦ ᐱᓕᕆᖃᑎᒌᑦ (IMO) ᐃᒃᐱᒋᖕᕕᐅᔭᕋᐃᑦᑐᑦ ᑕᕆᐅᕐᒥᑦ ᐃᓂᐅᔪᓄᑦ ᐊᑐᖅᑕᖏᑦ. ᖃᐅᔨᓴᐃᓐᓂᑦ ᐃᑲᔪᖅᑕᐅᔪᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᒐᕙᒪᒃᑯᓐᓄᑦ (ᓈᓚᒃᑯᕐᓯᐅᓯᕐ), ᐃᓚᒋᔭᐅᔪᑦ ᖃᓄᖅᑑᕆᓂᕐᒧᑦ ᐱᐅᓯᕆᐊᕐᓂᐊᕐᓗᒋᑦ ᐃᓂᐅᔪᒥᑦ ᒥᐊᓂᖅᓯᓂᖅ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐆᒪᓂᖃᖃᑎᒌᒃᑐᕐ.*

*ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐊᖏᔪᒪᑎᐅᔪᖅ ᐊᒻᒪᓗ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᑎᐊᖅᓱᓂ. ᓴᖅᑭᑦᑎᓂᐊᕐᓗᓂ ᐃᓗᐃᑦᑑᖕᒐᔪᒥᑦ ᑭᓪᓕᓕᐅᑎᓂᕐᒥᒃ ᐱᓕᕆᖃᑎᖕᓂᖏᓐᓄᑦ ᒥᐊᓂᖅᓯᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᓂᕐ, ᒪᕿᐃᖕᒐᔪᑦ ᑲᓇᑕᒥᑦ ᓯᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᔨᒃᑯᑦ (CSAS) ᑲᑎᒪᕐᑯᔭᐅᓚᐅᖅᑐᑦ ᐃᖃᓗᓕᕆᔨᒃᑯᑦ ᖃᓄᖅᑑᕆᓂᕐᒧᑦ ᐊᑐᐊᒐᖕᒐᓄᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐊᓯᐅᔨᑦᑕᐃᓕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐸᕐᓇᐃᔨᒃᑯᓐᓄᕐ, ᕿᒥᕐᕈᓂᐊᕐᓗᒋᑦ ᖃᓄᐃᖕᒐᓂᖕᒐ ᖃᐅᔨᒪᔭᐅᓂᖕᒐ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ. ᑖᓐᓇ ᓯᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᓂᕐᒧᑦ ᐅᓂᑉᑳᒦᑦᑐᖅ ᑕᖅᑮᓇ ᕐᔭᐊᖅ (ᔭᓄᐊᕆ) 22-24, 2020-ᒥᐅᓚᐅᖅᑐᖅ, ᑲᑎᒪᓚᐅᖅᑐᑦ ᑲᓇᑕᒥᑦ ᑕᑯᔭᖃᕐᕕᒃ ᐃᓄᐃᑦ ᐱᔭᓐᓇᐅᑎᖏᓐᓄᑦ ᐅᐃᓂᐲᒡ, ᒫᓂᑑᐸᒥᕐ, ᕿᒥᕐᕈᑉᓗᑎᒃ ᐊᒻᒪᓗ ᐅᖃᐅᔾᔨᑉᓗᑎᒃ ᐆᒪᓂᖃᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᕐᓂᖓᓄᑦ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐊᒻᒪᓗ ᐊᑭᐊᓃᑦᑐᑦ. ᓯᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧ ᐅᖃᐅᔾᔨᓂᖅ ᐅᓂᑉᑳᒦᑦᑐᖅ ᐱᓕᐊᖑᓚᐅᖅᑐᖅ ᑲᑎᒪᖃᑕᐅᔪᓄᑦ ᑲᓇᑕᒥᕐ, ᐊᑯᑭᑦᑐᕐᒥᕐ, ᐊᒻᒪᓗ ᑎᐊᓐᒫᒃᒥᕐ, ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᔪᒃᓴᐅᑕᐅᑉᓗᓂ ᐊᒥᓱᓄᑦ (ᓲᕐᓗ, ᓯᕗᓂᒃᓴᒥᑦ ᑲᑎᖅᓯᐃᓂᕐᒧᑦ ᖃᐅᔨᒪᓂᖃᖅᑐᓂᕐ, ᐃᓄᐃᑦ-ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᖃᐅᔨᓴᐃᓂᕐᒥᕐ, ᐊᒻᒪᓗ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑕᐅᓂᖏᑦ ᓂᕐᔪᑏᑦ ᓄᓇᒥᐅᑕᐃᑦ), ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᖅ ᐃᓱᒪᓕᐅᕆᓂᕐᓄᕐ, ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᓂᕐᒥᒃ ᐊᓯᐅᔨᑦᑕᐃᓕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᑐᐊᒐᒥᑦ ᑕᒫᓂ ᐃᓂᐅᔪᒥᕐ.*

## ᓇᐃᓈᖅᓯᒪᔪᖅ

- ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᓇᓗᓇᙱᑦᑐᖅ ᐃᓂᐅᔪᖅ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦᑐᖅ ᐅᐊᖕᓇᖕᒐᓂᑦ ᕿᑭᖅᑖᓅᑉ, ᐋᖅᑭᒃᓯᒪᔪᖅ ᐊᖏᖁᖅᑲᑕᐅᔪᓂᑦ ᑕᐃᒪᐅᖏᓐᓇᖅᑐᓄᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖃᖅᑐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ. ᐱᒻᒪᕆᐅᓂᖓ ᐃᓂᐅᔩᑉ ᐊᒃᑐᐊᓂᖃᖅᑐᖅ ᐅᑯᓄᖓ:

- ᖃᓄᐃᓕᐅᕐᓂᖔᓄᑦ ᓯᓚᖃᙱᑦᑑᑉ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᐅᑎᖅᑕᕐᓂᐅᑉ ᐅᐊᖕᓇᒥᙵᖅᑐᒥᑦ ᐊᓄᕆᓕᐅᖅᑰᓂ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᐊᐅᓚᓂᐅᔪᓂᒃ ᐊᔾᔨᔪᓂᒃ ᑕᕆᐅᕐᒥᑦ ᓯᑯᓂᒃ ᐅᑭᐅᖅᑖᑉ ᑕᕆᐅᖔᑕ ᓂᕆᐊᓂᑦ ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᒍᑦ;
- ᑐᐊᓐᓂᐅᔪᑦ ᓱᑉᓗᐃᑦ ᐋᖅᑭᒃᓯᔪᑦ ᓯᑯᖃᑦᑕᕐᓂᖏᑦ Nares Strait-ᒥᑦ, Kane Basin-ᒥᑦ, ᐊᒻᒪᓗ Smith Sound-ᒥᑦ, ᓂᕆᖅᐸᓯᖕᒥᑦ ᐊᐅᓚᓂᖃᖅᑎᑦᑎᙱᖕᒐᓂ ᑕᕆᐅᑉ ᓯᑯᖓᓂᑦ, ᐊᒻᒪᓗ ᒥᒃᓵᕆᐊᖅᑎᑦᑎᑉᓗᓂ ᑕᕆᐅᑉ ᓯᑯᖓᑕ ᖄᖓᓂᑦ ᓂᕆᐊᓂᑦ Smith Sound;
- ᑎᒥᒧᑦ ᐱᑦᑕᐅᔪᓂᒃ ᐱᑕᖃᑦᑎᐊᖅᑐᖅ ᑕᒪᐃᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᙵᖅᑐᓂᑦ (ᓂᑲᓇᖅᑐᖅ ᐸᓯᕚᒃ (Pacific) ᐃᒪᕐᒥᑦ ᐱᐅᕆᖕ ᑕᕆᐅᒃᑯᑦ (Bering Sea) ᐊᒻᒪᓗ ᐅᐊᖕᓇᖓᓂᑦ ᐊᑦᓛᓐᑎᒃ (Atlantic) (ᐃᒪᖅ ᐆᓇᔾᔭᒃᑐᖅ ᑕᐃᕙᔅ ᔅᑐᕆᑦ-ᑯᑦ (Davis Strait) ᑯᕙᔭᖅ ᐅᐊᖕᓇᒧᑦ ᐱᖓᖕᓇᖓᓂᑦ ᐊᑯᑭᑦᑑᑉ);
- ᑕᕆᐅᕐᒥᑦ ᐊᐅᓚᓐᓂᐅᔪᑦ ᐊᒻᒪᓗ ᐊᓄᕆᐅᑉ ᖃᓄᐃᓕᐅᕐᓂᖓᓄᑦ ᐃᒪᕐᒥᒃ ᕐᑯᒻᒨᒃᑎᑦᑎᑉᓗᑎᒃ ᐅᕝᕙᓘᓐᓃᑦ ᕐᑯᒻᒧᑦ ᐊᑯᑉᓕᖅᑎᕆᔭᖅ ᑎᒥᒧᑦ ᐱᑦᑕᐅᔪᓂᒃ ᐃᑎᓂᕐᒥᙵᖅᑐᓂᒃ ᐸᓯᕚᒃᒥᑦ ᐊᒻᒪᓗ ᐊᑦᓛᓐᑎᒃᒥᑦ ᐃᒪᖕᒋᓐᓂᑦ; ᐊᒻᒪᓗ
- ᐅᐃᒍᕆᐊᖅᓯᒪᔭᖅ ᓯᑯᑕᖃᖃᑦᑕᙱᓐᓂᖅ (ᐅᕝᕙᓘᓐᓃᑦ ᒥᒃᓵᕆᐊᖅᓯᒪᔭᖅ ᓯᑰᑉ ᖃᖓ) ᐃᑲᔪᐃᑉᓗᓂ ᐊᑯᓂᐅᔪᒥᑦ ᓂᕐᔪᑏᑦ ᐱᓕᐅᕆᕝᕕᓕᐊᓂᖕᒋᓐᓂᑦ.

- ᓯᕐᕿᑦ ᐱᒻᒪᕆᐅᑉᓗᑎᒃ ᐃᓚᒋᔭᐅᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᐊᒻᒪᓗ ᐊᐅᒃᑐᑦ ᐃᒪᐃᑦ ᓯᕐᒥᖕᓂᙱᖅᑐᑦ ᐊᒻᒪᓗ ᓯᑯᓂᑦ ᐱᔾᔪᑕᐅᓚᖖᒍᔾᔮᐅᔪᑦ ᖃᓂᑦᑐᒥᑦ ᐃᒪᑦᑎᐊᕝᕙᓄᑦ ᑯᕙᔪᓂᑦ ᑕᒪᐅᖓ. ᖃᓄᐃᓕᐅᕐᓂᖏᑦ ᑕᒪᐃᓐᓄᑦ ᐃᒪᑦᑎᐊᕝᕙᒧᐊᖅᑐᑦ ᓯᕐᒥᖕᓂᙱᖅᑐᑦ ᐊᒻᒪᓗ ᓯᑯᓂᑦ ᓯᒃᔪᒧᑦ ᓖᓐᓇᐅᔭᖅ ᖃᐅᔨᓴᖅᑕᐅᕚᓂᒃᓯᒪᙱᑦᑐᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᓂᑦ.

- ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐆᒪᔪᓕᐅᕆᓂᖃᐅᑦᑎᐊᖅᑐᖅ, ᐊᒻᒪᓗ ᐊᖏᓂᖓ ᐊᒻᒪᓗ ᖃᖓᒃᑰᖓᓂᖓ ᐆᒪᔪᑦ ᐱᓕᐅᕆᕝᕕᓕᐊᓂᖏᑦ ᐊᑐᖅᑐᖅ ᐊᖏᔪᒥᑦ ᖃᓄᐃᖓᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐆᒪᔪᓄᑦ ᐃᓚᓕᐅᑎᓯᒪᔪᓂᒃ ᐊᐅᓚᑦᑎᓂᕐᓄᑦ (ᓵᕐᓗ, ᖃᖓᒃᑯᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓃᑦ ᐱᕝᕙᓕᐊᓂᖏᑦ, ᐊᑯᓕᖅᑎᕐᓂᖅ, ᐱᔾᔨᑎᖃᖅᑐᑦ ᐊᔾᔨᒌᙱᓐᓂᖏᓐᓄᑦ ᐃᒪᐃᑦ), ᐊᔾᔨᒌᙱᖃᑦᑕᖅᑐᑦ ᑕᒫᓂᓗᒃᑖᖅ. ᖃᓄᐃᓕᓃᑦ ᐊᖏᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐊᑯᓂᐅᑎᒋᓂᖓᓄᑦ ᐆᒪᔪᐃᑦ ᐱᓕᕆᕝᕙᓕᐊᓂᖏᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᐅᓯᕆᐊᖅᑕᐅᒃᑲᓐᓂᖅᑐᑦ ᓈᒻᒪᒃᑐᒥᑦ ᐆᒪᖅᑯᑎᒥᒃ ᓅᑦᑎᓂᕐᓄᑦ ᓂᕿᕆᔭᐅᔪᓄᑦ.

- ᐱᕆᐊᖊᖅᑐᑦ ᐱᕈᖅᑐᐃᑦ ᐃᑲᔪᖅᑕᐅᔪᑦ ᒥᒃᓵᕆᐊᕐᓂᖏᑦ ᓯᑯᑉ ᖃᖓ ᑕᐅᑐᙵᖅᐳᕆᑦ ᖃᓂᑖᓃᑦᑐᑦ, ᐊᒻᒪᓗ ᑲᑎᓐᓂᖏᑦ ᐆᒪᔪᐃᑦ ᐱᓕᕆᕝᕙᓕᐊᓂᖏᑦ ᐊᒻᒪᓗ ᐆᒪᔪᕋᕐᓛᑦ ᓂᕿᒃᓴᖅᑎᑦᑎᖄᓕᔪᑦ ᓴᓗᒻᒪᖅᓴᐃᔾᔨᑎᖃᖅᑐᓂᒃ ᓂᕆᖃᑦᑕᖅᑐᓄᑦ, ᓵᕐᓗ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ, ᐊᒻᒪᓗ ᐱᔭᐅᔭᕆᐊᖃᑦᑎᐊᖅᐳᑎᒃ ᐃᖃᓗᖕᓄᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᓄᑦ.

- ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᒻᒪᕆᐅᑉᓗᓂ ᐃᓂᐅᔪᖅ ᐅᖅᓱᕐᒥᒃ ᑮᑎᖃᕐᓂᕐᒧᑦ; ᐃᓂᐅᔪᖅ ᐃᓱᒪᒋᔭᐅᔪᖅ ᐃᓂᐅᓂᖔᓄᑦ $CO_2$-ᒧᑦ, ᐊᖏᓂᖓᑕ ᓴᙱᔪᒥᒃ ᐊᒃᑐᖅᑕᐅᓯᒪᑉᓗᓂ ᖃᓂᑦᑐᒥᑦ ᐊᔭᐅᕆᓂᕐᒧᑦ, ᐃᓚᐅᑉᓗᑎᒃ ᐃᒪᑦᑎᐊᕝᕙᒧᐊᖅᑐᑦ, ᑕᕆᐅᕐᒥᑦ ᐃᓚᒋᔭᐅᔪᑦ (ᓵᕐᓗ, ᐆᓇᕐᓂᖅ), ᑕᕆᐅᑉ ᖃᓄᐃᓐᓂᖓᓄᑦ, ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᓐᓄᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐱᕈᖅᑐᓂᒃ ᐱᔾᔪᑕᐅᔪᓄᑦ ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᑐᕐᓂᕐᒧᑦ.

- ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐋᖅᑭᒃᓯᒪᔾᔨᓇᖅᑐᖅ ᖁᑦᑎᒃᑐᒥᑦ ᖃᓂᑦᑐᒥᑦ ᐆᒪᔪᓂᒃ ᐊᔾᔨᒌᙱᑦᑑᑎᓄᑦ. ᐱᓗᐊᖅᑐᒥᑦ, ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐃᓱᒪᒋᔭᐅᔪᖅ ᐃᓂᐅᓂᖔᓄᑦ ᐊᔾᔨᒌᙱᑦᑐᓄᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ. ᐊᔾᔮᙱᓐᓂᕆᔭᖏᑦ ᐊᔾᔨᒌᙱᑦᑑᑏᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᖁᑦᑎᓛᖑᖃᑕᐅᔪᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖓᓂᑦ.

- ᐆᒪᖅ ᐆᒪᔪᖃᑕᐅᓗᐊᖅᑐᖅ ᓂᕿᕆᔭᐅᔪᓗᒃᑖᓄᑦ ᐊᒻᒪᓗ ᐊᓯᐊᙳᕐᓂᖏᑦ ᐊᒥᓲᓂᖕᒋᓐᓄᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᓇᒧᙵᐅᓂᖕᒋᓐᓄᑦ ᐱᕙᓕᐊᓂᖃᕋᔭᖅᑐᖅ ᖃᓄᐃᙵᓕᖅᑎᑦᑎᓂᕐᓂᒃ ᐆᒪᖅᑯᑎᖕᒋᓐᓂᑦ ᐊᒥᓲᓂᖅᓴᓄᑦ ᓂᕿᕆᔭᐅᔪᑦ ᓇᓃᓐᓂᖕᒋᓐᓄᑦ.

- ᒪᕐᕉᒃ ᐱᓪᒪᕆᐅᔪᑦ ᐃᖃᓗᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐅᐊᖕᓇᖕᒐᓂᑦ ᑭᖑᐃᑦ ᐊᒻᒪ ᐊᑯᑭᑦᑐᖅ Hᐊᓕᐸᑦ (Halibut), ᑭᓯᐊᓂᓗ ᑐᑭᓯᐅᒪᔾᔪᑎᑕᖃᓗᐊᖏᓐᒍᓂ ᓇᒧᙵᐅᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐊᒻᒪ ᐊᒥᓲᓂᖏᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᑎᑭᐅᑎᓯᒪᓂᖏᓐᓄᑦ ᐊᖏᓪᓕᕆᐊᕈᖕᓇᕐᓂᖏᑦ ᐃᖃᓗᒃᓯᐅᕈᑏᑦ ᐊᒻᒪ ᐃᑯᒪᓕᒃᔪᐊᑦ ᑖᑉᓱᓄᙵ ᐃᖃᓗᖕᓄᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐱᕙᖅᖅᑎᑕᐅᓂᖏᑦ ᓄᓇᓖᑦ ᐊᒻᒪ ᐅᓗᓇᐊᓇᕐᓂᕐᒧᑦ ᐱᕈᖅᐸᓪᓕᐊᖅᑲᑎᒌᒃᑐᓄᑦ (ᓲᕐᓗ, ᐅᖓᑎᓗᐊᖓᓄᑦ ᐃᖃᓗᒃᓯᐅᖅᑕᐅᓗᑎᒃ ᐅᕝᕙᓘᓐᓃᑦ ᐃᖃᓗᒃᑕᓇᔭᐅᖃᑦᑕᕐᓂᖏᓐᓄᑦ).
- ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ 'ᐃᓂᐅᔪᖅ' ᐃᒪᕐᒥᐅᑕᓄᑦ ᓂᕐᔪᑎᓄᑦ ᐅᑭᐅᓗᒃᑖᒃᑯᑦ, ᐊᒻᒪ 9-ᖑᔪᑦ ᓂᕐᔪᑏᑦ ᑕᐃᒪᐅᖃᑦᑕᖅᑐᑦ ᑕᒫᓂ. ᐊᔾᔨᒌᙱᑦᑐᑦ ᓂᕐᔪᑏᑦ (ᓲᕐᓗ ᕿᓇᓗᒐᐃᑦ, ᑑᒑᓖᑦ, ᐊᒻᒪ ᐊᕐᕚᑦ) ᑕᒫᓂ ᓄᕐᓇᐅᖃᑦᑕᖅᑐᑦ, ᓂᓇᔭᒃᓴᖅᓯᐅᖅᐳᑎᒃ, ᐊᒻᒪ ᐅᑎᕐᕕᕆᖃᑦᑕᖅᐳᒍ; ᖃᓂᑕᖕᒐᓃᑦᑐᑦ ᓯᑯᐃᑦ (ᓯᓈ) ᐱᓪᒪᕆᐅᔪᖅ ᐃᓂᒋᔭᐅᑉᓗᓂ ᐊᐃᕙᕐᓄᑦ, ᓇᑦᑎᕐᓄᑦ, ᐅᒡᔪᖕᓄᑦ, ᐊᒻᒪ ᓇᓄᕐᓄᑦ.
- ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᓪᒪᕆᐅᔪᖅ ᓂᕿᒋᔭᐅᔪᓄᑦ ᐊᒻᒪ ᐅᑉᓗᖃᕐᕕᐅᓂᕐᒧᑦ ᒥᓕᔭᓐᖏᓐᓃᑦᑐᑦ ᐅᑎᖅᑕᖃᑦᑕᖅᑐᓄᑦ ᑕᓇᐅᕐᒥᐅᑕᓄᑦ ᑎᖕᒥᐊᓄᑦ. ᓂᕐᔪᑎᖃᕐᕕᒃ ᒥᕐᖑᐃᖅᓯᕐᕕᒃ ᐃᓚᒋᔭᐅᔪᖅ ᐱᓪᒪᕆᐅᓂᖅᐹᖑᖃᑕᐅᔪᓄᑦ ᑕᓇᐅᕐᒥᐅᑕᓄᑦ ᑎᖕᒥᐊᓄᑦ ᐅᑉᓗᖃᕐᕕᐅᓂᕐᒧᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖓᓂᑦ. ᐊᑯᑭᑦᑑᑉ ᖃᓂᑕᖕᓖᖕᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐃᓂᒋᔭᐅᔪᖅ ᐊᖏᓘᖑᔪᓄᑦ ᑲᑎᓯᒪᔪᑦ ᐊᖅᐸᖓᓄᑦ, ᐊᒻᒪ ᐊᑯᑭᑦᑑᑉ ᐊᖏᓘᖑᔪᖏᑦ ᑲᑎᓯᒪᔪᑦ ᐱᑦᓯᐅᓛᑦ ᐊᒻᒪ ᓇᐅᔮᔪᐊᑦ. ᐊᓯᖏᑦ ᐱᓪᒪᕆᐅᔪᑦ ᐃᓂᒋᔭᐅᔪᑦ ᑎᖕᒥᐊᓄᑦ ᐃᓚᐅᔪᑦ ᒥᑏᑦ, ᒥᑎᕐᔪᐊᑦ, ᐊᒻᒪ ᓴᐲᓇ ᓇᐅᔮᔪᐊᖏᑦ.
- ᑭᖑᓪᓕᖅᐹᖅ ᑲᓇᑕᒥᑦ ᐅᐸᓗᓕᐅᕐᕕᒃ ᐅᓗᓇᐊᓇᖅᑑᑦᑐᓄᑦ ᐊᐃᕗᓇ ᓇᐅᔮᔪᐊᑦ ᑕᐃᒪᐅᔪᑦ ᐃᐅᓪᕐᒥᐅ ᕿᑭᖅᑕᒥᑦ (Ellesmere Island), ᖃᓂᑦᑐᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ. ᐊᐃᕗᓇ ᓇᐅᔮᔪᐊᑦ ᐊᒻᒪ ᓴᐲᓇᐅᑉ ᓇᐅᔮᔪᐊᖏᑦ ᐱᓪᒪᕆᐅᔪᑦ ᐆᒪᔪᓂᑦ ᖃᐅᔨᓴᖅᑕᐅᓗᑎᒃ ᐊᒻᒪ ᒥᐊᓂᕆᔭᐅᓗᑎᒃ, ᑕᒪᕐᒥᒃ ᐊᒥᓲᙳᕆᑦᑐᓪᒪᕆᐅᖓᑕ ᑲᓇᑕᒥᑦ ᐊᒻᒪ ᐊᑯᑭᑦᑐᕐᒥᑦ.
- ᓯᓪᓴᓂᑦ (ᓲᕐᓗ, ᑰᑦ ᐹᖏᑦ, ᐃᓪᓈᐹᔭᐃᑦ, ᐃᒪᐃᑦ, ᐊᒻᒪ ᓯᕐᒦᑦ ᐃᓯᖏᑦ) ᐊᒻᒪ ᓯᓈᑉ ᐊᕙᑎᖏᑦ ᖃᓂᑕᖏᓐᓂᑦ ᓄᓇᓖᑦ ᐱᓪᒪᕆᐅᒋᔭᐅᔪᑦ ᒪᖃᐃᕝᕕᐅᓂᕐᒧᑦ ᓂᓇᔭᐅᖃᑦᑕᖅᑐᑦ ᓂᕐᔪᑎᓄᑦ, ᓲᕐᓗ ᑑᒑᓕᖕᓄᑦ, ᐊᐃᕙᕐᓄᑦ, ᓇᑦᑎᕐᓄᑦ, ᓇᓄᕐᓄᑦ, ᐊᒻᒪ ᐊᔾᔨᒌᙱᑦᑐᓄᑦ ᑕᓇᐅᕐᒥᐅᑕᓄᑦ ᑎᖕᒥᐊᓄᑦ. ᐃᖃᓗᒃᐱᒃ ᐱᓪᒪᕆᐅᒋᔭᐅᔪᖅ ᓂᕿᒋᔭᐅᑉᓗᓂ, ᐊᒻᒪ ᖃᑉᓯᐊᕐᔪᐃᑦ ᑰᑦ ᖃᓂᑕᖕᒐᓃᑦᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐱᑕᖃᐅᖅᑐᑦ ᐊᑐᖃᑦᑕᖅᑐᓂᒃ ᑕᓇᐅᕐᒥᑦ ᐊᐅᔭᐅᑎᓕᓗᒍ (ᓴᖦᓚᕿᒥᑦ (ᔪᓚᐃ) ᐊᒥᕋᐃᔭᕐᕕᖓᓄᑦ (ᓯᑎᐱᕆ).
- ᓂᕆᐅᒋᔭᐅᔪᖅ ᐊᒃᑐᖅᓯᓂᖅᐹᖑᓂᐊᕐᓂᖓ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖅᑲᑎᒌᒃᑐᓄᑦ. ᖃᓂᑦᑐᒥᑦ ᐊᓯᐊᙳᕐᓂᐅᔪᑦ ᖃᐅᔨᔭᐅᕙᓪᓕᐊᓕᐊᓂᒃᑐᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᓯᓚᕐᔫᑕᐅᖃᑦᑕᕐᓃᑦ, ᐱᕙᓪᓕᐊᑎᑦᑎᔪᖅ ᓵᓐᓂᖅᓴᒥᑦ ᓴᙲᓐᓂᖅᓴᒥᓪᓗ ᓯᑯᖃᑦᑕᕐᓂᖓᓂᑦ Nares Strait (ᐊᖏᓪᓕᕙᓪᓕᐊᔪᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖏᑦ ᑕᒫᓂᓗᒃᑖᖅ), ᓇᓚᐅᑦᑖᖅᓯᓇᐊᖏᓐᓂᖅᓴᐅᔪᑦ ᓯᑯᓂᒃ ᐊᐅᓚᔪᓕᐅᕐᓃᑦ, ᐊᓯᐊᙳᕐᓂᖓ ᐃᓂᐅᔪᖅ ᐊᒻᒪ ᖃᓄᖅ ᐊᑯᓂᐅᑎᒋᓂᖏᑦ ᐱᕈᖅᑐᐃᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖏᑦ, ᐊᐅᒃᐸᓪᓕᐊᔪᑦ ᓯᕐᒦᑦ, ᐊᒻᒪ ᐃᒪᖅᑯᖅᑐᓯᓃᑦ (ᓯᓪᓴ ᓄᖑᑉᐸᓪᓕᐊᔪᖅ).

## ᐱᔾᔪᑕᐅᔪᖅ

2011-ᒥᑦ, ᑲᓇᑕᒦᑦᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐃᓂᓕᐊᖑᓚᐅᖅᑐᖅ ᐱᕈᖅᐸᓪᓕᐊᓂᖅᑲᑎᒌᒃᑐᖃᕐᓂᖏᓐᓄᑦ ᐊᒻᒪ ᐆᒪᓂᖅᑲᖅᑐᓄᑦ ᐃᓂᒋᔭᐅᑦᑎᐊᕐᓂᖓᓄᑦ (EBSA) ᑲᓇᑕᒥᑦ ᐃᖃᓗᓕᕆᔨᒃᑯᓐᓄᑦ (DFO 2011, 2015). ᐃᓂᐅᔪᖅ ᕿᒥᕐᕈᔭᐅᓯᒪᖕᒥᔪᖅ ᐊᓯᖏᓐᓄᑦ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐱᕙᓪᓕᐊᔪᓕᕆᔨᓂᒃ ᑲᒪᒋᔭᐅᑉᓗᑎᒃ ᐊᑯᑭᑦᑐᕐᒧᑦ ᐊᒻᒪ ᑎᐊᓐᒫᒃᑯᑦ, ᐱᔾᔪᑎᒋᑉᓗᒍ ᐊᔾᔨᐅᖏᑦᑐᖅ ᐱᖅᑯᓯᖅ ᐊᒻᒪ ᐱᕈᖅᐸᓪᓕᐊᓂᖅᑲᑎᒌᒃᑐᓄᑦ ᐱᓪᒪᕆᐅᓂᖓᓄᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᑎᑭᐅᑎᓚᐅᖅᑐᖅ ᖁᑦᑎᓛᒥᒃ ᓈᓴᐅᑎᒋᖅᑎᑕᐅᑉᓗᓂ ᐊᒻᒪ ᓯᕗᓕᖅᐸᐅᑎᓴᓇᐊᖅᑲᐅᑉᓗᓂ ᐱᔭᐅᔪᖅ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐃᒪᕐᒧᑦ ᐱᓕᕆᐊᖅᑎᒌᓄᑦ (IMO) ᐊᑐᖅᑕᖏᓐᓄᑦ ᖃᐅᔨᓂᐊᕐᓗᑎᒃ 'ᐱᓗᐊᖅᑐᒥᑦ ᐃᒃᐱᒋᓴᖏᐃᑐᑦ ᑕᓇᐅᕐᒥᑦ ᐃᓂᐅᔪᑦ' ᑲᓇᑕᒥᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐱᓪᒪᕆᐅᔪᓂᑦ ᐊᒻᒪ ᐊᒃᑐᖅᑕᐅᓴᖏᐃᑦᑐᓂᒃ ᑕᓇᐅᕐᒥᐅᑕᐃᑦ

ᐃᓂᖏᓐᓂᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ (Christensen et al. 2012, 2017). ᐊᓯᐊᓂᑦ ᖃᓄᖅᑑᕈᑎᓕᕆᓂᕐᒥᑦ ᐱᐅᓯᕆᐊᕐᓂᐊᕐᓗᒍ ᐃᓂᐅᔪᒦᖓᔪᒃᑯᑦ ᒥᐊᓂᕆᔭᐅᓂᖏᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐆᒪᓂᖃᖃᑎᒌᒃᑐᑦ, ᕿᒥᕐᕈᓂᖃᓚᐅᖅᑐᑦ ᐃᓂᓂᒃ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓂᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖃᑎᒌᒃᑐᓂᑦ ᐱᒻᒪᕆᐅᔪᓂᑦ ᐱᖓᓐᓇᖓᓂᑦ ᐊᒻᒪᓗ ᓂᒋᐊᓂ-ᑲᓇᓐᓇᖓᓂᑦ ᐊᑯᑭᑦᑑᑉ ᐱᓕᕆᐊᖑᓚᐅᖅᑐᑦ ᐊᑐᖅᑕᐅᔪᒍ EBSA ᐊᒻᒪᓗ ᐊᓯᖏᑦ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐊᑐᖅᑕᐅᔪᓄᑦ, ᖃᐅᔾᔨᓂᐊᕐᓗᒋᑦ ᐱᒻᒪᕆᐅᔪᑦ ᐃᓂᐅᔪᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ. ᐅᓂᒃᑳᖅ ᖃᐅᔾᔭᐅᖅᑐᖅ 23-ᓂᒃ ᐃᓂᐅᔪᓂᑦ, ᐃᓚᐅᕝᕗᑎᒃ ᐱᖓᓱᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒦᑦᑐᑦ (Christensen et al. 2016).

ᐊᑯᓂᐅᒪᓇᐅᔪᖅ, ᐃᓄᐃᑦ ᐱᒻᒪᕆᐅᑎᓯᒪᔭᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᖁᓯᕆᔭᐅᔪᑦ ᐊᒻᒪᓗ ᑐᒃᓯᐊᕐᓂᕐᒧᑦ ᐱᒻᒪᕆᐅᓂᖓᓄᑦ, ᐊᑐᖅᑕᐅᕝᕗᑎᒃ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᓇᒧᙵᐅᖃᑦᑕᕐᓂᕐᒧᑦ, ᓂᕿᑦᓴᐅᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐱᕚᕕᐅᖃᑦᑕᕐᓂᕐᒧᑦ ᓴᓇᔾᔪᑎᓄᑦ ᐊᒻᒪᓗ ᐊᓐᓄᕋᓄᑦ. ᓴᕿᔪᐊᖅ ("ᖁᐊᓯᐃᑦᑐᖅ) ᐅᐊᖕᓇᖓᓃᑦᑐᖅ ᕿᑭᖅᑖᓘᑉ ᐊᑎᐅᔪᖅ ᐅᑭᐅᓗᒃᑖᕐᒥᑦ ᐃᒪᐅᖃᑦᑕᖅᑐᖅ ᐊᒻᒪᓗ ᖃᓂᑕᖓ ᓯᑯ, ᐊᒻᒪᓗ ᐱᑭᐊᓚᓱᕐᓯᐊᖅ ᑲᓛᓪᓕᓱᑦᖑᔪᖅ, ᐱᖓᓐᓇᖓᓂᑦ ᐊᑯᑭᑦᑐᒃᑯᑦ ᐊᑎᐅᔪᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ, ᑐᑭᖃᖅᑐᖅ "ᐃᒻᒥᕐᔪᐊᖅᓯᒪᔪᖅ" (QIA 2020). ᐱᓕᕆᖃᑎᒋᖕᓂᖏᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖏᑦ ᐊᒻᒪᓗ ᓄᓇᓖᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐊᒻᒪᓗ ᐃᓕᑕᕆᔭᐅᓂᖓ ᐃᓄᐃᑦ ᐃᓚᒋᔭᐅᖕᒪᑕ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᑐᖅᐸᓪᓕᐊᖃᑎᒌᖕᓂᖃᖅᑐᓄᑦ, ᐱᒋᐊᖅᑎᑦᑎᔾᔪᑕᐅᓗᐊᓚᐅᖅᑐᑦ ᓴᖅᑭᑕᐅᓂᖓ ᐱᑭᐊᓚᓱᕐᓯᐊᖅ ᑲᑎᒪᔨᖏᑦ ᐃᓄᖕᓄᑦ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑲᑎᒪᔨᓄᑦ 2016-ᒥᑦ. ᑲᑎᒪᔩᑦ ᐅᖃᖅᑎᒋᓂᖏᑦ ᑲᓇᑕ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᖅ 2016-2017-ᒥᑦ ᑐᙵᕕᐅᓚᐅᖅᑐᑦ ᑖᕝᓱᒎᖑ ᐅᓂᒃᑳᒧᑦ "*ᐃᓄᐃᑦ ᕿᑯᖃᑦᑕᕐᓂᕐᒥᐅᑕᐃᑦ: ᓯᕗᓂᒃᓴᖓ ᐱᑭᐊᓚᓱᕐᓯᐊᖅ*", ᐃᓗᓕᖅᑲᖅᑐᖅ ᐃᒪᓐᓈᖅᑑᑎᓂᒃ ᑕᒪᐅᖓ (ICCC 2017).

ᐃᖅᑲᓗᓕᕆᔨᒃᑯᑦ, ᐱᔪᓐᓇᖅᑎᑕᐅᕝᕗᑎᒃ *ᑕᕆᐅᕐᒧᑦ ᐱᖁᔭᕐᒥᑦ*, ᐱᓕᕆᖃᑎᖃᖅᑐᑦ ᓄᓇᖃᖅᑳᖅᑐᓂᒃ ᓴᖅᑭᑦᑎᓂᐊᕐᓗᑎᒃ ᑲᓇᑕᒧᑦ ᐋᖅᑭᐅᒪᔪᒥᒃ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᒥᐊᓂᖅᓯᓂᖃᕐᕕᐅᔪᓂᑦ ᑲᒪᒋᓂᐊᕐᓗᒍ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᐃᓗᐃᑦᑑᑦᑎᐊᕐᓂᖓ, ᐊᒻᒪᓗ ᐊᓯᐅᔨᑦᑕᐃᓕᓗᑎᒃ ᐊᒻᒪᓗ ᒥᐊᓂᕆᓗᒋᑦ ᑲᓇᑕᐅᑉ ᑕᕆᐅᖓᓂᑦ. ᓇᑦᑎᐊᑦ (ᒨᑦᓯ) 2019-ᒥᑦ, ᑲᓇᑕᐅᑉ ᐊᖓᔪᖅᑳᕐᔪᐊᖓ, ᔅᑎᓐ ᑐᕈᑑ, ᓴᖅᑭᑎᓚᐅᖅᑐᑦ ᐊᑕᐅᑦᑎᒃᑯᑦ ᐅᖃᐅᓯᐅᔪᒥᑦ ᑲᓇᑕᒥᑦ ᐃᓄᐃᑦ ᓯᕗᓕᐅᖅᑎᖏᓪᓗ ᐱᓕᕆᖃᑎᖃᕐᓂᐊᖅᑐᑎᒃ ᑕᓐᓕᒃ ᒐᕙᒪᒃᑯᖏᓐᓂᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᖅ ᓯᕗᓪᓗᕆᐊᕐᓂᐊᕐᓗᒋᑦ ᐊᔪᙱᓐᓂᐊᖅᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐊᐅᓚᑦᑎᓂᖅ ᐊᒻᒪᓗ ᐊᕙᑎᒥᒃ ᒥᐊᓂᖅᓯᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᑕᐃᒪᙵᓂᑦ ᓴᖅᑭᑕᐅᖕᒪᑦ ᑎᑎᖅᑲᖅ, ᐃᖅᑲᓗᓕᕆᔨᒃᑯᑦ, ᐱᔾᔪᔾᔨᕝᕗᑎᒃ ᑲᓇᑕᒥᑦ ᒐᕙᒪᒃᑯᓐᓂᑦ, ᐃᓚᐅᖃᑕᐅᖏᓐᓇᖃᑦᑕᖅᓯᒪᔪᑦ ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᒃᑯᓐᓂᑦ, ᐊᒻᒪᓗ ᑕᒪᒃᑯᓄᙵᓕᕆᔪᓂᑦ ᐊᑯᑭᑦᑎᕐᒥᑦ ᐊᒻᒪᓗ ᑎᐊᓖᒃᒥᑦ, ᐊᑕᐅᑦᑎᒃᑯᑦ ᐊᐅᓚᑦᑎᓂᖃᕐᓂᐊᕐᓗᑎᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᐱᓕᕆᐊᕆᓂᐊᕐᓗᒍ, ᐃᖅᑲᓗᓕᕆᔨᒃᑯᑦ (DFO) ᖃᓄᖅᑑᕆᓂᕐᒧᑦ ᐊᑐᐊᕆᖓᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐊᓯᐅᔨᑦᑕᐃᓕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐸᕐᓇᐃᓂᖅ (ᑕᕆᐅᕐᓂᑦ ᐊᐅᓚᑦᑎᓂᐅᓚᐅᖅᓯᒪᔪᖅ) ᑲᑎᒪᕐᑯᔩᓚᐅᖅᑐᑦ ᒪᕐᕈᐃᖓᔪᑦ ᑲᓇᑕᒥᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔩᒃᑯᓐᓂᑦ (CSAS), ᓇᐃᓈᖅᑎᕐᓂᐊᕐᓗᒋᑦ ᐊᒻᒪᓗ ᕿᒥᕐᕈᓗᒋᑦ ᖃᓄᐃᖓᓂᖓᑕ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐊᒻᒪᓗ ᖃᓂᑕᖓ (DFO 2021).

ᐸᕐᓇᐃᓂᕐᒥᑦ ᑕᒪᑐᒨᖓ ᐃᓚᐅᔪᑦ ᐊᒥᓱᑦ ᑲᓇᑕᒥᑦ, ᐊᒥᓱᑦ ᐃᓚᐅᖃᑕᐅᔪᑦ ᑲᑎᒪᔩᐊᓛᖑᕝᕗᑎᒃ, ᑐᑭᐅᔪᑦ ᐱᔾᔪᑕᐅᔪᓄᑦ ᐱᓕᕆᐊᖑᓚᐅᖅᑐᖅ ᐱᓕᕆᖃᑎᒋᕝᕗᑎᑦ ᑲᓇᑕᒥᑦ ᒐᕙᒪᒃᑯᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ, ᐊᒻᒪᓗ ᐃᓚᐅᕝᕗᑎᒃ ᑲᓇᑕᒥᑦ ᒐᕙᒪᒃᑯᓐᓂᙶᖅᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᔩᑦ, ᐊᑯᑭᑦᑐᕐᒥᓪᓗ ᐊᒻᒪᓗ ᑎᐊᓖᒃᒥᑦ. ᐊᔾᔨᕐᓚᖓᑎᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖅᑐᓂᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖅᑐᓂᒃ ᕿᒥᕐᕈᓂᕐᒥᑦ ᐅᓂᒃᑳᑉ (EOR) ᐊᑎᖅᑐᖅ *'ᐆᒪᔪᖅᑐᐃᑦ ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖅᑐᓂᒃ ᕿᒥᕐᕈᓂᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐊᒻᒪᓗ ᖃᓂᑕᖓᓂᑦ'* ᐅᓂᒃᑳᓕᐅᖅᑕᐅᓚᐅᖅᑐᖅ ᐃᖅᑲᓗᓕᕆᔨᒃᑯᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᔩᖏᓐᓄᑦ (ᑕᑯᓗᒍ Hornby et al. 2021) ᑐᙵᕕᖃᖅᑎᑦᑎᕝᕗᑎᒡᓗ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᒃ CSAS-ᒥᑦ ᐃᓚᐅᔪᑦ ᕿᒥᕐᕈᓂᐊᕐᓗᑎᒃ ᑲᑎᒪᓂᕐᒧᑦ. ᑕᒪᕐᒥᒃ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᓂᕐᒥᒃ ᐅᓂᒃᑳᖅ ᐊᒻᒪᓗ Hornby et al. (2021) ᐊᑐᖅᑕᐅᓂᐊᕐᓂᖅᑐᑦ ᐱᕚᕕᐅᔪᓐᓇᖅᑐᓄᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐅᖃᖅᑎᖃᕐᓂᕐᓄᑦ ᐊᒻᒪᓗ ᐱᕗᓕᕆᐊᔭᐅᓂᖏᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ.ᐊᑐᓇᐊᖃᒻᒪᓇᒃᑐᓂᒃ ᐱᑕᖃᑐᐃᓐᓇᓇᐊᖃᕋᓗᐊᖅᑎᓪᓗᒍ ᐆᒪᔪᖃᖅᑐᓂᒃ, ᑕᕆᐅᑉ ᖃᓄᐃᖓᓂᖓᓄᑦ, ᐊᒻᒪᓗ ᐱᖁᓯᕆᔭᐅᔪᓂᑦ ᐊᔾᔨᒌᙱᑦᑐᓂᑦ ᑕᒪᐃᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᐊᒻᒪᓗ ᐊᕕᒃᓯᒪᔪᑦ ᓄᓇᐃᑦ ᑲᓇᑕᒥᑦ, ᐊᑯᑭᑦᑐᕐᒥᑦ, ᐊᒻᒪᓗ

ᑎᐊᓪᓖᒃᒥᑦ, ᑎᑎᖅᑲᐅᑎ ᑐᓂᓯᔫᒃᓴᐅᑕᐅᔪᖅ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᒃ ᐊᒻᒪᓗ ᐅᖃᐅᔾᔨᓂᕐᒧᑦ ᐃᑲᔪᕐᓗᓂ ᐊᑐᕌᖓᑦ ᐃᓂᐅᔪᓗᒃᑖᒧᑦ, ᐊᒻᒪᓗ ᐃᓱᒪᕆᔭᐅᔪᖕᓇᖅᑐᖅ ᐃᓱᒪᓕᐅᕈᑕᐅᓂᐊᕐᓗᓂ ᐊᑕᐅᑦᑎᒃᑯᑦ ᐅᕙᓗᓐᓂᑦ ᐊᑐᓂ ᐊᕕᒃᓯᒪᔪᑦ ᓄᓇᐅᔪᓄᑦ.

## ᖃᐅᔨᓴᐃᓂᖅ

ᐊᔾᔨᕐᓚᖓᑎᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑐᓂᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖅᑐᓂᒃ ᕿᒥᕐᕈᓂᕐᒥᑦ ᐅᓂᑳᑉ (EOR) ᐱᓕᓇᐊᕐᔪᓚᐅᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᖃᓂᑕᖓᓄᓪᓗ ᐊᒻᒪᓗ ᐊᑭᐅᓃᑦᑐᓄᑦ ᐃᓗᐃᑦᑑᖓᔪᓂᑦ ᑎᑎᖅᑲᐅᑎᓂᑦ ᕿᒥᕈᑉᓗᑎᒃ ᓴᖅᑭᑕᐅᓯᒪᔪᓂᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ, ᐅᓂᖄᓂᑦ ᐊᒻᒪᓗ ᐱᓕᕆᐊᓕᖕᓂᑦ ᕿᒥᕐᕈᔭᐅᔪᓂᑦ ᐅᖃᓕᒫᒐᒃᓴᓂᑦ, ᐊᒻᒪᓗ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᓂᑦ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᓐᓂᑦ ᐊᒻᒪᓗ ᒪᖃᐃᑎᐅᑉ/ᐊᑐᖅᑎᐅᔩᑉ ᖃᐅᔨᒪᓂᕆᔭᖏᓐᓂᑦ ᒪᓂᒪᓚᐅᖅᑐᓂᒃ ᑕᒫᓂ ᐃᓂᐅᔪᒥᑦ. ᕿᒥᕐᕈᓂᖅ ᐃᓕᑕᖅᓯᖕᒥᔪᖅ ᒦᓇᐅᔪᖅ ᖃᐅᔨᒪᔭᐅᔪᓂᒃ ᖃᐅᔨᑎᑦᑎᔪᖕᓇᖅᑐᓂᓪᓗᓐᓂᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᕆᒃᑐᓂᒃ, ᑕᑯᒃᓴᐅᑎᑦᑎᑉᓗᓂᓗ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᖅ ᓄᑕᐅᙱᑉᐸᑦ, ᐱᐊᓂᒃᓯᒪᙱᑉᐸᑦ, ᐱᑕᖃᙱᑦᑐᖃᖅᐸᓪᓗᓐᓂᑦ. ᐊᒻᒪᓗᒃᑲᓐᓂᖅ, ᐊᔾᔨᕐᓚᖓᑎᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑐᓂᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖅᑐᓂᒃ ᕿᒥᕐᕈᓂᕐᒥᑦ ᐅᓂᑳᒥᑦ (EOR) ᐃᓚᐅᔪᑦ ᓇᐃᓈᖅᓯᒪᔪᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᐊᒻᒪᓗ ᐃᓂᖃᕐᓂᕐᒧᑦ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᒃ ᐱᒻᒪᓇᐅᓛᖑᔪᓄᑦ ᐆᒪᔪᖃᕐᕕᐅᔪᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᑐᓂᔭᐅᔪᑦ ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᑕᕐᕕᓪᔪᐊᕐᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ ᓄᓇᒥᑦ ᐱᕝᕕᐅᔪᓕᕆᔾᔪᒃᑯᓐᓂᑦ (Christensen et al. 2017).

ᐊᔾᔨᕐᓚᖓᑎᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑐᓂᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖅᑐᓂᒃ ᕿᒥᕐᕈᓂᕐᒥᑦ ᐅᓂᑳᑉ (EOR), ᑖᓐᓇ ᐅᓂᑳᖅ ᐋᖅᑭᒃᓯᒪᔪᖅ ᓯᑕᒪᐅᓗᐊᖅᑐᓂᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᕆᒃᑐᓄᑦ ᐱᔾᔪᑕᐅᔪᓄᑦ ᕿᒥᕐᕈᔭᐅᓚᐅᖅᑐᑦ CSAS-ᒥᑦ ᑲᑎᒪᓂᕐᒥᑦ ᐊᔪᙱᓐᓂᖃᖅᑐᓄᑦ ᑲᓇᑕᒥᑦ, ᑎᐊᓪᓖᒃᒥᑦ, ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ:

1. ᓯᓚᕙᑦ, ᓯᑯ, ᑕᕆᐅᖅ ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᑐᖅᑕᕙᑦ.
2. ᐆᒪᔪᓂᑦ ᐱᓕᐅᕆᓃᓕᐊᓂᖏᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖅᑐᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᑦ.
3. ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒧᑕᐃᑦ, ᐆᒪᔪᕋᓛᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ.
4. ᑕᕆᐅᕐᒧᑕᐃᑦ ᓂᕐᔪᑏᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᑦ.

ᐊᑐᓂ ᐱᔾᔪᑕᐅᔪᓄᑦ, ᐃᓚᒋᔭᐅᓗᐊᖅᑐᑦ, ᐃᓚᐅᑉᓗᑎᒃ ᓯᒡᔭᐃᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᕆᒃᑐᑦ, ᐊᓯᖏᓪᓗ ᑕᕆᐅᑉ ᖃᓄᐃᖓᓂᖓᓃᑦᑐᑦ ᐊᒻᒪᓗ ᐃᓂᒋᔭᐅᔪᓂᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐃᓕᑕᕆᔭᐅᓚᐅᖅᑐᑦ ᐊᒻᒪᓗ ᓇᐃᓈᖅᑎᖅᓯᒪᔪᑦ ᐊᑖᓂᑦ ᐊᕕᒃᑐᖅᓯᒪᔪᓂᑦ.ᓈᓴᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᓂᑦ ᐱᑕᖃᕆᑦᑐᑦ ᐱᔾᔪᑎᖃᖅᑐᑦ ᐊᑐᓂ ᐱᕈᖅᐸᓪᓕᐊᖃᑎᒋᒃᑐᓂᑦ ᐃᓚᒋᔭᐅᔪᓄᑦ ᓇᐃᓈᖅᑎᖅᓯᒪᖕᒥᔪᑦ ᐃᓱᖏᓐᓂᑦ ᐊᑐᓂ ᐱᔾᔪᑕᐅᔪᓄᑦ. ᓇᓗᓇᐃᔭᖅᓯᒪᒃᑲᓂᖅᑐᓂᒃ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᒃ ᐱᔾᔪᑕᐅᔪᓄᑦ ᐱᔪᒪᕕᑦ, ᐃᓚᐅᑉᓗᑎᒃ ᐱᔾᔪᑕᐅᔪᓄᑦ ᐊᑐᖅᑕᐅᔪᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᓂᕐᒧᑦ ᐅᓂᑳᒥᑦ, ᑕᑯᓗ Hornby et al. (2021).

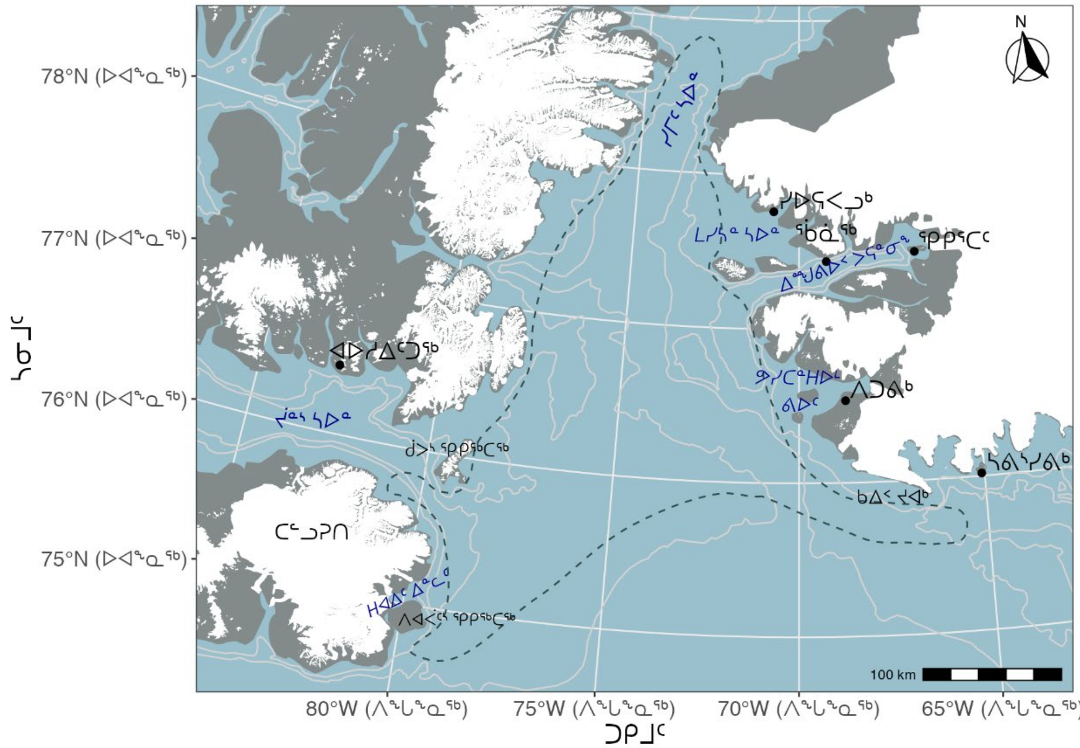
## ᓄᓇᐅᑉ ᖃᓄᐃᖓᓂᖓ ᐊᒻᒪᓗ ᐱᔾᔪᑕᐅᔪᑦ ᕿᒥᕐᕈᓂᕐᒧᑦ

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓ ᓴᙱᔪᒥᒃ ᐊᐅᓚᓐᓂᖅᑲᑦᑎᐊᖅᑐᖅ, ᑐᑭᓕᐅᖅᑕᐅᓯᒪᔪᖅ ᓯᑯᓯᒪᙱᑦᑐᖅ ᐃᒪᖅ ᐅᐱᕐᖔᒃᑯᑦ (ᓇᑦᑎᐊᑦ (ᒫᑦᓯ) - ᒪᓐᓃᑦ (ᔩᓂ)) ᐱᖓᖕᓇᖓᓃᑦᑐᖅ ᐊᒻᒪᓗ ᑲᓇᖕᓇᖓᓂᑦ ᓯᒡᔭᐃᑦ ᓯᑯᐃᑦ ᐊᐅᓚᔪᑦ ᐃᐅᓪᔅᒥᐅᒥᑦ (Ellsmere) ᐊᒻᒪᓗ ᑎᐊᕙᓐ (Devon) ᕿᑭᖅᑕᓂᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ, ᑎᑭᓯᒪᑉᓗᓂ ᐅᐊᖕᓇᖓᓄᑦ ᑮᓐ ᐲᓯᓐᒧᑦ (Kane Basin) ᐊᒻᒪᓗ ᓂᒋᕐᒧᑦ ᕿᑭᖅᑖᓗᑉ ᐃᒪᖓᓄᑦ ᑎᑯᓕᐊᖅᑐᒧᑦ ᑎᑭᐅᑎᓯᒪᔪᑦ ᑲᓇᖕᓇᒥᑦ ᓯᒡᔭᖏᓐᓄᑦ ᑎᐊᕙᓐ (Devon) ᕿᑭᖅᑕᖏᓐᓂᑦ ᑮᑉ ᔭᐊᒃᒧᑦ (Cape York) (ᐊᔾᔨ 1, 2). ᓯᑯᐃᑦ ᐊᐅᓚᔪᓂᑦ ᐊᖏᓛᖑᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ (ᐊᖏᓛᒃᑯᑦ 80,000 ᑭᓛᒥᑕᐃᑦ$^{2}$), ᐊᒻᒪᓗ ᑭᒡᓕᓕᐅᖅᑕᐅᓯᒪᔪᑦ ᐊᐅᓚᔪᑦ ᓯᑯᓄᑦ ᒪᕐᕉᖕᓂᑦ, ᐃᓛᓐᓂᒃᑯᑦ ᐱᖓᓱᓄᑦ ᓴᓂᕋᖅᑲᖅᓗᑎᒃ. ᑕᐃᑉᓱᒪᓂ, ᓯᑯᖃᑦᑕᕐᓂᖅ Nares Strait-ᒥᑦ ᐊᑉᕐᑯᑎᖃᖅᐸᓚᐅᖅᑐᖅ ᐊᑯᓐᓂᖏᓐᓂᑦ ᑲᓇᑕᐅᑉ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑑᑉ, ᑲᑎᕝᕗᓂ ᐅᒥᒻᒫᑦᓄᓅᓂᑦ (ᐃᐅᓪᔅᒥᐅ (Ellsmere) ᕿᑭᖅᑕᖅ) ᐊᒻᒪᓗ ᐊᕙᓂᖅᓱᐊᖅᒧᑦ (ᐅᐊᖕᓇᖅᐸᓯᖓ

ᐱᖓᖕᓇᖅᐸᓯᖓᓄ ᐊᑯᑭᑦᑑᑉ). ᐅᑉᓗᒥ, ᓯᑯᐃᑦ ᐊᐅᓚᓂᐅᔪᑦ ᐊᒻᒪᓗ ᓯᓈ ᐃᐅᕐᔅᓯᐅᒥᑦ (Ellsmere) ᕿᑭᖅᑕᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐃᓄᐃᑦ ᐃᖏᕐᕋᔅᓭᖏᓐᓄᑦ ᐊᒻᒪᓗ ᒪᖃᐃᕝᕙᒋᔭᐅᑉᓗᓂ, ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᒻᒪᕆᐅᖏᓐᓇᖅᑐᖅ ᖃᓂᑕᖓᓃᑦᑐᓄᑦ ᓄᓇᓕᖕᓄᑦ ᐊᐅᔭᐃᑦᑐᕐᒥᑦ, ᓯᐅᕋᐸᓗᖏᑦ, ᖃᓈᕐᒥᑦ, ᐊᒻᒪᓗ ᐱᑐᕚᒃᒥᑦ. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᑕ ᖃᓂᖓᓃᒻᒪᕆᙱᒃᑲᓗᐊᖅᓱᑎᒃ, ᓄᓇᓖᑦ ᖃᐅᓯᐃᑦᑐᖅ, ᐃᒃᐱᐊᕐᔭᒃ, ᒥᑦᑎᒪᑕᓖᒃ, ᑲᖏᖅᑐᒫᐱᒃ, ᕿᑭᖅᑕᕐᔭᐊᖅ, ᓴᕙᔅᓯᕚᒃ, ᐊᒻᒪᓗ ᑯᓗᕐᓯᐊᕐᒥᑦ ᒪᖃᐃᖃᑦᑕᖅᑐᓗᒃᑖᖑᔪᑦ ᓂᕐᔪᑎᓂᒃ, (ᓱᕐᓗ, ᓇᑦᑎᕐᓂᑦ, ᕿᓇᓗᒐᕐᓂᑦ, ᐊᒻᒪᓗ ᑑᒑᓕᖕᓂᐅᔫᒃᓴᐅᔪᖅ ᓅᖃᑦᑕᖅᑐᓂᒃ ᐊᑯᓐᓂᖏᓐᓂᑦ ᑕᑦᓗᕈᑎᐅᑉ ᐃᒪᖓᓂᑦ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ (ᐊᔾᔨ 1).

ᐱᒻᒪᕆᐅᓂᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᔾᔪᑎᖃᖅᑐᖅ, ᐊᖏᔪᒥᑦ ᐃᓚᖓᒍᑦ, ᐃᓂᒋᔭᖓ ᐊᒻᒪᓗ ᖃᓂᑕᖏᑦ ᓄᓇᐅᑉ ᐊᖏᓂᕆᔭᖓᑕ (ᓱᕐᓗ, ᖁᑦᑎᑦᑎᐊᖅᑐᑦ ᖃᖅᑲᐃᑦ, ᓯᕿᑦ, ᓯᑯᓯᒪᔪᑦ, ᑐᐊᑦᑐᑦ ᓄᓇᒧᑦ ᖃᓂᑦᑐᐃᑦ ᐃᒪᐃᑦ). ᓄᓇᖓ, ᐃᓚᐅᑉᓗᓂ ᐊᓂᖅᕵᖅᑐᖅᑕᑉᑎᓐᓂᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᑦ, ᐊᓄᕆᑐᑉᓗᑎᒃ ᐱᒋᐊᕐᕙᒃᑰᖅᓱᑎᒃ (Smith Sound, Kane Basin, ᐊᒻᒪᓗ Nares Strait), ᐊᑐᕆᐊᖃᖅᑐᑦ ᐋᖅᑭᒃᑕᐅᓂᖏᓐᓄᑦ ᓯᑯᐃᑦ ᐊᐅᓚᔪᑦ ᑕᒫᓂ. ᐊᓄᕆᑐᓂᕐᒥᑦ ᐱᔪᒥᒃ ᑕᕆᐅᕐᒥᑦ ᐊᐅᓚᓂᖓ, ᐊᒻᒪᓗ ᑎᑭᐅᑎᖃᑦᑕᕐᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᒻᒪᓗ ᐊᑦᓛᓐᑎᒃ (Atlantic) ᐃᒪᖏᑦ ᑕᒫᓂ, ᐱᑎᑕᐅᔪᑦ ᑕᕆᐅᑉ ᐊᓗᐊᑕ ᐋᖅᑭᐅᒪᓂᖓᓄᑦ, ᐃᓚᐅᑉᓗᑎᒃ ᖁᓕᕈᐊᖑᓂᕋᖅᑕᐅᔪᑦ ᑕᑭᔪᓂᒃ ᐃᓗᑐᓂᖅᖅᑐᓄᑦ, ᐊᒻᒪᓗ ᖃᑉᓯᑲᓪᓚᖕᓂᑦ ᑐᐊᓐᓂᐅᔪᓂᒃ (ᓱᕐᓗ, Nares Strait, Jones Sound, Inglefield Bredning) ᐊᒃᓱᕈᖅᑎᑦᑎᔪᑦ ᑕᕆᐅᑉ ᐊᐅᓚᓐᓂᕆᔭᖓᓂᑦ (ᐊᔾᔨ 2, 3). ᑲᑎᓐᓂᖏᑦ ᐊᒻᒪᓗ ᐃᒡᒥᖃᑦᑕᕐᓂᖓᓂᑦ ᓂᕿᑎᐊᕙᖃᐅᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᒻᒪᓗ ᐊᑦᓛᓐᑎᒃ (Atlantic) ᐃᒪᖏᑦ ᐃᑲᔪᐃᔪᑦ ᐆᒪᔪᓂᒃ ᐊᒻᒪᓗ ᐊᔾᔨᙵᖏᑦᑑᑕᐅᓂᖏᑦ ᑕᒫᓂ.

ᖃᐅᔨᒪᔭᐅᔪᖅ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᐊᒻᒪᓗ ᐱᖁᓯᖓ ᑕᒫᓂ ᐊᖏᓂᖅᓴᒃᓚᐅᔪᖅ ᓯᑯᓂᒃ ᐊᐅᓚᓂᐅᔪᓂᑦ, ᐊᒻᒪᓗ ᑕᒫᓂ ᐱᖁᓯᕆᓂᕆᔭᖓ ᑲᔪᓯᔪᑦ, ᐃᓱᒪᒋᔭᐅᖏᕐᓗᓂ ᓄᓇᕐᔪᐊᕐᒥᑦ ᑭᒻᓕᐅᔪᑦ, ᐊᒻᒪᓗ ᑲᑎᑦᑎᑉᓗᓂ ᐃᓄᖕᓂᑦ ᐊᒻᒪᓗ ᐱᕝᕙᐅᖃᑦᑕᖅᑐᓂᒃ. ᑕᐃᒪᓐᓇᒧᑦ, ᓄᓇᖓ ᕿᒥᕐᕈᔭᐅᔩᑉ (ᐊᔾᔨ 1) ᑭᒻᓕᖃᓚᐅᖏᑦᑐᖅ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖏᓐᓄᑐᐃᓐᓇᖅ, ᐊᒻᒪᓗ ᐃᓚᐅᑉᓗᑎᒃ ᑕᕆᐅᑉ ᖃᓄᐃᖓᓂᖓᓄᑦ ᐃᓚᒋᔭᐅᔪᑦ ᑲᑎᓯᒪᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᓴᓂᕋᓗᒃᑖᖓᓂᑦ (ᓲᕐᓗ, ᐱᑎᑦᑎᔪᑦ ᓕᖕᑲᓐ ᑕᕆᐅᕐᒥᑦ (Lincoln Sea) ᐊᒻᒪᓗ ᐃᒪᕐᒥᑦ ᐊᒡᔭᖅᑐᐃᓂᖅ ᐱᐅᕆᖕ ᑕᕆᐅᕐᒥᑦ (Bering Sea) ᐊᒻᒪᓗ ᐅᐊᖕᓇᖓᓂᑦ ᐊᑦᓛᓐᑎᒃ (Atlantic), ᑕᑯᒃᓴᐅᑎᑦᑎᑉᓗᓂ ᐆᒪᓂᖅᑲᖅᑐᓂᒃ ᑲᑎᑦᑎᓂᕐᒧᑦ ᐊᓯᖏᓐᓂᙳᖅᑐᓂᑦ.




*ᐊᔾᔨ 2. ᖃᒡᓕᒋᐊᖅᓯᒪᓪᓗᓂ ᓴᕿᕙᕐᔭᐊᖅ/ᐱᑭᐊᓚᓱᕐᔭᐊᖅ), ᐃᓚᐅᓪᓗᓂ 200-500 ᒦᑕ ᐃᒪᐅᑉ ᐃᑎᑎᒋᓂᖕᒋᓐᓄᑦ ᓇᓗᓇᐃᒃᑯᑎᐅᔪᑦ (ᐅᕙᙳᑦ: ᐊᑐᒃᑲᓐᓂᕈᓐᓇᖅᑐᓕᕆᔾᒃᑯᑦ ᑲᓇᑕᒥ), ᐊᒻᒪ ᓯᒡᔭᓃᑦᑐᑦ ᑲᖏᖅᖢᐃᕐ, ᕿᑭᖅᑕᐃᕐ, ᐊᒻᒪᓗ ᐃᒪᐃᑦ ᐅᕙᓂ ᐅᓂᒃᑳᒥ ᐅᖃᐅᓯᐅᔪᑦ.*

## ᐱᔾᔪᑕᐅᔪᖅ 1. ᓯᓚᕗᑦ, ᓯᑯ, ᑕᕆᐅᖅ ᐊᒻᒪᓗ ᐊᓂᖅᓷᖅᑐᖅᑕᕗᑦ

### ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ

ᐊᑐᑦᑎᐊᖅᑐᖅ ᐱᓕᐅᕆᕙᒡᓕᐊᓂᕐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᑕᐃᒪᐅᓂᖕᒋᓐᓄᑦ ᓯᑯᐃᑦ, ᐅᕝᕙᓘᓐᓃᑦ ᓯᑯᐃᑦ ᐃᓱᖕᒋᑦ (ᓯᕿᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᓯᑯ), ᐊᒻᒪᓗ ᕐᑯᒻᒧᑦ ᑲᐃᕙᑦᑐᑦ ᐱᙱᖃᑦᑕᖅᑐᑦ ᐊᓯᐊᙱᕐᓂᖓᓄᑦ ᐊᕙᑎ (ᓰᕐᓗ, ᖃᐅᒪᓂᕐᒧᑦ ᐱᔭᐅᓂᖓᓄᑦ, ᑕᕆᐅᓕᒃ ᐱᔭᐅᖕᒋᑦᑐᖅ, ᐊᒻᒪᓗ ᐊᓄᕆᒥᑦ ᐱᑎᑦᑎᔪᖅ). ᑲᐃᕙᑦᑐᖅ ᐊᒻᒪᓗ ᐊᐅᓚᓂᖓᑕ ᑕᕆᐅᑉ ᓯᑯᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᒃᑯᑦ ᐊᖏᔫᔪᖅ, ᑭᓯᐊᓂ ᒪᓕᒋᐊᔭᒃᑐᖅ ᑭᖑᒻᒧᖖᖅ ᐊᐅᓚᓂᖕᒋᑦ ᐊᐅᓚᓃᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᐊᓄᕆᑐᓂᕐᓄᑦ. ᑕᒪᓐᓇ ᐊᓄᕈᑐᓂᖓ ᑲᒪᓇᖅᑐᖅ ᐊᒻᒪᓗ ᐊᓄᕌᓗᐊᖃᑦᑕᖅᓱᓂ ᐅᐊᖕᓇᒥᑦ-ᑲᓇᖕᓇᒥᑦ, ᑲᑎᕐᓱᑎᒃ Nares Strait-ᒧᑦ ᐊᒻᒪᓗ ᐊᓄᕆᑦᑐᖅᐸᓪᓕᐊᑉᐳᓂ ᓄᖅᑲᖓᑎᑕᐅᖕᒪᑦ ᖃᖅᑲᖕᒋᓐᓄᑦ ᐊᑯᑭᑦᑑᑉ ᐊᒻᒪᓗ ᐃᐅᓪᓖᒥᐅ ᕿᑭᖅᑕᐅᑉ (Ellsmere Island). ᓂᒡᓕᓇᕐᓂᐅᑎᓪᓗᒍ (ᐋᒡᔪᓕᕐᕕᖕᒥᑦ (ᑎᓯᐱᕆ) ᓇᑦᑎᐊᓄᑦ (ᒫᑦᓯ) ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᖃᓪᓕᖅᓯᒪᖃᑦᑕᖅᑐᖅ ᓄᑖᓂᒃ ᐊᒻᒪᓗ ᓯᑰᖅᑐᓂᑦ, ᓯᕗᓪᓕᖅ ᐅᑭᐅᒥᑦ ᓯᑯᕙᓪᓕᐊᓕᖅᓱᓂ ᑭᓯᐊᓂ ᓇᑦᑎᐊᕐᒥᑦ (ᒫᑦᓯ). ᓕᖕᑲᓐ ᑕᕆᐅᖅ (Lincoln Sea), Nare Strait ᑎᑭᐅᑎᓂᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᕆᐅᕐᒥᑦᑐᖅ, ᑕᐃᔭᐅᖓᔾᔭᒃᑐᖅ 'ᑭᐳᒃᑐᖅ ᐊᕙᓗ'-ᒥᑦ, ᐊᓂᖅᓷᖅᑐᖅᑕᑉᑕ ᖃᓄᐃᓕᐅᕐᓂᖓ ᐊᔾᔭᖅᑐᐃᖓᒪᑦ ᐃᑉᔪᔪᒥᒃ ᓯᑯᒥᑦ ᓯᒡᔪᒧᑦ ᐅᐊᖕᓇᖅᐸᓯᖓᓄᑦ ᐊᑯᑭᑦᑑᑉ, ᐅᕝᕙᓘᓐᓃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ Fram Strait-ᑰᖅᖢᓂ, ᐱᑎᑦᑎᑉᓗᓂ ᓯᑯᐃᑦ ᖃᓄᐃᑦᑑᓂᖕᒋᓐᓂᑦ ᑕᐃᒪᐅᔪᖅ Nares Strait-ᒥᑦ. ᑕᒪᓐᓇ ᑕᕆᐅᑉ ᓯᑯᖓᓂᑦ ᐊᒡᔭᖅᑐᐃᔪᖅ ᑕᐃᒪᐅᖓᔾᔭᒃᑐᖅ ᐊᐅᔭᐅᑉ ᓄᙳᐊᓂᑦ ᓯᑯᖃᑦᑕᕐᓂᐅᑉ, ᓄᖅᑲᖅᖢᓂᓗ ᓯᑯᒃᐸᑦ Nares Strait-ᒧᑦ ᐊᒻᒪᓗ ᓯᑯᐃᑦ ᐊᐅᓚᓃᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᓕᖅᖢᑎᒃ.

ᓱᓇᑐᐃᓐᓇᓕᕆᓃᑦ ᑐᑭᓕᐅᖅᓯᒪᔭᕆᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓃᑦ ᑕᐃᒪᐅᖃᔾᓂᙶᑦ ᑕᕆᐅᕐᒧᑦ ᐃᓚᒋᔭᐅᐸᓗᑎᒃ ᓵᑐᑦ ᓯᑯᐃᑦ ᐊᒻᒪᓗ ᐃᒪᖅ ᐃᓂᐅᔾᒦᖃᑦᑕᖅᑐᑦ, ᓯᓚᒧᑦ, ᐃᑉᔪᔾᑦ ᓯᑯᐃᑦ ᓂᕈᐅᒋᔭᐅᐸᓗᑎᒃ. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐱᔾᔪᑕᐅᓗᐊᖅᑐᖅ ᐅᒃᑯᐃᖅᓯᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖃᖅᑎᑦᑎᓂᕐᒧᑦ ᐊᓄᕆᒥᑦ ᐱᔪᓂᒃ ᓯᑰᒃᑐᓂᒃ Nares Strait-ᒧᑦ, Kane Basin-ᒧᑦ, ᐊᒻᒪᓗ Smith Sound-ᒧᑦ. ᓯᕗᓪᓕᖅ ᐅᐊᓐᓇᖅᐸᓯᒃᑐᖅ ᓯᑯᓂᖓ ᐊᑭᐊᓄᑦ ᑎᑭᖃᑦᑕᖅᑐᖅ, ᐅᕝᕙᓘᓐᓃᑦ ᐅᐊᓐᓇᖕᒑᓄᑦ Nares Strait ᐋᓪᔪᓕᕈᖕᒥᑦ (ᑎᓯᐱᕆ) ᐊᕗᓐᓂᕈᖕᒧᑦ (ᕈᕗᐊᕆ), ᐃᓛᓐᓂᒃᑯᑦ ᓇᑦᑎᐊᑦ (ᒫᑦᓯ) ᓄᙳᐊᓄᑦ, ᐱᑕᖃᕈᓐᓃᖅᓱᓂ ᒪᓐᓃᑦᒧᑦ (ᔫᓂ) ᐅᕝᕙᓘᓐᓃᑦ ᓴᑉᐹᑦᒧᑦ (ᔪᓚᐃ). ᑭᖑᓂᐊᒍᑦ ᓂᒋᐊᓂᑦ ᓯᑯᒐᔪᒃᑐᖅ, ᑕᐃᒪᓐᓇᐃᖏᓐᓇᖅᑲᑦᑖᕆᒃᑲᓗᐊᖅᑯᓂ Kane Basin/Smith Sound-ᒥᑦ ᖃᕝᓯᐊᕐᔪᐃᑦ ᐅᐸᓗᐃᑦ ᐱᓇᓱᐊᕈᓰᓪᓘᓐᓃᑦ ᑭᖑᓂᐊᒍᑦ. ᖃᕝᓯᐊᕐᔪᐃᑦ ᓯᑯᓃᑦ ᑎᑭᐅᑎᓯᒪᓂᖓᓄᑦ ᐱᑎᑦᑎᐸᓗᑎᒃ ᓯᑯᐃᑦ ᐊᐅᓚᓂᕐᓂᑦ, ᐊᑯᓂᐅᑎᒋᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐱᓪᓗᓇᒃᑑᓂᖓᓄᑦ. ᓄᑖᑦ ᓯᑯᕙᓪᓕᐊᓃᑦ ᓱᑲᐃᓪᓕᑎᑦᑎᖃᑦᑕᖅᑐᑦ ᐅᐊᓐᓇᖅᑐᓐᓂᑦ ᓄᖅᑲᖅᑎᑦᑎᐸᓗᑎᒃ ᐅᑭᐅᖑᓚᐅᖅᐳᓂ ᐅᐱᕐᖓᓕᕚᖓᑦ, ᐊᒻᒪᓗ ᓯᑯᐃᑦ ᐊᐅᓚᓃᑦ ᐊᖏᓪᓕᒋᐊᖅᐳᓂ ᓂᒋᖅᐸᓯᖕᒧᑦ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓᓄᑦ, ᑎᑭᐅᑎᐸᓗᓂ ᐊᖏᓛᕐᒧᑦ (ᓇᓚᐅᑦᑖᖅᑕᐅᔪᖅ ᐊᖏᑎᒋᓂᖓ 80,000 ᑭᓛᒥᑕᐃᑦ$^{2}$) ᓄᙳᐊᓂᑦ ᒪᓐᓃᑦ (ᔫᓂ) ᐱᒋᐊᕌᕐᓂᖓᓂᓗᓐᓃᑦ ᓴᑉᐹᑦ (ᔪᓚᐃ). ᓯᑯ ᓯᖁᐸᑎᓕᖃᑦᑕᖅᑐᖅ ᓴᑉᐹᓪᒥᑦ (ᔪᓚᐃ), ᓯᑯᐃᑦ ᐊᐅᓚᓂᙳᖅᐳᓂ. ᓯᑯᐃᑦ ᐊᐅᒃᐸᓪᓕᐊᓕᖃᑦᑕᖅᑐᑦ ᐊᑯᑭᑦᑑᑉ ᖃᓂᑕᖓᓂᑦ ᐊᔾᔨᒌᙱᓐᓂᖃᕐᓂᖓᓄᑦ ᖄᖓᓂᑦ ᐆᓇᕐᓂᐅᑉ, ᓯᑯᐃᑦ ᐃᐸᔪᓂᕆᑦ, ᐊᐅᓚᓃᑦ, ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑕ ᖃᓄᐃᓕᐅᕐᓂᕆᑦ. ᓯᑯᓯᒪᙱᑦᑐᖅ ᐃᒪᖃᖃᑦᑕᖅᑐᖅ Smith Sound-ᒥᑦ Devon ᕿᑭᖅᑕᒧᑦ ᐱᖓᓱᐊᓂᑦ ᐱᓇᓱᐊᕈᓯᖓᓂᑦ ᒪᓐᓃᑦ (ᔫᓂ) ᐊᒻᒪᓗ ᑲᑎᙵᐅᑎᒃ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓᓄᑦ ᒪᓐᓃᑦᒥᑦ (ᔫᓂ) ᐅᐊᓐᓇᖕᒑᓄᑦ ᓴᑉᐹᓪᒥᑦ (ᔪᓚᐃ)

ᐊᑐᑎᖃᑎᑉᐱᖕᓂᖕᒋᑦ ᑕᒫᓂ ᐃᒃᐱᒋᓴᕋᐃᓐᓂᖃᖅᑎᑦᑎᔪᖅ ᓯᓚᒧᑦ ᐊᓯᐊᙳᕐᓃᑦ ᖃᓄᐃᓕᐅᕐᓂᕆᓐᓄᑦ. 15 ᐅᑭᐅᓂᑦ ᐊᓂᒍᖅᑐᓂᑦ, ᓯᑯᖃᑦᑕᙳᕆᓐᓂᖅᖅᓴᐅᓕᖅᑐᑦ, ᐊᖑᓯᒃᓯᒋᐊᖅᓯᒪᓂᖅᓴᐅᓕᖅᐳᑎᒃ ᓯᑯᓂᑦ ᐊᐅᓚᓂᖅᑖᕐᓂᖅ ᐊᒻᒪᓗ ᓯᖁᐸᑎᖅᓵᓕᓂᖅᓴᐅᖃᑦᑕᓕᖅᐳᑎᒃ. 2007 ᐅᐱᕐᖔᒥᑦ, ᓯᕗᓪᓕᖅᐸᐅᖑᔫᒃᓴᐅᔩᑦ ᑎᑎᕋᐅᓯᐅᓚᐅᖅᑐᖅ (ᑕᐃᒪᙵᓂᑦ 1970-ᖏᓐᓂᑦ), ᓯᑯᑲᑦᑕᕐᓂᖓ Nares Strait-ᒧᑦ; ᑕᐃᒪᓐᓇᐃᓚᐅᕆᐸᓐᓂ 2009, 2010, 2017, ᐊᒻᒪᓗ 2019-ᒥᑦ (Vincent 2019). ᓯᑯᑲᑦᑕᕐᓂᖓ Nares Strait-ᒧᑦ ᐱᓪᒪᕆᐅᔪᖅ ᑕᐃᒪᓐᓇᐃᓐᓂᖓᓄᑦ ᐊᔪᖅᑎᑦᑎᖓᒪᑦ ᐊᒻᒪᓗ ᒥᒃᓵᒋᐊᖅᑎᑦᑎᐸᓐᓂ ᓂᒋᕐᒧᑦ ᐊᐅᓚᓂᐅᔪᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓᓄᑦ. ᐃᓚᒋᔭᐅᐸᓐᓂ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ ᖃᖓᒃᑯᑦ ᓯᑯᑲᑦᑕᕐᓂᖓᓄᑦ, ᐃᓂᒋᓚᐅᒃᑕᖏᑦ ᓯᑯᑲᑦᑕᕐᓂᖅ ᓅᓯᒪᓕᖅᑐᑦ ᐅᐊᓐᓇᒧᑦ ᑕᐃᒪᙵᓂᑦ 2007-ᒥᑦ, ᑲᓇᖕᓇᐅᑉ ᐃᓱᐊᓂᑦ ᐅᖓᓯᙵᓂᖅᓴᐅᓕᖅᑎᑦᑎᐸᓐᓂ ᓄᓇᒥᑦ ᐊᒻᒪᓗ ᓯᖁᐸᑎᖅᓴᕋᐃᓐᓂᖅᓴᐅᓕᖅᐳᑎᒃ.

**ᑲᐃᕙᓐᓂᖅ, ᖃᓕᓅᖕᓂᖅ, ᐊᒻᒪᓗ ᓂᕿᑦᑎᐊᕙᐃᑦ**

ᐃᑎᓂᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᖃᓄᐃᓕᐅᕐᓂᖅᑎᑕᐅᔪᖅ ᐃᑎᓂᕐᒧᑦ (700 ᒦᑕᐃᑦ), ᕿᑎᐊᓃᖓᐸᓗᓂ ᓱᐸᓗ ᑎᑭᐅᑎᓯᒪᔪᖅ ᐅᐊᖕᓇᖅᐸᓯᐊᓄᑦ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓᓄᑦ ᐊᒻᒪᓗ ᐅᐊᖕᓇᖓᓂᑦ ᐃᓱᐊᓄᑦ Smith Sound (ᐊᔾᔨ 3), ᐊᕙᓗᔭᐅᓯᒪᐸᓗᓂ ᐃᒃᑲᓐᓂᕐᓄᑦ (<200 ᒦᑕᐃᑦ) ᖁᓕᕈᐊᖑᓂᕋᖅᑕᐅᔪᓄᑦ ᑭᐱᔭᐅᓯᒪᐸᓗᑎᒃ ᐊᒥᓲᖏᑦᑐᓄᑦ ᐃᑎᔪᒥᑦ ᑕᑭᔪᑦ ᐃᓗᑐᓂᕐᓄᑦ ᓯᕐᒥᕆᐅᑲᐸᓗᓂ. ᑲᐃᕙᓐᓂᖓ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓ ᖃᓕᓅᓕᖓᔪᓂᑦ ᐃᒪᐅᓂᐅᔪᖅ, ᑐᑭᖅᑐᖅ ᐃᓂᐅᔪᖅ ᐊᒻᒪᓗ ᓴᙱᓂᖏᑦ ᐊᐅᓚᓃᑦ ᐋᖅᑭᒃᑕᐅᓯᒪᔪᖅ ᐊᔾᔨᒌᙱᓐᓂᖓᓄᑦ ᐆᓇᕐᓂᐅᑉ ᐊᒻᒪᓗ ᑕᕆᐅᕐᓂᐅᑉ ᐃᒪᕐᒥᑦ ᐊᑐᓂ ᐃᑎᓂᖏᓐᓂᑦ, ᐊᒻᒪᓗ ᐊᐅᓚᓂᖓᑕ ᑕᕆᐅᑉ ᖃᓂᑕᖓᓂᑦ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓ ᑭᖑᓪᒧᖓᖕᒋᖅ ᐊᐅᓚᔪᖅ ᓲᕐᓗ ᓯᕿᙳᐅᔭᐅᑉ ᐊᐅᓚᓂᖓᑕ. ᐊᓗᐊᓃᑦᑐᑦ (ᐊᔾᔨᖓᖏᑦ ᖃᖅᑲᐃᑦ ᑭᓯᐊᓂ ᑕᕆᐅᑉ ᐊᓗᐊᓃᑦᑐᑦ) ᐊᒻᒪᓗ ᐃᒃᑲᓐᓂᑦ ᑕᐃᒪᐅᔪᑦ ᑕᒪᓘᒃᑖᖅᑲᔭᖅ ᐅᐊᖕᓇᖅᐸᓯᐊᓄᐊᕆᐊᕐᓗᓂ ᕿᑭᖅᑖᓗᐸ ᐃᒪᖓᓄᑦ, ᐊᐅᓚᑎᑦᑎᐸᓗᑎᒃ ᐊᒻᒪᓗ ᐃᒪᕐᒧᑦ ᐃᓚᒋᔭᐅᔪᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᐊᖅᑐᓂᒃ (ᐊᔾᔨ 3).

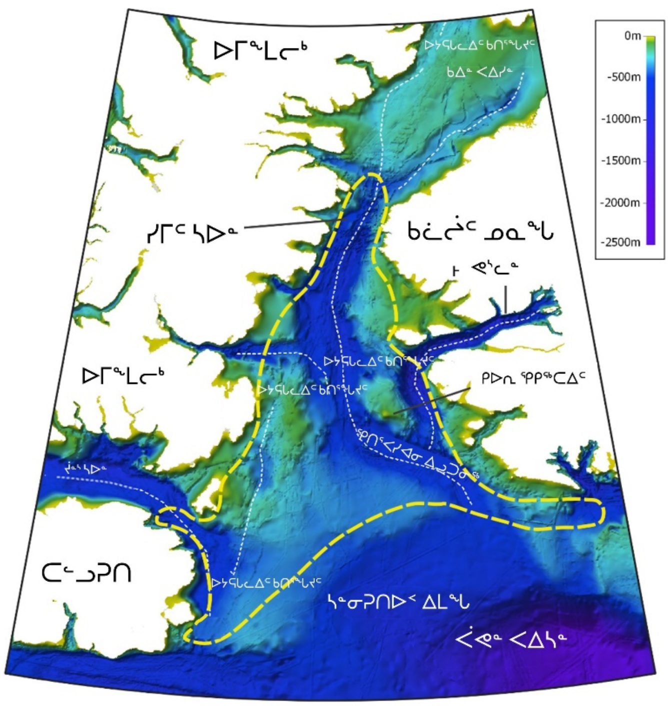
ᐃᒪᕐᒥᑦ ᐱᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᓇᖕᒥᓂᖅ ᐊᔾᔨᐅᖏᑦᑐᓂᒃ ᐃᒪᕐᒧᑦ ᐃᓚᒋᔭᐅᔪᖅᑲᖅᑐᑦ (ᑕᕆᐅᕆᖕᓂᖅ, ᐆᓇᕐᓂᖅ, ᐃᒪᖅᑯᖅᑐᑎᒋᓂᖓ) ᐊᒻᒪᓗ ᖃᓄᐃᓕᐅᖃᑎᒋᖕᓂᖕᒋᑦ ᐃᒪᐃᑦ ᐱᓪᒪᕆᐅᔪᖅ ᓂᕿᑦᑎᐊᕙᖅᑲᖅᑎᑦᑎᓂᕐᒧᑦ, ᐱᓕᐅᕆᐊᓕᓐᓂᐊᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᑲᑎᓐᓂᖏᓐᓄᑦ. ᓯᑕᒪᓂᒃ ᐃᒪᐅᓂᖃᓗᐊᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ:

1. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᑯᕙᔪᖅ (ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐃᑎᓂᖓ ~0-50 ᒦᑕᓂᒃ) ᑕᕆᐅᕆᓗᐊᖏᑦᑐᖅ ᖁᐊᕈᓐᓇᕐᓂᕐᒧᐊᖅᓯᒪᕐᓚᒃᓗᓂ ᐅᑭᐅᓗᒃᑖᕐᓚᒃ, ᑭᓯᐊᓂ ᐆᓇᕐᓂᖃᖅᓗᓂ 7°C -ᒥᑦ ᒪᕿᓐᓄᑦ ᐱᖓᓱᓄᑦ ᑕᖅᑭᓄᑦ ᐊᐅᔭᒃᑯᑦ.

2. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᑯᕙᔪᖅ (ᐸᓯᕙᒃ (Pacific) ᐃᒪᕐᒥᑦ, ᐃᑎᓂᖓ ~50-300 ᒦᑕᓂᒃ;) ᑕᕆᐅᕆᓐᓂᖅᓴᐅᐸᓗᓂ, ᓂᒡᓚᓇᕐᓂᖓ ᖁᐊᖃᑦᑕᕐᓂᖅᓴᐅᐸᓗᓂ ᑭᓯᐊᓂ ᓂᒡᓚᓇᕐᓂᖅᓴᐅᐸᓗᓂ 0°C-ᒥᒃ, ᓄᖑᑎᖅᓯᒪᔪᓂᒃ ᓂᕿᑦᑎᐊᕙᖃᕈᑕᐅᔪᓂᒃ ᐱᑕᖃᐅᖅᓗᓂ.

3. ᐊᑦᓛᓐᑎᒃᒥᑦ (Atlantic) ᐃᒪᖅ ᑯᕙᔪᖅ (ᐱᖓᓐᓇᖓᒍᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᐅᓚᓂᐅᑉ, ᐃᑎᓂᖓ <200 ᒦᑕᓂᒃ) ᐆᓇᔪᓐᓂᖅᓴᖅ (2°C-ᒧᑦ ᑎᑭᕐᓗᓂ) ᑕᕆᐅᕆᓐᓂᖅᓴᐅᐸᓗᓂᓗ, ᖃᐅᔨᒪᔭᐅᓚᖓᔪᖅ ᐊᑦᓛᓐᑎᒃ (Atlantic) ᐊᑯᓐᓂᖓᓂᑦ ᐃᒪᖅᑎᑐᑦ.

4. ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓ ᐃᑎᓂᕐᒥᑦ, ᐊᑖᓂᑦ 1200 ᒦᑕᓂᒃ ᐃᑎᓂᖃᖅᑐᖅ, ᑕᕆᐅᕆᓐᓂᖓ ᐊᑦᓛᓐᑎᒃᑎᑐᑦ ᑯᕙᔪᒥᑦ, ᑭᓯᐊᓂ ᐆᓇᕐᓂᖓ ᐊᑖᓅᑦᑐᖅ 0°C.




*ᐊᔾᔨ 3. ᑕᕆᐅᑉ ᐊᓗᐊ (ᒦᑕᒃᑯᑦ) ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᐃᑎᓂᐅᓂᖏᑦ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᑦ ᖃᑯᖅᑕᒥ ᑎᑎᖅᓯᒪᔪᓂᒃ ᐊᒻᒪᓗ ᓇᓃᓐᓂᖏᑦ ᐊᒻᒪᓗ ᐅᔾᔨᓚᓚᐃᑦ ᑲᑎᓯᒪᐅᖅᑐᓐ ᓇᓃᓐᓂᖏᓐᓂᒃ (ᑲᑎᕐᓯᒐᕐᓂᒃ ᐅᑯᓇᙶᑦ [International Bathymetric Chart of the Arctic Ocean (IBCAO) ver. 4]).*

ᐊᓄᕆᑐᓂᖅ ᐅᒃᑯᐃᖅᓯᖃᑦᑕᖅᑐᖅ ᓯᑯᓂᒃ ᐊᐅᓚᔪᓂᒃ ᐊᔭᒃᓱᕆᓪᓗ ᑕᕆᐅᕐᒥᑦ ᓯᑯᐃᑦ ᓂᕆᕐᒧᑦ ᐱᖓᓐᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐃᑲᔪᐃᓂᖃᕐᒥᔪᖅ ᐃᒻᒥᖅᑐᒥᑦ ᐊᑯᑭᑦᑑᑉ ᓯᒡᔭᖓᓂᑦ. ᐱᒻᒪᕆᐅᔪᑦ ᓂᕿᑦᑎᐊᕙᐃᑦ (ᓰᕐᓗ, nitrate, silicate ᐊᒻᒪᓗ phosphate) ᑯᕙᔪᑦ ᑕᒪᐅᖓ ᐅᑭᐅᖅᑕᖅᑐᖅ ᐃᒪᖏᓐᓂᑦ Smith Sound-ᒧᐊᖅᑐᑦ (ᑭᖑᓂᐊᒍᑦ ᐊᑯᓂᐅᔪᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᙶᖅᓗᓂ) ᐊᒻᒪᓗ ᐊᑦᓛᓐᑎᒃ ᐃᒪᖏᓐᓂᑦ ᐅᐊᖓᓇᖓᓂᑦ ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᓂᑦ. ᖃᓂᑦᑐᒥᑦ ᐊᒻᒪᓗ ᐅᖓᓯᒃᑐᒥᑦ ᑲᑎᓐᓃᑦ ᐱᑎᑦᑎᔪᑦ ᓂᕿᑦᑎᐊᕙᒃᑕᖃᐅᕐᓂᕐᒥᑦ ᐊᒻᒪᓗ

ᐊᓯᐊᙳᖅᑕᕐᓂᖏᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᑕᐃᒪᓐᓇᒧᑦ ᐊᒃᑐᖅᓯᐸᓗᑎᒃ ᐱᓕᐅᕆᔨᐅᓗᐊᖅᑐᓂᑦ ᐊᒻᒪᓗ ᓂᕿᒋᔭᐅᔪᓂᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᐃᒪᖅᑖᕐᕕᐅᔪᑦ ᐸᓯᕕᒃ (Pacific) ᑕᕆᐅᕐᒥᑦ ᓂᕿᑦᑎᐊᕙᖅᑐᑦ, ᑭᓯᐊᓂ ᐊᓯᐊᙳᕈᖕᓇᑦᑎᐊᖅᑐᑦ ᐊᐅᓚᑎᓪᓗᒋᑦ, ᐊᒻᒪᓗ ᓯᓚᒧᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᐱᔪᓂᒃ (ᓱᕐᓗ, ᐊᓯᐊᙳᕐᓂᖓ ᓴᙱᓂᖓᑕ ᐊᒻᒪᓗ ᓇᒧᙵᐅᓂᖓᑕ Beaufort Gyre), ᑕᐃᒪᓐᓇᒧᓪᓗ ᑕᐃᒪᐅᖏᓐᓇᙱᑦᑐᑦ ᐋᖅᑭᐅᒪᔪᒥᑦ. ᒫᓐᓇᓵᖅ ᖃᐅᔾᔭᐅᔪᓂᑦ ᓴᙱᔪᒥᒃ ᐅᑭᐅᑉ ᐃᓚᖓᓂᑦ ᐊᒻᒪᓗ ᐊᕐᕿᒍᑕᒫᑦ ᐃᓚᖏᓐᓂᑦ ᐊᔾᔩᙱᖏᓐᓂᐅᔪᑦ ᐃᓚᒋᔭᐅᔪᓂᑦ ᐊᒻᒪᓗ ᓇᒧᙵᐅᓂᖏᓐᓂᑦ ᐊᑦᓛᓐᑎᒃ (Atlantic) ᐃᒪᕐᒥᑦ ᑯᕙᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᐱᖓᓐᓇᖓᒍᑦ ᐊᑯᑭᑦᑑᑉ ᐊᐅᓚᓂᖓᓂᑦ, ᐊᒃᑐᐊᓂᖃᖅᓗᑎᒃ ᐊᖏᔪᒥᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᖕᓄᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᐊᓯᐊᙳᖃᑦᑕᖅᑐᓄᑦ ᐅᐊᖕᓇᖓᓂᑦ ᐊᑦᓛᓐᑎᒃ (Atlantic). ᖃᓕᓅᓕᖕᖓᓂᖅ ᐊᒻᒪᓗ ᐊᑯᑉᓕᖅᓯᒪᓂᖓ ᐃᒪᐅᑉ, ᐊᑐᓗᐊᖅᑐᖅ ᐃᒪᑦᑎᐊᕙᖕᒥᑦ/ᑕᕆᐅᐅᑉ ᓯᑯᖓᓂᑦ ᐊᒻᒪᓗ ᐊᓄᕆᒥᑦ, ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᑎᑦᑎᓗᐊᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐊᓯᖏᑦᑎᑐᑦ ᐃᓂᐅᔪᓂᑦ.

### ᓯᕐᒦᑦ ᐊᒻᒪᓗ ᓯᓪᕙᒥᑦ ᐱᕙᓪᓕᐊᓃᑦ

ᒫᓐᓇᐅᔪᖅ, ᓯᕐᒥᖕᓄᑦ ᖃᓪᓕᖅᑕᐅᓯᒪᓕᑦᑎᐊᖅᑐᖅ ᐅᐊᖕᓇᖅᐸᓯᖓ ᐱᖓᖕᓇᖅᐸᓯᖓ ᐊᑯᑭᑦᑑᑉ ᐊᒻᒪᓗ ᑲᓇᖕᓇᖅᐸᓯᖓ Queen Elizabeth ᕿᑭᖅᑕᐃᑦ, ᐊᒥᓱᑦ ᐲᖅᐸᓪᓕᐊᔪᑦ ᓯᕐᒦᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓄᙵᐅᐸᓗᑎᒃ. ᑕᐃᒪᙵᓂᑦ 2000-ᖏᓐᓂᑦ, ᓯᕐᒦᑦ ᐲᖅᐸᓪᓕᐊᔪᓄᑦ ᓈᓴᐅᑏᑦ ᐊᖏᒡᓕᕚᓪᓕᖅᓯᒪᓕᑦᑎᐊᖅᑐᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᓯᑯᖏᓐᓂᑦ ᐊᒻᒪᓗ ᐃᐅᓪᔅᒥᐅ (Ellesmere) ᕿᑭᖅᑕᖏᓐᓂᑦ, ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᖕᓂᑦ ᐊᒻᒪᓗ ᑕᕆᐅᖅ ᐆᓇᖅᓯᕙᓪᓕᐊᓂᖓᓄᑦ ᐱᔪᓂᒃ. ᓯᕐᒦᑦ ᐱᖃᓗᔭᓕᐅᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᐊᖏᔪᓂᒃ ᓯᑰᔪᓂᑦ ᕿᑭᖅᑕᙳᖅᑐᓂᒃ ᓂᒋᕐᒧᙵᐅᓚᔫᒃᓗᑎᒃ Nares Strait-ᑯᑦ ᐊᒻᒪᓗ ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᓄᐊᖅᓗᑎᒃ, ᑭᓯᐊᓂ ᐅᐊᖕᓇᒧᙵᐅᖃᑦᑕᕐᒥᔪᑦ ᐱᖓᖕᓇᖓᓄᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᐅᓚᓂᐅᑉ ᐅᑎᕐᓂᐊᕐᓗᑎᒃ ᓂᒋᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ. ᑕᐃᒪᐅᓂᖏᑦ ᐊᖏᔪᑦ ᓯᑯᐃᑦ, ᓄᖅᑲᕈᑎᒃ, ᓱᑲᐃᓪᓕᑎᑦᑎᔪᖕᓇᖅᑐᑦ ᑕᕆᐅᑉ ᓯᑯᖏᑦ ᐊᐅᓚᓂᖏᓐᓂᑦ ᐊᒻᒪᓗ ᑲᑎᑎᑦᑎᓗᑎᒃ ᓯᑯᓂᒃ, ᐊᒃᑐᖅᓯᓂᖃᕈᖕᓇᖅᓱᓂ ᐋᖅᑭᒃᐸᓪᓕᐊᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᓯᕐᑯᑉᑎᖅᐸᓪᓕᐊᓂᖓᑕ ᓯᑰᑉ. ᐅᑭᐅᓂᑦ ᐊᒥᓱᓂᒃ ᐊᓂᒍᖅᓯᒪᓕᖅᑐᓂᑦ ᑯᕙᓂᐅᑉ ᐊᖏᓪᓕᒋᐊᕐᓂᖓ ᓯᕐᒦᑦ ᖄᖏᓐᓂᑦ ᐊᐅᒃᐸᓪᓕᐊᔪᒥᑦ ᓯᑯᓂᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᓄᑖᙳᖅᑎᓇᕐᔭᐊᖅᑐᖅ ᖃᓕᐅᔪᒥᑦ ᐃᒪᖓᓂᑦ ᖃᓂᑕᖓᓃᑦᑐᓂᒃ ᑕᕆᐅᕐᒥᑦ ᐃᒪᕐᓂᑦ. ᖃᓂᑦᑐᒥᑦ ᑭᓯᐊᓂ, ᐊᐅᒃᑐᒥᑦ ᐃᒪᙳᖅᑐᖅ ᑯᕙᔪᖅ ᐅᓕᓐᓂᕐᒧᑦ ᑎᑭᓯᒪᔪᑦ ᓯᕐᒥᕐᓄᑦ (ᐃᓚᖓᓂᑦ ᓯᕐᒥᖓᓂᑦ ᑯᕙᔪᖅ) ᖁᑦᑎᒃᓯᖃᑦᑕᖅᑐᑦ ᖃᓂᑕᖓᓂᑦ ᓯᕐᒦᑦ ᓵᖏᓐᓂᑦ, ᑕᒫᓂᖅᓴᖅᑐᒥᒃ ᐃᒪᖃᓕᖅᑎᑦᑎᑉᓗᓂ, ᐊᒻᒪᓗ ᐊᐅᓚᓂᕐᒥᑦ ᐊᐅᓚᓂᖃᓕᖅᑎᑦᑎᑉᓗᓂ, ᑕᐃᒪᓐᓇ ᐊᖏᔪᒥᑦ ᖃᓄᐃᙵᓕᖅᑎᑦᑎᓂᖃᕈᖕᓇᖅᓱᓂ ᐃᒪᕐᓂᑦ ᖃᓕᓅᓕᖓᔪᓂᑦ ᐊᒻᒪᓗ ᑲᐃᕙᓐᓂᐅᔪᓂᒃ.

ᐃᓚᖓᓂᑦ ᓯᕐᒥᖓᓂᑦ ᑯᕙᖃᑦᑕᖅᑐᖅ ᐃᑎᔫᑦᑐᓄᑦ ᐅᓕᓐᓂᕐᒥᑦ ᓯᕐᒥᓂᑦ, ᖁᓪᓗᖓᓂᖓ ᐃᑎᓂᐅᑉ, ᓂᕿᑦᑎᐊᕙᖅᑐᖅ ᐃᒪᖅ ᐱᑎᑦᑎᔪᖕᓇᖅᑐᖅ ᒪᓂᒪᓂᖏᓐᓂᑦ ᓂᕿᑦᑎᐊᕙᐃᑦ ᐱᓕᐅᖅᑎᐅᓗᐊᖅᑐᓄᑦ, ᐱᒋᐊᖅᑎᑦᑎᓗᓂ ᐱᓕᐅᕆᓂᕐᒥᒃ ᓯᓪᓴᓃᑦᑐᓂᑦ ᐱᒻᒪᕆᐅᒋᔭᐅᐸᓗᑎᒃ ᐃᖃᓗᖕᓄᑦ, ᓱᕐᓗ ᐆᕙᓄᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᖅ Hᐊᓕᐸᑦ-ᓄᑦ (Halibut). ᒫᓐᓇᓵᖅ, ᐃᓚᖏᑦ ᐊᕗᖕᑲᓪᓚᒃ ᐊᓯᐊᙳᖅᓯᒪᔪᑦ ᓂᕆᖃᑦᑕᖅᑕᖏᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᓯᓪᓴᓂᑦ ᐅᐊᖕᓇᖅᐸᓯᖕᒥᑦ ᐱᖓᖕᓇᖅᐸᓯᖕᒥᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᖃᐅᔨᔭᐅᓯᒪᔪᑦ, ᐊᒻᒪᓗ ᐃᓱᒪᒋᔭᐅᔪᑦ ᐊᖏᓪᓕᒋᐊᕐᓂᖓᑕ ᐃᒪᑦᑎᐊᕙᒃ ᐊᐅᒃᐸᓪᓕᐊᔪᓂᑦ ᓯᕐᒥᓂᑦ, ᐊᒻᒪᓗ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᓂᖓᑕ ᑕᕆᐅᑉ, ᐱᑎᑦᑎᔪᑦ ᖃᐅᔨᔭᐅᔪᓂᒃ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓂᒃ ᐊᓯᐊᙳᖅᑐᓂᒃ. ᓈᓪᓚᒃᑐᑦ ᖃᓄᐃᖓᓂᐅᔪᑦ ᐊᖏᓛᒃᑯᑦ ᖁᓪᓗᒃᑐᖅ ᐃᒪᖅ ᐊᔾᔨᒌᖏᑦᑕᑦᑐᒃᓴᐅᔪᑦ ᐊᑐᓂ ᓯᕐᒥᖓᓂᑦ, ᑭᓯᐊᓂ ᑕᒪᓗᒃᑖᕐᓚᒃ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐅᓕᓐᓂᕐᒧᑦ ᑎᑭᑦᑐᑦ ᓯᕐᒥᖕᓄᑦ ᖃᐅᔨᓂᐊᖅᑐᑦ ᓄᕗᑉᐸᓪᓕᐊᔪᓂᒃ ᓂᕿᑦᑎᐊᕙᖕᓂᑦ, ᐃᑎᓂᕐᒦᖓᖅᐸᑕ, ᓂᕿᑦᑎᐊᕙᓕᒃ ᐃᒪᕐᒧᑦ (ᐃᓪᓕᖀ ᐅᑭᐅᑦ ᖁᓕᑦ ᖃᐃᔪᓂᑦ). ᑕᒪᐃᓐᓅᖓᔫᒃᑯᑦ, ᖃᓄᐃᓕᐅᕈᑕᐅᓃᑦ ᐊᒻᒪᓗ ᑕᒪᐃᓅᖓᔫᒃᑯᑦ ᑯᕙᓂᖓ ᐃᒪᑦᑎᐊᕙᐅᑉ ᓯᕐᒥᖓᓂᑦ ᐊᒻᒪᓗ ᓯᑯᓂᑦ ᖃᐅᔨᓴᑦᑎᐊᖅᑕᐅᓯᒪᙱᑦᑐᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓ.

### ᓈᓴᐅᑎᓂᑦ/ᑎᑎᖅᑲᓂᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᓂᒃ ᐱᑕᖃᙱᓐᓃᑦ

- ᖃᐅᓯᕐᓂᕐᒧᑦ ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ ᐱᑕᖄᓂᙱᑦᑐᖅ (ᓱᕐᓗ, ᒪᖁᒃᑐᒥᑦ, ᖃᓐᓂᖅᑐᓂᒃ ᖃᓂᑕᖏᓐᓂᑦ ᓄᓇᐃᑦ, ᓯᑯᓂᑦ, ᑕᕆᐅᑉ ᖄᖓᓂᑦ ᐊᒻᒪᓗ ᑕᕆᐅᑉ ᓯᑯᖓᓂᑦ) ᐊᒻᒪᓗ ᑎᑎᖅᑲᐅᑏᑦ ᓈᓴᐅᑎᓄᑦ/ᑎᑎᖅᑲᓄᑦ

ᐹᓂᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᐱᔪᓂᒃ ᐱᓗᐊᖅᑐᒥᑦ ᑕᕆᐅᑉ ᐊᕙᑎᖓᓂᑦ. ᑐᑭᓯᐅᒪᔾᔪᑎᒃᑲᓐᓂᕐᓂᒃ ᐱᔭᕆᐊᖃᖅᑐᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᖃᐅᓯᕐᓂᐅᑉ, ᑲᑎᑉᐸᓪᓕᐅᔪᑦ ᖃᐅᓯᕐᓂᐅᑉ ᑕᕆᐅᑉ ᐊᕙᑎᖓᓄᑦ ᐊᒻᒪᓗ ᓯᕐᒥᖕᓄᑦ.

- ᐃᑎᓂᕐᒥᒃ ᖃᐅᔨᒪᓂᖃᓗᐊᖏᑦᑐᑦ ᐊᒥᓱᑦ ᓯᑲᖏᓐᓂᑦ (~ 30 ᑮᓗᒥᑕᐃᑦ ᐃᓗᐊᓂᑦ ᓯᑲᒥᑦ), ᐃᓚᐅᑉᓗᑎᒃ ᐊᓗᐊᓄᑦ ᐃᑎᓂᐅᑉ ᐊᒥᓱᑦ ᓯᕐᒥᖕᓄᑦ ᑲᓇᑖᑦᑐᓂᑦ, ᐊᒻᒪᓗ ᓄᓇᙳᐊᓕᐅᖅᑕᐅᓯᒪᙱᑦᑐᑦ ᓱᓕ ᐊᒥᓱᐃᑦ ᐃᓂᐅᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᓈᓴᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ ᐱᒪᕆᐅᔪᑦ ᑐᑭᓕᐅᕐᓂᐊᕐᓗᒋᑦ ᑕᕆᐅᑉ ᐃᒪᖓᓂᑦ ᖃᐅᔮᔭᐅᔪᓄᑦ ᐊᒻᒪᓗ ᖃᓄᐃᖓᔪᓕᐅᕆᓂᐊᕐᓗᓂ ᑕᕆᐅᑉ ᐃᒪᖓᓂᑦ ᑲᐃᕙᓐᓂᐅᔪᖅ.

- ᓯᓈ ᐊᒻᒪᓗ ᓯᑲᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᑦ (ᐃᒪᖅ ᐊᒻᒪᓗ ᓄᓇ) ᖃᐅᔨᒪᔭᐅᓗᐊᖏᑦᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᖅᑕᐅᑎᐊᖅᓯᒪᙱᖔᓗᑎᒃ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᒻᒪᓗ ᑲᓇᑕᒥᑦ. ᐱᓗᐊᖅᑐᒥᑦ, ᕿᓪᓕᖅᑐᓂᒃ ᖃᐅᔨᒪᓂᖅᑐᑦ ᓯᕿᑦ ᐃᒪᕐᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᓐᓄᑦ, ᐃᓚᐅᑉᓗᓂ ᐃᓂᐅᔪᖅ ᐊᒻᒪᓗ ᐊᕙᓗᐊᓂᑦ ᖃᓄᐃᓕᐅᕐᓂᕆᔭᖓᑕ ᐊᐅᒃᓯᒪᔪᖅ ᐃᒪᖅ ᖁᕙᔪᑦ ᐊᑭᐊᓂᑦ ᓯᕐᒥᖕᓂᑦ ᖄᖓᓂᑦ ᐊᒻᒪᓗ ᐃᑎᓂᖓᓂᑦ, ᐱᑎᑦᑎᔪᖅ ᓯᑯᕙᓪᓕᐊᑎᓪᓗᒍ ᑲᐃᕙᓐᓂᕐᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑉᓕᕐᓂᖓᑕ ᐃᒪᐅᑉ, ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᓂᐅᔪᑦ ᐱᑎᑦᑎᔪᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒧᓗᐊᖅ ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᑲᑎᓐᓂᖏᓐᓄᑦ.

- ᖃᓄᐃᖓᓕᖅᑎᑦᑎᓃᑦ ᐊᖏᓂᖅᓴᒥᒃ ᔫᕙᓂᖓᓄᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᒻᒪᓗ ᑲᓇᑕᒥᑦ ᓯᕐᒥᖕᓂᑦ ᖃᓖᒃᑐᓄᑦ, ᑲᐃᕕᓐᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐆᒪᔪᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖏᓐᓄᑦ ᓇᓗᓇᖅᑐᑦ.

- ᑐᑭᓯᐊᔭᐅᓗᐊᖏᑦᑐᖅ ᖃᓄᖅ ᐊᖏᔪᒥᒃ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᓃᑦ ᐊᓂᖅᕵᖅᑐᖅᑕᑉᑎᖏᓐᓂᑦ ᑲᐃᕙᓪᒪᙴᑦ ᐊᒻᒪᓗ ᑕᕆᐅᑉ ᐊᐅᓚᓂᖏᑦ ᐊᒃᑐᖅᓯᓯᒪᔪᑦ ᓯᑯᖃᑦᑕᕐᓂᖕᒐᓄᑦ ᐊᒻᒪᓗ ᐊᔫᖏᓐᓂᖕᒐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᐊᒻᒪᓗᒃᑲᓐᓂᖅ, ᑲᑎᓐᓅᑦ ᐊᑯᓐᓂᖓᓂᑦ ᖃᓂᑦᑐᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᖓᑕ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᐊᒻᒪᓗ ᓄᓇᕐᔪᐊᕐᒥᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᒻᒪᓗ ᐊᔾᔨᒌᖃᑦᑕᙱᓐᓂᖏᑦ ᖃᐅᔨᒪᔭᐅᖏᑦᑐᑦ, ᑕᐃᒪᓐᓇ ᕿᓪᓕᖅᑎᑦᑎᑉᓗᓂ ᓇᓚᐅᑦᑎᑦᑎᐊᕈᓐᓇᕐᓂᑉᑎᖕᓂᑦ ᐋᖅᑭᐅᒪᓂᐊᖅᑐᒥᑦ ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᕐᓗᒋᑦ ᐱᓕᕆᖃᑎᒌᖕᓂᖏᑦ (ᓲᕐᓗ, ᐱᒋᐊᖅᑎᑦᑎᓂᖅ ᓯᑯᐃᑦ ᐊᐅᓚᓂᕐᓂᑦ ᐊᒻᒪᓗ ᓯᖁᑉᑎᕐᓂᖏᑦ); ᑕᐃᒪᓐᓇᒎᑦ, ᓯᕗᓂᒃᓴᒥᑦ ᖃᓄᐃᖓᓂᕆᔭᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᖃᓂᑕᖓᓗ ᓇᓗᓇᖅᑐᖅ.

## ᐱᔾᔪᑕᐅᔪᖅ 2. ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖅ ᐊᒻᒪᓗ ᐆᒪᓂᖃᖅᑐᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᑦ

### ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖃᑦᑎᐊᖅᑐᖅ

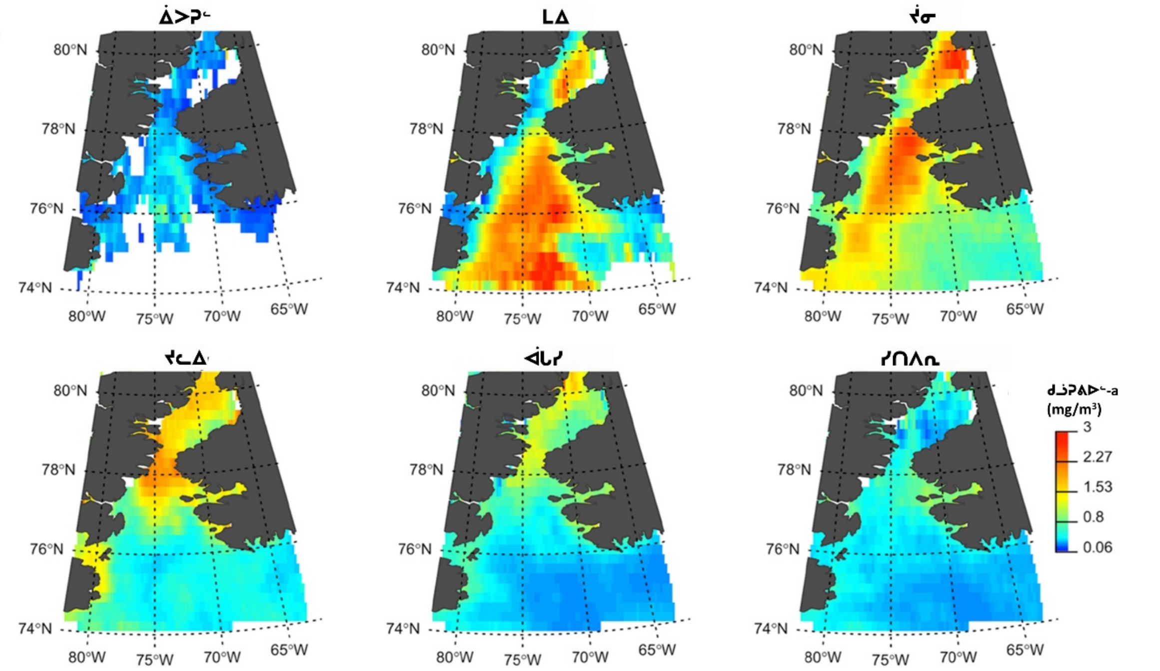
ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖃᑦᑎᐊᖅᑐᖅ, ᐋᖅᑭᒃᑕᐅᓯᒪᑉᓗᓂ ᖁᑦᑎᒃᑐᒥᑦ ᑕᒪᐃᓐᓄᑦ ᐱᕈᖅᑐᑦ ᐆᒪᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐱᓕᐅᕆᓂᕐᒧᑦ. ᐊᖏᓂᖓᑕ, ᓇᒨᕙᐅᓂᖏᑦ, ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᓂᖏᑦ ᐱᕈᖅᑐᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᑎᑕᐅᖃᑦᑕᖅᑐᑦ ᖃᐅᒪᓂᖅ ᒪᓂᒪᓂᖓᓄᑦ (ᓲᕐᓗ, ᐊᑯᓂᐅᓂᖓ ᐃᒪᖃᕐᓂᖅ, ᖃᖓᒃᑯᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᓕᐅᖃᑦᑕᕐᓂᖓᑕ), ᐊᑕᐅᑦᑎᒃᑯᑦ ᐃᒪᐅᑉ ᓇᒨᕙᐅᓂᖓᑕ ᐊᒻᒪᓗ ᖃᓄᐃᓕᐅᕐᓂᖓᓄᑦ, ᒪᓂᒪᔪᑦ ᓂᕿᑦᑎᐊᕙᐃᑦ ᐊᒻᒪᓗ ᑲᐃᕙᓐᓂᐅᑉ ᖃᓄᐃᖓᓂᖏᓐᓄᑦ. ᓂᕿᑦᑎᐊᕙᐃᑦ ᐱᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᖅ ᑕᕆᐅᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ Smith Sound-ᑯᑦ ᐱᒪᕆᐅᔪᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᑦᑐᙵᖅᑐᑦ ᐱᑎᑦᑎᔪᑦ ᑲᑎᓐᓂᖃᖅᑐᑦ ᐆᒪᔪᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᓐᓄᑦ Lincoln ᑕᕆᐅᕐᒥᑦ ᐊᒻᒪᓗ ᐅᖓᓯᒃᑐᒥᑦ ᐱᑎᑦᑎᔪᓄᑦ (ᓲᕐᓗ, Beaufort Gyre-ᒥᑦ). ᐊᑯᑭᑦᑐᕐᒥᑦ, ᐱᑎᑦᑎᓂᖓ ᐊᑦᑖᓐᑎᒃ (Atlantic) ᐃᒪᐅᑉ ᐊᑐᒪᕆᒃᑐᖅ ᐅᑭᐅᑉ ᐃᓚᖓᓂᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᓄᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᓄᑦ. ᖃᐅᔨᒪᓂᓗᒃᑖᕐᓚᕗᑦ ᐱᕈᖅᑐᐃᑦ ᐱᑕᖃᐅᓕᕐᓂᖏᓐᓄᑦ, ᐃᓚᕖᒃᑐᑦ ᐊᒻᒪᓗ ᐊᖏᓂᖓᑕ ᐋᖅᑭᐅᒪᔩᑉ, ᐊᒻᒪᓗ ᓯᑯᒥᑦ ᑐᙳᔪᖅᑐᐃᑦ ᐱᕈᖃᑦᑕᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐊᑐᖅᑐᑦ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖏᓐᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒥᑦ, ᖃᐅᔨᓴᐃᓂᖃᓚᐅᖅᑐᑦ 1997-99-ᒥᑦ. ᒥᑭᔩᑎᓂᒃ ᐆᒪᔪᕋᖁᑦ ᐱᑕᖃᐅᓕᖃᑦᑕᕐᓂᖏᑦ ᖃᐅᔨᔭᐅᓯᒪᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᒪᓕᒃᑕᐅᖃᑦᑕᖅᑐᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒧᑦ ᓄᖅᑲᖓᔪᑦ ᐆᒪᔪᕋᖁᓄᑦ, ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖃᑦᑎᐊᖅᑐᖅ ᐅᑭᐅᑉ ᐃᓚᖓᓄᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᓄᑦ ᐊᓗᐊᓄᐊᖅᑐᑦ ᐃᑎᔪᒥᑦ. ᓯᑯᒥᑦ ᑐᙳᔪᖅᑐᖅ ᐱᕈᖅᑐᖅ ᐃᑲᔪᐃᖃᑦᑕᕐᒥᔪᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓗᐊᕐᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᕿᓯᐊᓂ ᐃᑲᔪᐃᓂᖓᑦ ᐊᒥᓱᙳᖅᐸᓪᓕᐊᓗᐊᖏᑦᑐᖅ.

ᐆᒪᓂᖃᕐᓂᖓ ᓯᑯᒥᑦ ᑐᖑᔪᖅᑐᖅ ᑲᑎᑉᐸᓪᓕᐊᖃᑦᑕᖅᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᑎᓪᓗᒋᑦ ᓅᑕᐅᑎᐊᖃᑦᑕᖅᑐᖅ ᐃᒪᕐᒥᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᖅᑎᓄᑦ. ᓅᑕᐅᑎᐊᖃᑦᑕᖅᑐᑦ ᐃᒪᐅᑉ ᖁᑎᖕᓂᖅᓴᖓᓃᑦᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᐃᑲᔪᖅᑐᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖏᑦ ᐃᒪᕐᒥᐅᑕᐃᑦ ᓂᕿᖏᓐᓄᑦ (ᑕᑯᓗᒍ ᐱᔾᔪᑕᐅᔪᖅ 3: ᓈᒻᒪᒃᑐᒥᑦ ᐆᒻᒪᖅᑯᑎᒃ ᓅᑎᓂᖅ).

### ᐱᒋᐊᓖᕐᓂᕐᒥᑦ ᖃᖓᒃᑯᑦ ᑎᑭᐅᑎᓯᒪᓂᖓ/ᖃᓄᑎᒋ ᐱᕈᖅᐸᓪᓕᐊᓂᖅ

ᐱᒻᒪᕆᐅᔪᖅ ᖃᐅᔨᓐᓇᐅᑎ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᑕᐅᑐᖒᖅᓱᒍ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᓂᐅᔪᑦ ᖁᑦᑎᒃᑐᓂᒃ ᐱᕈᖅᑐᓂᒃ ᐆᒪᓂᖃᖅᑐᓕᐅᕆᑐᐃᓐᓇᙱᑦᑐᑦ, ᑭᓯᐊᓂ ᐱᒋᐊᓖᕐᓂᕐᒥᑦ ᖃᖓᒃᑰᖓᔪᑦ (ᓲᕐᓗ ᑎᕆᒡᓗᐃᑦ (ᐄᐳᕆ) ᓄᕐᕋᐃᑦ (ᒪᐃ)), ᐊᒻᒪᓗ ᖃᓄᑎᒋᐅᓂᖓ ᐱᕈᖅᐸᓪᓕᐊᓂᐅᑉ. ᐱᒋᐊᖅᓖᓕᓂᖓ ᐃᒪᙳᕐᓂᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᕙᓪᓕᐊᓂᖅᖃᖅᑎᑦᑎᔪᖅ ᐱᕈᖅᑐᐃᑦ ᐱᕈᕐᓂᖏᓐᓂᑦ 6-8-ᓄᑦ ᐱᓇᓱᐊᕈᓯᓂᒃ ᐱᒋᐊᖅᓖᓕᓂᕐᒥᑦ (ᐊᔾᔨ 4) ᖃᓂᓐᓂᖅᓴᐅᔪᓂᐅᖓᓂᑦ ᓯᑯᖅᑐᓂᑦ ᐃᒪᕐᓂᑦ ᑲᓇᑕᐅᑉ ᕿᑭᖅᑕᖏᓐᓂᑦ. ᐱᕈᕐᓂᖏᑦ ᐱᒋᐊᖃᑦᑕᖅᑐᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ, ᐱᑎᑕᐅᔪᖅ ᐆᓇᕐᓂᖓ ᐊᑦᓛᓐᑎᒃ (Atlantic) ᐃᒪᖏᓐᓂᑦ, ᓯᐊᒻᒪᒃᑯᓂᓗ ᐅᐊᖕᓇᖅᐸᓯᖕᒧᑦ ᐱᖓᖕᓇᖅᐸᓯᖕᒧᑦ. ᐅᖓᓯᒃᑐᓂᒃ ᖃᐅᔾᔭᐃᑎᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒥᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐱᕈᖅᑐᐃᑦ ᐱᒋᐊᖅᓖᓕᒋᐊᔭᒃᑐᑦ ᐊᒻᒪᓗ ᐊᑯᓂᐅᓂᖅᓴᐅᑉᓗᑎᒃ ᐅᑭᐅᕐᓂᑦ ᓯᑯᖃᓗᐊᖏᓐᓂᖅᓴᓂᒃ (ᓲᕐᓗ, ᐊᑯᓂᐅᓂᖅᓴᖅ ᐃᒪᐅᑉᓗᓂ), ᐊᒻᒪᓗ ᖁᓛᓃᑦᑐᖅ ᐱᒻᒪᕆᐅᔪᒥᒃ ᐱᑕᖃᓂᖅᑐᒃᓴᐅᔪᖅ ᐱᕈᖅᑐᐃᑦ ᖃᓄᐃᓐᓂᕐᓂᓄᑦ ᖃᐅᒪᓂᖅᑕᖅᓂᖓᓄᑦ. ᒫᓐᓇᓖᖅ ᐊᓯᐊᙳᕐᓂᐅᔪᑦ ᐱᕈᖅᑐᑦ ᖃᓄᐃᓕᐅᕐᓂᕐᒥᓄᑦ, ᐊᒃᑐᐊᓂᖃᖅᑐᑦ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᔪᖅ ᑕᓇᐅᑉ ᓯᑯᕐᒥᑦ ᖃᓄᐃᓐᓂᕐᓂᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᖃᐅᔨᒪᔭᐅᓗᓂ ᐱᒻᒪᕆᐅᔪᖅ ᐊᓯᐊᙳᕐᓂᖓ ᑕᓇᐅᕐᒥᑦ ᓯᑯᐃᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒧᑦ ᑕᒫᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ. ᒫᓐᓇᓖᖅ ᐱᕕᖃᕐᓂᕐᒥᑦ ᐊᒥᓱᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒥᑦ ᐅᖓᓯᒃᑐᒥᑦ ᖃᐅᔾᔭᐃᑎᓄᑦ ᓇᓚᐅᑦᑖᕆᓂᖅ ᐱᕈᖅᑐᑦ ᐆᒪᓂᖏᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐊᕙᑎ ᐅᑭᐅᓂᑦ (1998–2014) ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐊᖏᔪᒥᒃ ᓄᖑᑉᐸᓪᓕᐊᓂᖓ ᓈᒻᒪᖕᓂᖓᑕ ᐱᕈᕐᓂᐅᑉ, ᐊᕐᕌᒍᓂᑦ ᐊᔾᔨᐅᙱᕐᓂᐅᖅᑕᑦᑕᕋᓗᐊᖅᑎᓪᓗᒍ ᖃᐅᔨᓴᔭᐅᔪᓂᑦ (Marchese et al. 2017).

ᒫᓐᓇᓖᖅ ᓄᖑᑉᐸᓪᓕᐊᓂᖅ ᐱᕈᖅᑐᑦ ᐆᒪᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖅ ᑎᑎᕋᐃᕐᒥᔪᑦ ᑕᕝᕙᐅᑉᓗᑎᒃ ᐆᒃᑐᕋᐃᓂᕐᓂᑦ (Blais et al. 2017), ᐱᔾᔪᑎᖃᖅᑐᑦ ᐋᖅᑭᒃᐸᓪᓕᐊᓇᓖᕐᓂᕐᒥᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓯᑯᖃᑦᑕᕐᓂᖓ Nares Strait-ᒥᑦ. ᒫᓐᓇᓖᖅ ᐅᑭᐅᕐᓂᑦ, Nares Strait-ᒥᑦ ᓯᑯᓚᐅᕐᒥᑦᑐᖅ, ᐅᕝᕙᓘᓐᓃᑦ ᑕᐃᒪᐅᓚᐅᐱᓚᑐᐃᓐᓇᖅᑯᓂ, ᓯᑯᐃᑦ ᐊᐅᓚᓂᖃᕐᓂᖅᓴᐅᓕᕐᓂᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᐅᕐᒥᑦᑐᒥᒃ ᐊᒃᑐᖅᓯᓂᖃᓚᐅᖅᑐᖅ ᐱᓕᑎᐅᕆᕙᓪᓕᐊᓂᓗᐊᕐᒧᑦ ᑕᒫᓂ. ᒥᒃᓵᕙᓪᓕᐊᓂᖃᑐᐊᖅᑎᓪᓗᒍ ᓯᑯ ᐊᒥᓱᓂᑦ ᐃᓂᐅᔪᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᑎᐅᕐᒥᑦ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᑕᑯᓯᒪᔪᖅ ᐃᓚᕐᓂᓂᑦ ᑕᑎᐊᕐᒥᑦ ᓯᑯᓯᒪᓂᖅᓴᐅᔪᓂᑦ ᐊᕐᓂᓕᕆᐊᕐᓂᕐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᑎᐅᕐᒥᑦ ᓯᑯ ᐊᔭᖅᑕᐅᓂᖅ ᓯᑯᙱᒃᑲᓐᓂᖅ (Michel et al. 2015).




*ᐊᔾᔨ 4. ᐅᔭᖖᒍᕌᖓᑦ ᐱᕈᖅᐸᓪᓕᐊᕚᒃᑐᑦ ᒫᓂ ᓴᕝᕙᕐᔪᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᒥᒃᓯᖓᓂ, ᒪᓕᒃᓯᒪᔪᑦ ᐅᖓᓯᒃᑐᒥ ᐃᒃᐱᒍᓯᒍᑎᓄᑦ ᒪᑯᓂᖓ ᑯᓘᕈᕕᐅᓪ ᐃᓚᒃᓴᒥᑦ. ᑖᖅᓴᓇᔭᐅᔪᑦ ᓇᓗᓇᐃᒃᑯᑎᐅᔪᑦ ᐊᔾᔨᓕᖅᑭᓐᓂᖏᓐᓂᒃ ᑯᓘᕈᕕᐅᓪ (ᐊᐅᐸᖅᑐᖅ = ᖁᑦᑎᖕᓂᖅᐸᕌᓯᒪᓪᓗᓂ ᒪᐃᒥ ᑖᒥᓂ ᕿᑎᐸᓗᐊᓂ ᖃᐅᔨᓴᖅᕕᐅᔩᑉ). ᐅᑯᐊ ᓄᓇᖑᐊᑦ ᓴᖅᑮᔭᖅᑎᑦᑎᓯᒪᑐᐃᓐᓇᖅᑐᖅ ᐃᓚᐃᓐᓇᖓᓂᒃ ᖃᓄᐃᓕᐅᖅᐸᓪᓕᐊᓂᖅᒥᒃ, ᓲᖃᐃᒻᒪ ᓴᖅᑮᔭᖅᑎᑦᑎᓯᒪᑐᐃᓐᓇᕋᓐ ᑯᓘᕈᕕᐅᓪᒥ ᖃᖓᓂᓪᓗᐊᑕᐸᓗᒃ ᐊᒻᒪᓗ ᓴᖅᑮᔭᖅᑎᑦᑎᓯᒪᖕᖏᓗᓂ ᖄᖓᑕ ᐊᑖᓃᑦᑐᓂᒃ ᐅᕝᕙᓘᓐᓃᑦ ᓯᑯᒧ ᑕᐃᒪᐃᓐᓇᔭᕆᐊᒃᓴᖓᓂᒃ. ᖃᐅᔨᒫᓂᖕᖏᓐᓇᑦᑕ ᓱᓕ ᑯᓘᕈᕕᐅᓪ ᐃᒪᕐᑏᑎᒋᓂᖓᓂᒃ ᐊᖏᔪᒥ (ᖃᐅᔨᕚᕕᐅᔪᖅ: Marchese et al. 2017).*

### ᐃᓂᐅᔪᖅ ᐊᓂᖅᓵᖅᑐᖅᑕᑎᖕᓂᑦ-ᑕᓇᐅᕐᒥᑦ ᐅᖅᓱᕐᒥᑦ ᑭᐳᖕᓂᖅ

ᐅᑭᐅᖅᑕᖅᑐᖅ ᑕᒪᐃᓐᓄᑦ ᐱᕝᕕᐅᖃᑦᑕᕐᓂᖓ (ᓴᑯᐃᖃᑦᑕᖅᑐᖅ ᐱᕙᓪᓕᐊᖕᖏᓕᖅᓱᓂ) ᐅᕝᕙᓘᓐᓃᑦ ᐃᓂᐅᐸᓗᓂ ᐃᒪᕐᒧᑦ (ᐱᕙᓪᓕᐊᓂᖅᓴᐅᐸᓗᓂ ᓴᑯᐃᓂᕐᒥᐅᖓᓂᑦ) ᐳᔪᕐᓗᖕᓂᑦ ᐊᓯᖕᖏᓐᓂᓗ ᓯᓚᒥᑦ ᐅᖅᓱᕐᓂᑦ ᒪᓕᒃᑐᖅ ᐃᒪᖅᑯᖅᑐᓂᕐᒥᑦ ᐃᓚᒋᔭᐅᔪᓂᑦ ᖃᓂᑕᖓᓂᑦ ᐃᒪᐅᑉ ᖄᖓᑕ, ᐃᓚᐅᐸᓗᓂ ᐃᒪᕐᒥᑦ ᐆᒪᓂᐅᔪᑦ ᖃᓄᐃᓕᐅᕐᓂᖕᖏᑦ, ᐆᓇᕐᓂᖅ, ᓇᒍᖕᖓᐅᓂᖓ ᐃᒪᑎᐊᕙᐅᑉ, ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᐱᕙᓪᓕᐊᓂᖕᖏᑦ. ᐊᑕᐅᑦᑎᒃᑯᑦ, ᐃᒪᕐᒥᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᓂᐅᔪᑦ ᐊᒃᑐᖅᓯᓂᖃᕈᓇᖅᑐᑦ ᖃᓂᑦᑐᒥᑦ ᐆᒪᐃᑦ ᖃᓄᐃᓕᐅᕐᓂᖕᖏᓄᑦ ᐋᖅᑭᐅᒪᔪᒥᑦ ᐱᒋᐊᖅᑎᑦᑎᔪᖅ ᐅᖅᓱᕐᒥᒃ ᑭᐳᒃᓯᓂᕐᒧᑦ ᐃᒪᐅᑉ ᑳᖓᓂᑦ. ᖃᐅᔨᒪᔭᐅᖕᖏᑦᑐᖅ ᖃᓄᑎᒋᐅᖕᒪᖕᖔᑦ ᓇᓗᓇᖕᖏᓐᓂᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐱᒻᒪᓇᐅᖕᒪᖕᖔᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑕ-ᑕᓇᐅᑉ ᑮᐳᑎᖃᕐᓂᖓᓂᒃ ᓯᓚᒥᑦ ᐅᖅᓱᓂᑦ. ᐊᒥᓲᖕᖏᑦᑐᓂᒃ ᖃᐅᔨᓴᐃᓂᖃᖅᑐᑦ ᑕᒫᓂ, ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᖅᐳᑦ ᐊᑐᖅᑐᖅ ᖃᐅᔨᔭᐅᔪᓂᒃ ᑕᑯᒃᓴᐅᓗᐊᖕᖏᑦᑐᓄᑦ ᖃᐅᔨᓴᕐᓂᕆᔭᐅᔪᓂᒃ ᐅᒥᐊᕐᔪᐊᒃᑯᑦ ᐊᐅᔭᐅᑎᓪᓗᒍ ᐊᒻᒪᓗ ᐃᓱᒪᒋᔭᐅᔪᑦ ᐅᑭᐅᒃᑯᑦ ᐱᕙᓪᓕᐊᓃᑦ. ᐆᒃᑐᕋᐃᓃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᖃᐅᔨᑎᑦᑎᔪᑦ ᐊᖏᔪᒥᑦ ᖃᓂᑦᑐᒥᑦ, ᐅᑭᐅᑉ ᐃᓚᖓᓂᑦ, ᐊᒻᒪᓗ ᐊᕐᕌᒍᑕᒫᒃᑯᑦ ᐊᔾᔨᓕᖕᖏᒃᑕᑦᑕᕐᓂᖕᖏᓐᓂᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑎᖕᓂᑦ-ᑕᓇᐅᕐᒥᑦ $CO_2$-ᒥᑦ ᑮᐳᑎᒃᑲᑦᑕᕐᓂᖓᓂᑦ. ᐊᕐᕌᒍᑕᒫᒧᑦ $CO_2$-ᒧᑦ ᑮᓇᐅᔭᖅᑑᑎᑕᖖᒋᑎᓪᓗᒍ, ᐃᓱᒪᒋᔭᐅᔪᖅ ᐅᐱᕐᖓᓕᕖᖅᑎᓪᓗᒍ ᐊᓂᐊᔪᑦ ᐅᖅᓱᐃᑦ ᑭᒡᓕᖅᑎᑦᑎᔾᔪᓇᕐᓂᖕᖏᓄᑦ ᓯᑯᓂᕐᒥᑦ ᐊᒻᒪᓗ ᑕᒫᓂ ᐊᕐᕌᒍᑕᒫᒃᑯᑦ ᐃᓂᒋᔭᐅᔪᖕᓇᕐᓂᖓᓄᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑎᖕᓂᑦ $CO_2$-ᒧᑦ. ᐃᒪᑦᑎᐊᕝᕙᕐᓂᖅ ᐃᒪᐅᓂᕐᓄᑦ ᐋᖅᑭᐅᒪᔪᓂᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᖏᓪᓕᕙᓪᓕᐊᔪᖅ, ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᓂᐅᔪᑦ ᐅᖃᖅᑐᑦ ᓯᕐᒥᓂᑦ ᐊᐅᒃᐸᓪᓕᐊᔪᖅ ᐃᒪᖅ ᐃᑲᔪᐃᓂᖃᕐᓂᖓ $CO_2$-ᒥᑦ ᐱᔪᑦ ᐃᒪᐃᑦ ᐊᒻᒪᓗ ᐊᑭᐊᓂᑦᑐᑦ ᓱᓴᒥᑦ ᐃᒪᐃᑦ. ᑕᐃᒪᓐᓇᒧᑦ ᓂᕆᐅᒋᔭᐅᔪᑦ ᐊᐅᒃᐸᓪᓕᐊᔪᒥᑦ ᐃᒪᖅ ᓄᑖᖑᖅᑐᕆᔭᖅ

ᐊᒃᑐᖅᓯᓂᐊᕐᓂᖓᓄᑦ $CO_2$-ᒥᑦ ᐱᙵᐅᔪᒥᑦ/ᐃᓂᒋᔭᐅᔪᒥᑦ ᖃᓄᐃᖓᓂᖓᓄᑦ ᑕᒪᓐᓇ, ᑕᐃᒪᐅᓚᔾᑲᓗᐊᖅᑎᓪᓗᒋᑦ ᑕᐃᒪᓐᓇᐃᓕᐅᕐᓂᐅᔪᖅ ᓇᓗᓇᐃᖅᑕᐅᔭᕆᐊᖃᖅᑐᖅ ᓱᓕ. ᐊᒥᓱᙳᕐᓂᕐᒋᑦ ᓄᙱᑎᖅᓯᒪᔪᑦ $CO_2$-ᒥᑦ ᒥᒃᓵᒋᐊᖅᑎᑦᑎᖃᑦᑕᖅᑐᖅ pH-ᒥᑦ, ᖃᐅᔨᒪᔭᐅᔪᖅ ᑕᕆᐅᕐᒥᑦ ᐋᓯᑦᓕᐅᕆᓂᕐᒥᑦ (OA). ᐃᓂᓕᐅᕆᓂᖅ OA-ᒥᑦ ᐆᒃᑐᕋᖅᑕᐅᓯᒪᔪᖅ ᑕᒫᓂ, ᑭᓯᐊᓂ ᖃᓄᐃᙵᓕᖅᑎᑦᑎᓃᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᖃᐅᔨᒪᔭᐅᕐᒋᑦᑐᖅ ᓱᓕ. ᐊᒻᒪᓗ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᓂᕆᐅᒋᔭᐅᔪᖅ $CH_4$-ᖃᕐᓂᖓᓄᑦ, ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᕐᓄᑦ, ᐃᒻᒪᖅᑳ ᓴᙱᔪᐊᓘᕐᒋᒃᑲᓗᐊᖅᑐᑦ ᐱᑕᖃᕐᓂᙶ. ᑭᓯᐊᓂ, ᑕᒪᓐᓇ ᐊᑐᖅᑐᖅ ᖃᑉᓯᐊᕐᔪᑐᐃᓐᓇᕐᓂᒃ ᖃᐅᔮᓴᐃᓂᕆᔭᐅᓚᐅᖅᑐᓂᒃ ᕿᒥᕿᑉᐳᒋᑦ ᓄᙱᑎᖅᓯᒪᔪᑦ $CH_4$ ᑲᓇᙳᓇᖅᐸᓯᙵᓂᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᙵᓂᑦ ᐊᒻᒪᓗ ᐱᑕᖃᙱᕐᓗᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᒥᑦ. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᓴᙱᔪᒥᑦ ᐱᙵᐅᖃᑦᑕᖅᐳᙰᖅᑐᖅ ᐊᓯᕐᒋᓐᓂᑦ ᐅᖅᓱᕐᓂᑦ (ᐱᙳᖅᑐᑦ ᐆᒪᔪᓂᑦ, ᓰᕐᓗ ᐱᕈᖅᑐᓂᑦ), dimethyl sulphide-ᑎᑐᑦ (DMS), ᑭᓯᐊᓂ, ᖃᐅᔨᓯᒪᙱᑦᑐᒍᑦ ᒪᓕᒃᑯᕆᑦ ᐃᓚᕐᒋᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᙵᓄᑦ. ᖃᐅᔨᓐᓇᖅᑐᑦ ᐱᔭᐅᔪᑦ ᒫᓇᕌᖅ ᖃᐅᔨᓴᐃᓂᕆᓚᐅᖅᑕᕐᒋᑦ ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᕿᑭᖅᑕᖃᐅᕐᓂᕐᓂᑦ ᐊᐅᔭᐅᑎᓪᓗᒍ, ᖃᐅᔨᑎᑦᑎᔪᑦ ᑲᑎᓯᒪᔪᑦ DMS ᓯᑯᓯᒪᙱᑎᓪᓗᒍ ᐃᒪᕐᒥᑦ ᐊᒻᒪᓗ ᖁᓖᓂᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᕐᓂᑦ, ᖁᑦᑎᓛᑦ ᓈᓴᐅᑏᑦ ᖃᐅᔨᔭᐅᑉᓗᑎᒃ ᐱᔮᑎᖃᖅᑐᓂᒃ ᖃᓂᑦᑐᒥᑦ ᖁᑦᑎᒃᓯᒋᐊᕐᓂᐅᔪᓂᑦ chlorophyll *a*, ᐱᔮᔫᔪᑦ ᓃᕐᓗ ᐃᒪᕐᒥᑦ ᐱᕈᖅᑐᑦ ᐆᒪᓂᖃᕐᓂᕆᔭᕐᒋᓐᓄᑦ.

**ᓈᓴᐅᑎᓂᑦ/ᑎᑎᖅᑲᓂᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᓂᒃ ᐱᑕᖃᙱᓐᓃᑦ**

- ᐆᒪᔪᐃᑦ ᐊᔾᔨᒌᙱᑦᑑᑕᐅᓂᕐᒋᑦ ᐱᓕᐅᕆᓂᖃᓗᐊᖅᑐᓄᑦ ᕿᒥᕿᔭᐅᓯᒪᙱᑦᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᓕᓂᑦ. ᑕᐃᒪᙵᓂᑦ ᑕᒫᓃᑦᑐᓂᒃ ᓈᓴᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ ᑲᑎᑕᐅᕐᒪᑕ ᐱᕈᖅᑐᓄᑦ 1990-ᕐᒋᑦ ᓄᙳᐊᓂᐅᓚᐅᖅᑐᖅ, ᐊᒥᓯᐃᑦ ᖃᐅᔨᒪᓂᕐᒥᒃ ᐱᑕᖃᙱᑦᑐᑦ, ᐃᓚᐅᐸᓗᑎᒃ ᒫᓇᐅᔪᖅ ᐃᓂᐅᔪᒥᑦ ᐊᒻᒪᓗ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᓇᒨᕐᒐᐅᖃᑦᑕᕐᓂᕐᒋᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᔾᔪᐊᓄᑦ (ᐱᓗᐊᖅᑐᒥᑦ ᓯᒡᔭᓂᑦ), ᐅᑭᐅᑉ ᐃᓚᙶᓃᑦᑐᕐᒋᑦ (ᓃᕐᓗ, ᐱᕚᓪᓕᐊᓂᕐᒋᑦ ᐃᒪᐅᑉ ᖄᙶᓄᑦ ᖃᓂᑦᑐᑦ ᐱᕈᖅᑐᐃᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒋᑦ), ᐊᒻᒪᓗ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒋᑦ ᐊᒻᒪᓗ ᑲᑎᓐᓂᕐᒋᓐᓄᑦ ᐃᒪᐅᑉ ᖁᑦᑎᖕᓂᖅᓴᙶᓃᑦᑐᓂᑦ ᐊᒻᒪᓗ ᐊᓗᐊᓂᕐᒥᐅᑕᓂᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᖅᑏᑦ.

- ᓈᓴᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖅ ᓯᑯᖃᖅᑎᓪᓗᒍ ᐱᑕᖃᓗᐊᕐᒋᑦᑐᖅ, ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᖅᑕᖄᓂᙱᑦᑐᖅ ᓯᑯᒥᑦ ᐱᔪᓂᒃ ᑐᙳᔪᖅᑐᑦ ᐱᕈᖅᑐᓄᑦ ᐊᒻᒪᓗ ᐊᕐᒋᓂᕆᔭᙵᑕ ᓯᑯᒥᑦ ᑐᙳᔪᖅᑐᖅ ᐱᕈᖅᑐᓕᐅᕆᓂᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ.

- ᖃᐅᔨᓴᐃᒃᑲᓐᓂᕐᓂᖃᕆᐊᖃᖅᑐᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐅᑭᐅᒃᑯᑦ, ᑐᑭᓯᐊᓂᖅᓴᐅᓂᐊᕐᓗᒋᑦ ᐱᓕᕆᐊᙵᑕ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐃᓂᒋᔭᐅᑉᓗᓂ ᐅᙵᓘᓐᓃᑦ ᐱᙵᐅᖃᑦᑕᕐᓂᙵᓄᑦ ᐳᔪᕐᓗᓐᓂᑦ.

- ᐱᔾᔪᑕᐅᔪᑦ ᐱᑎᑦᑎᔪᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓗᐊᖅᑐᓄᑦ, ᖃᓄᖅ ᐊᓯᐊᙳᖅᓯᙵᙱᑕ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᙵᓄᑦ, ᐊᒻᒪᓗ ᑕᒪᐃᓐᓄᑦ ᐊᒃᑐᖅᓯᓂᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓗᐊᖅᑐᓄᑦ, ᐱᒻᒪᕆᐅᕐᒋᓐᓇᖅᑐᖅ ᖃᐅᔨᒪᓂᕐᒥᒃ ᐱᑕᖃᙱᓐᓂᕐᒧᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᐱᑎᑦᑎᔪᖅ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᓂᙵᓄᑦ ᓯᑯᐃᑦ ᖃᓄᐃᓕᐅᕐᓂᕐᒋᓐᓄᑦ, ᑕᕆᐅᕐᒥᑦ ᑲᐃᕙᑦᑐᑦ ᖃᓄᐃᓕᐅᕐᓂᕐᒋᓐᓄᑦ ᐊᒻᒪᓗ ᓯᑯᐃᑦ ᐊᐅᓚᓂᕐᓂᑦ, ᐊᓯᐊᙳᕐᓂᙶ ᐅᑭᐅᑉ ᐃᓚᙶᓂᑦ ᐊᒻᒪᓗ ᐊᒃᑐᖅᓯᓂᕐᒋᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓗᖅᑐᓄᑦ ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᑐᑭᓯᐅᒪᔭᐅᕖᓂᙱᑦᑐᖅ ᓱᓕ.

- ᓇᓗᓇᖅᑐᖅ ᖃᓄᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖅ ᐊᒃᑐᖅᓯᓂᐊᕐᒪᙳᑦ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᔪᑦ ᖃᓂᑦᑐᒥᑦ ᖃᓄᐃᓐᓂᐅᔪᓄᑦ (ᓃᕐᓗ, ᐊᓯᐊᙳᕐᓂᙶ ᓯᑯᐃᑦ ᖃᓄᐃᓐᓂᕐᒋᑦ ᐊᒻᒪᓗ ᖁᓖᓂᑦ ᖃᓕᖅᑕᐅᕙᓪᓕᐊᓂᖅ), ᐃᓚᐅᐸᓗᓂ ᐊᔪᖃᑦᑐᓐᓇᕐᓂᕐᒋᑦ ᐆᒪᔪᐃᑦ ᐊᒻᒪᓗ ᑕᐅᑦᑐᙶ ᐱᕚᓪᓕᐊᔪᓐᓇᕐᓂᕐᒋᓐᓄᑦ ᐱᕈᖅᐸᓪᓕᐊᖃᑎᒌᒃᑐᓂᑦ.

- ᖃᐅᔨᒪᔭᐅᕐᒋᑦᑐᖅ ᓱᓕ ᒫᓇᕌᖅ ᓄᙳᐸᓪᓕᐊᓂᖅ ᖀᙶᓂᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐊᒻᒪᓗ ᐅᐊᙳᓇᒧᙱᐅᔪᖅ ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐊᑯᓂᐅᔪᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᐊᕐᓂᕐᒥᒃ ᓅᓐᓂᕐᒧᓪᓘᓐᓃᑦ. ᐱᐅᓂᖅᓴᐅᔪᒥᑦ ᐃᓂᒧᑦ ᐊᒻᒪᓗ ᓄᓇᒥᑦ ᖃᓪᓕᖅᓯᓂᖅ ᐋᖅᑭᐅᒪᔪᓄᑦ ᖃᐅᔨᓴᐅᔪᑦ ᐱᓴᕆᐊᖃᖅᑐᑦ ᓴᖅᑭᑦᑎᓂᐊᕐᓗᓂ ᐊᑯᓂᐅᔪᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᕐᒋᓐᓂᑦ, ᑐᑭᓕᐅᕐᓗᒋᓪᓗ ᐃᓂᐅᔪᒧᑦ ᐊᔾᔨᒌᙱᓐᓂᑦ ᐊᒻᒪᓗ ᐊᐅᓚᑦᑎᓐᓂᑦ.

## ᐱᔾᔪᑕᐅᔪᖅ 3. ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ, ᐆᒪᔪᕐᕿᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ

### ᖁᑦᑎᒃᑐᒥᑦ ᖃᓂᑦᑐᒥᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ

ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐆᒪᔪᕐᕿᑦ ᐱᒻᒪᕆᐅᔪᑦ ᑳᐸᓐᒥᒃ (carbon) ᐅᑎᖅᑕᖅᑎᑦᑎᑉᐳᑎᒃ ᑕᕆᐅᑉ ᐊᓗᐊᓂᑦ ᐃᒍᓇᖅᑎᑦᑎᑉᐳᑎᒃ ᐆᒪᓂᖃᖅᑐᒥᒃ ᓂᕿᑦᑎᐊᙳᕐᒥᓪᓗ ᐃᒪᕐᒧᐊᖅᑎᕝᕙᒍ ᓱᓇᙵᖅᑎᒃᑲᓐᓂᖅᕙᒍ. ᓂᕿᕆᔭᐅᖃᑦᑕᖅᑐᑦ ᐃᖃᓗᙱᑦ, ᑕᕆᐅᕐᒥᐅᑕᓖᑦ, ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᓖᑦ, ᐋᖅᑭᒃᓯᒪᔪᒥᑦ ᐊᒻᒪᓗ ᐃᓂᖃᖅᑎᑦᑎᑉᐳᑎᒃ ᐊᓯᙱᓐᓂᓖᑦ ᒥᑭᔫᑎᓖᑦ ᐊᙱᔪᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐆᒪᔫᑦ (ᓃᕐᓗ, ᑕᕆᐅᑉ ᐊᓗᐋᑦᑐᓖᑦ ᐱᔭᖅᑐᕋᓗᐃᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ), ᐊᒻᒪᓗ ᓂᕿᕆᔭᐅᕙᒃᐳᑎᒃ (ᓃᕐᓗ, ᑕᑉᐳᕈᕐᓇᐃᑦ, ᐊᒥᓯᓂᒃ ᓂᐅᑏᑦ, ᑭᖑᐃᑦ, ᐅᕕᓗᐃᑦ, ᐊᓯᙵᓪᓗ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ). ᐊᙱᔪᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᒥᑭᔫᑏᑦ ᑕᐃᒪᑕᖃᐅᕐᓂᖅᑭᑦ ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᑦᑑᑕᐅᓂᖅᑭᑦ ᑕᐃᒪᑕᓕᒪᕆᐅᔪᖅ ᕿᑎᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐊᒻᒪᓗ ᐊᑦᑎᓵᖓᓂᑦ ᑲᓐᓇᖓᓂᑦ, ᑲᑎᓯᒪᔪᑦ ᐆᒪᓂᖃᖅᑐᑦ ᑳᐸᓐ (carbon) ᐊᒻᒪᓗ ᓇᐃᑐᕈᔾᔨᓐ (nitrogen) ᖁᑦᑎᓵᖑᑉᐳᑎᒃ. ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐱᖓᓐᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐃᓱᒪᕆᔭᐅᔪᖅ ᐃᓂᕆᔭᐅᑦᑎᐊᕐᓂᖓᓄᑦ ᐆᒪᔪᓄᑦ ᐊᔾᔨᒌᙱᑦᑐᓄᑦ. ᐱᒻᒪᕆᐅᑉᐳᓂ, ᐊᔾᔨᒌᓐᓂᖃᕐᓂᕐᒧᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ, ᐃᓚᕆᔭᐅᔪᑦ ᐆᒪᓂᖃᖅᑐᑦ ᐊᔾᔨᒌᙱᑦᑐᓄᑦ ᐱᓕᕆᐊᖃᖅᐳᑎᒃ ᑎᑭᐅᑎᓂᖅᑭᓐᓄᑦ ᐃᓂᕆᔭᐅᔪᓄᑦ ᐱᔾᔪᑎᖃᕐᓂᖃᖃᑎᒌᒃᑐᓄᑦ, ᖃᐅᔨᒪᔭᐅᓛᙳᔪᖅ ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ. ᐅᔾᔨᕆᔭᐅᓯᒪᔪᖅ, Jabr et al. (2018) ᓚᓐᓇᕚᖅ ᖃᐅᔨᔭᐅᔪᖅ ᐊᒻᒪᓗ ᐅᖃᐅᓯᐅᔪᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐆᒪᔪᖅ (ᖁᐱᕐᕈᐃᑦ) ᖃᐅᔨᒪᔭᐅᖅᑭᑦᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ. ᖃᐅᔨᓴᐃᓂᖅᑕᖃᓗᐊᖅᑭᑦᑐᖅ ᐊᑯᑭᑦᑑᑉ ᖃᓂᑕᙵᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᑭᓯᐊᓂ ᖃᐅᔨᓴᐃᒃᑲᓐᓂᕐᓂᐅᔪᒥᑦ ᓂᕆᐊᓂᑦ ᕿᑭᖅᑖᓗᑉ ᐃᒪᙱᓂᑦ ᖃᐅᔨᔭᐅᓯᒪᔪᖅ ᑕᒪᓐᓇ ᐆᒪᔪᖃᐅᑦᑎᐊᕐᒪᑦ, ᐆᒪᔪᕐᕿᖃᐅᑦᑎᐊᖅᓱᓂ. ᑕᐃᒪᑕᖃᐅᕐᓂᖅᑭᑦ ᐊᐃᕖᑦ ᐊᒻᒪᓗ ᒥᑏᑦ ᑖᒥᓂ, ᐆᒪᔪᐃᑦ ᓂᕿᕆᔭᐅᓗᐊᖅᑐᑦ ᐅᕕᓗᕋᓗᐃᑦ, ᓇᓗᓇᐃᖅᓯᙵᔪᖅ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᖅᑕᖃᐅᕐᒪᑦ, ᐃᑎᓂᕐᒧᑦ ᑎᑭᐅᑎᖃᑦᑕᖅᑕᙱᓐᓄᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᖅᐳᑎᒃ (ᒥᑏᑦ 25 ᒦᑕᓄᑦ, ᐊᐃᕖᑦ 100 ᒦᑕᓄᑦ). ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐊᔾᔨᐅᙱᑦᑐᒥᑦ ᐊᒻᒪᓗ ᒥᑭᔫᑎᒻᒪᕆᓐᓂᒃ ᐱᑕᖃᑦᑎᐊᖅᑐᖅ. ᐊᔾᔨᕐᓚᕆᔭᙶ ᐆᓇᔪᓐᓂᖅᓴᐅᔪᒥᑦ ᑕᕆᐅᕐᒥᑦ, ᓴᓗᒪᐃᑦᑐᖅ (bacteria) ᐱᒻᒪᕆᐅᔪᖅ ᐊᑐᖅᑕᐅᒃᑲᓐᓂᖃᑦᑕᕐᓂᙶᓄᑦ ᑳᐸᓐ (carbon) ᐊᓯᙵᓪᓗ ᓂᕿᑦᑎᐊᕙᐅᔾᔪᑕᐅᔪᑦ ᐃᒪᐅᑉ ᖁᑦᑎᓐᓂᖅᓴᙶᓐᑐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᙶᓂᑦ.

### ᓈᒻᒪᒃᑐᒥᑦ ᐆᒪᖅᑯᑎᒥᒃ ᓅᑦᑎᓂᖅ (ᐃᒪᐅᑉ ᖁᑦᑎᓐᓂᖅᓴᙶᓐᑐᑦ-ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᑲᑎᓐᓂᖅᑭᑦ)

ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᐅᓯᕆᐊᖅᑕᐅᒃᑲᓐᓂᖅᑐᖅ ᓈᒻᒪᒃᑐᒥᒃ ᓅᑕᐅᓂᖅᓚ ᐆᒪᖅᑯᑎ ᐃᒪᐅᑉ ᖁᑦᑎᓐᓂᖅᓴᙶᓐᑐᑦ ᐊᒻᒪᓗ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐱᔾᔪᑎᖃᕐᓂᐊᖅᑕᐅᔪᒃᑐᓄᑦ. ᖃᐅᔨᓴᐃᓅᑦ ᐃᒪᐅᑉ ᖁᑦᑎᓐᓂᖅᓴᙶᓐᑐᑦ-ᐊᓗᐊᓂᕐᒥᐅᑕᐃᓪᓗ ᑲᑎᑦᑐᓂᒃ (ᐅᑎᖅᑕᐃᓂᖅ ᑳᓐᒥᑦ (carbon) ᐊᒻᒪᓗ ᓅᑕᐅᓂᖅᓚ ᐃᒪᐅᑉ ᖁᑦᑎᓐᓂᖅᓴᙶᓐᑐᓂᑦ ᐊᒻᒪᓗ ᐊᓗᐊᓂᕐᒥᐅᑕᓂᑦᓂᕆᔭᐅᑦᑕᖅᑐᓂᒃ) ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐊᑯᓂᐅᔪᒥᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖃᕐᓂᖅᑭᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᙶᓂᑦ ᑐᓂᓯᔪᖅ ᐊᑯᓂᐅᔪᒥᑦ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐆᒪᓂᖃᖅᑐᓂᒃ ᑳᓐᒥᒃ ᐱᑉᐳᑎᒃ ᐃᒪᕐᒥᑦ ᖁᑦᑎᓐᓂᖅᓴᒦᑦᑐᒥᙶᖅᑐᒥᑦ. ᐊᙱᓪᓕᕆᐊᕐᔪᐊᕐᓂᖓ ᑳᓐᑖᕐᓂᖅ (carbon) ᐊᓗᐊᓂᕐᒥᐅᑕᓄᑦ ᖃᐅᔨᔭᐅᓚᐅᖅᑐᖅ 2010-ᖏᓐᓂᑦ, ᐱᔾᔪᑕᐅᔫᓴᐅᔪᖅ ᖃᓂᑦᑐᒥᑦ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ ᑕᕆᐅᑉ ᖃᓄᐃᓐᓇᖓᓄᑦ, ᐱᒋᐊᕐᓗᓂ ᐊᑖᓂᑦ-ᖁᓪᓗᑦ ᐊᐅᓚᑕᐅᔪᒥᑦ ᑕᕆᐅᑉ ᓯᑯᖏᓐᓄᑦ ᐱᔾᔪᑎᒃ ᐱᓕᐅᕆᓂᕐᒧᑦ, ᐅᕝᕙᓘᓐᓃᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᑲᑎᓐᓂᖅᑭᑦᑕ ᖃᖓᒃᑰᖓᓂᕐᒥᑦ ᐱᓕᐅᕆᔭᐅᓚᖅᑐᓂᒃ ᐊᒻᒪᓗ ᐆᒪᔪᕐᕿᓂᒃ ᓂᕆᔭᒃᓴᖅᓯᐅᓂᕐᒧᑦ. ᑭᖑᓂᐊᒍᑦ ᖃᓄᐃᖓᓂᐅᔪᑦ ᐱᕈᕆᐊᖅᑐᓄᑦ, ᐱᓕᐅᕆᓂᕐᒧᑦ ᐅᐊᙵᒧᖅᐸᓯᖅ, ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᑦ ᓂᕿᑦᑎᐊᕙᐅᑎᓂᒃ ᐊᐢᔭᖅᑕᐅᔪᑦ (ᐊᐅᓚᓂᒃᑯᑦ-ᐊᐢᔭᖅᑕᐅᔪᑦ) ᐊᓯᐊᙳᖅᓯᓂ Smith Sound-ᒧᑦ ᐅᐊᖕᓇᖓᓂᑦ ᕿᑭᖅᑖᓗᑉ ᐃᒪᖓᓂᙶᖅᑐᓂᑦ. ᑕᒪᕐᒥᒃ ᑕᐃᒪᓐᓇᐃᑦᑐᖕᓇᖅᑑᒃ ᑕᐃᒪᓐᓇᐃᑎᑦᑎᓂᖅᓴᐅᔪᑦ ᐊᖏᓂᖅᓴᐅᔪᒥᑦ ᐱᔭᖅᑐᓂᒃ-ᐱᔭᐅᔪᑦ ᑳᓐ (carbon) ᐊᓗᐊᓄᑦ ᑕᕆᐅᕐᒧᐊᖅᐳᑎᒃ.

ᖁᑦᑎᒃᑐᑦ ᓇᓃᓐᓂᐅᔪᑦ ᑐᖑᔪᖅᑐᐃᑦ ᐱᔭᖅᑐᑦ ᐱᓕᐅᕆᓗᐊᕐᓂᐅᔪᑦ ᑐᙵᕕᖃᖅᑎᑦᑎᔪᑦ ᐊᒥᓲᒪᕆᖕᓂᑦ ᐆᒪᔪᕐᕿᑦ ᓂᕆᖃᑦᑕᖅᑐᑦ ᑐᖑᔪᖅᑐᑦ ᐱᔭᖅᑐᓂᑦ. ᐆᒪᔪᕐᕿᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᙶᑦᑐᑦ ᐊᔾᔨᕐᓚᕆᔭᙶ ᓂᕆᖅᐸᓯᐊᓂᑦ ᐆᕗᐊᑦ ᑕᕆᐅᑉ (Beaufort Sea) ᐊᒻᒪᓗ ᖁᑦᑎᓐᓂᖅᓴᐅᔪᑦ ᐊᓯᙵᓂᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᙶᓂᑦ. ᐊᙱᔪᑦ ᑰᐸᑦ

(copepods) ᐋᖅᑭᒃᓱᖃᑦᑕᖅᑐᑦ ᐱᒻᒪᕆᐅᔪᒥᒃ ᐊᒃᑐᐊᓂᕐᒥᒃ ᓅᑕᐅᓂᖏᓐᓄᑦ ᓂᕿᑦᑎᐊᕚᐃᑦ ᑐᙵᔪᖅᑐᓂᑦ ᐱᕈᖅᑐᓂᑦ ᖃᑦᑎᖕᓂᖅᓵᒧᑦ ᓂᕿᑦᑎᐊᕙᖃᕐᓂᐅᔪᑦ ᓇᓃᓐᓂᕆᔭᖏᓐᓄᑦ ᓲᕐᓗ ᐃᖃᓗᐃᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ. ᐊᓯᐊᙳᕐᓂᐅᔪᑦ ᐆᒪᔪᕋᖅᓂᑦ ᐊᔾᔨᒌᙲᓕᖃᑦᑕᖅᑐᑦ ᑐᙵᔪᖅᑐᑦ ᐱᕈᖅᑐᓕᐅᕆᓂᕐᒧᑦ (ᓲᕐᓗ, ᖃᖓᒃᑯᑦ ᐊᒻᒪᓗ ᒪᓂᒪᓂᖏᑦ) ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑰᐸᐹᑦ (copepods) ᐊᖏᓂᖅᓴᒥᑦ ᐱᒡᒎᖃᑎᖃᑐᐃᓐᓇᕆᐊᖃᖅᑐᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᔫᓐᓃᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᖅᑕᐅᓗᑎᒃ ᓄᑖᑦ ᐆᒪᔪᑦ ᖃᑉᓗᓈᓂᙶᕚᖓᑕ. ᐊᑕᐅᓯᖅ ᐃᓱᓖᓘᑕᐅᓗᐊᖅᑐᖅ ᐊᓯᐊᙳᕐᓂᐅᔪᖅ ᒥᕿᓂᖅᓴᓄᑦ ᐆᒪᔪᓄᑦ ᐅᖅᓱᖃᓗᐊᖏᓐᓂᖅᓴᐅᔪᑦ ᖁᑦᑎᒃᑐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒪᔪᖏᓐᓂᐅᖓᓂᑦ, ᐊᓯᐊᙳᖅᓯᒪᓂᖃᓕᐊᓂᒃᑐᖅ ᓂᒋᖅᐸᓯᐊᓂᑦ ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᓂᑦ ᐊᒻᒪᓗ ᓛᐳᕋᑐᐊ (Labrador) ᑕᕆᐅᖓᓂᑦ. ᑕᐃᒪᓐᓇᐃᑦᑐᑦ ᐊᓯᐊᙳᕐᓂᐅᔪᑦ ᐱᐅᖏᑦᑐᒥᒃ ᐊᒃᑐᖅᓯᓂᖃᖅᑐᑦ ᐆᒻᒪᖅᑯᑎᖏᓐᓂᑦ ᐆᒪᔪᕋᖅᓂᒃ ᓂᕆᖃᑦᑕᖅᑐᓂᒃ (ᐃᖃᓗᐃᑦ, ᐃᓚᖏᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ, ᐊᒻᒪᓗ ᐊᕐᕕᑦ).

### ᐃᖃᓗᐃᑦ ᐊᒻᒪᓗ ᐃᖃᓗᓕᕆᓃᑦ

ᑐᑭᓯᐅᒪᔾᔪᑎᑕᖃᓗᐊᖏᑦᑎᐊᖅᑐᖅ ᒪᓂᒪᔪᓂᒃ ᐊᔾᔨᒌᙲᑦᑐᑦ ᐃᖃᓗᐃᑦ ᒥᒃᓵᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒦᑦᑐᓂᒃ ᐊᒻᒪᓗ ᖃᓂᑕᖏᓐᓂᑦ ᐃᒪᕐᓂᑦ. Coad ᐊᒻᒪᓗ Reist (2018) ᐃᓕᑕᖅᓯᓚᐅᖅᑐᑦ 21 ᐃᖃᓗᖏᑦ ᐊᔾᔨᒌᙲᑦᑐᓂᒃ ᑕᓖᓂᐅᔫᒃᓴᐅᔪᒥᑦ, ᐊᔾᔨᒌᙲᑦᑐᑦ ᐃᖃᓗᐃᑦ ᓂᕆᐅᕆᔭᐅᑉᓗᑎᒃ ᑕᐃᒪᑕᖁᐅᕐᓂᖅᓴᐅᓂᖏᓐᓄᑦ. ᐆᒃᑑᑎᕆᓗᒍ, ᐊᓯᐊᔩᑦᑕᐃᓕᔩᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐱᕈᖅᑐᓂᒃ ᐊᒻᒪᓗ ᓂᕐᔪᑎᓂᑦ (CAFF) ᖃᐅᔨᓴᐃᓂᖓᑦ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐃᖃᓗᖕᓂᑦ ᐅᖃᓚᐅᖅᑐᑦ 50-ᓗᐊᑦ ᐊᔾᔨᒌᙲᑦᑐᑦ ᐃᖃᓗᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᖃᓂᑕᖓᓂᑦ ᐊᒻᒪᓗ ᑕᐃᑲᓂ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ (Mecklenburg et al. 2018). ᑲᓇᔦᐃᑦ, ᐊᓯᖏᑦ, ᑎᒃᑖᕋᑦ, ᐆᒐᐃᓪᓗ, ᐊᑯᑭᑦᑐᖅ Hᐊᓕᐸᑦ (Halibut), ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓯᑮᑦ (Skate), ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᖅ ᐃᖃᓗᒡᔪᐊᖅ ᖃᐅᔨᔭᐅᓯᒪᔪᓗᒃᑖᑦ ᑲᓇᑕᐅᑉ ᓯᒡᔭᖏᓐᓂᑦ, ᐱᓗᐊᖅᑐᒥᑦ Jones Sound-ᒥᑦ ᐊᐅᓯᐅᑦᑑᑉ ᖃᓂᑕᖓᓂᑦ. ᐃᖃᓗᒃᐲᑦ, ᐱᒻᒪᕆᐅᕆᔭᐅᔪᑦ ᓂᕿᕆᔭᐅᑉᓗᑎᒃ ᐃᓄᖕᓄᑦ, ᑕᐃᒪᐅᔪᑦ ᖃᑉᓯᐊᕐᔦᐃᑦ ᑯᖕᓂᑦ ᓄᓇᖏᑦ ᖃᓂᑕᖅᑭᖕᓂᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒦᖃᑦᑕᖅᑐᑦ ᐊᐅᔭᒃᑯᑦ. ᐃᔾᔪᑦ ᐃᖃᓗᐊᓖᑦ, ᐊᒥᓲᔪᑦ ᐊᔾᔨᒌᙲᑦᑐᑦ ᐊᓯᖏᓐᓂᑦ ᐃᓂᐅᔪᓂᑦ, ᓲᕐᓗ ᐊᑦᓚᓐᑎᒃ (Atlantic) ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᓂᒋᖅᐸᓯᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑑᑉ, ᖃᐅᔨᔭᐅᓯᒪᓕᕐᒥᔪᑦ ᐊᐅᓯᐃᑦᑑᑉ ᖃᓂᑕᖓᓂᑦ, ᑰᐳᒡ (Coburg) ᕿᑭᖅᑕᒥᑦ, ᒥᑦᑎᒪᑕᓕᖕᒥᑦ, ᐊᒻᒪᓗ ᐱᖓᖕᓇᖅᐸᓯᖓᓂᑦ ᓯᒡᔭᖓᓂᑦ ᐊᑯᑭᑦᑑᑉ; ᐱᒻᒪᕆᐅᕆᓂᖏᑦ ᓂᕿᕆᔭᐅᑉᓗᑎᒃ ᖃᐅᔨᒪᔭᐅᖏᑦᑐᖅ. ᐆᒐᐃᑦ ᐃᓱᒪᕆᔭᐅᔪᑦ ᓂᕿᕆᔭᐅᓂᖏᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᐅᓗᐊᖅᑐᖅ ᐆᒪᔪᕋᓄᑦ ᐊᒻᒪᓗ ᓂᕆᖃᑦᑕᖅᑐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ (ᓲᕐᓗ ᕿᓇᓗᒐᐃᑦ, ᓇᑦᑏᑦ, ᑎᖕᒥᐊᑦ). ᐱᒻᒪᕆᐅᓂᖏᓐᓄᑦ ᐱᕈᖅᐸᓪᓕᐊᖃᖅᑎᒌᒃᑐᓄᑦ, ᐆᒐᐃᑦ ᐃᓱᒪᕆᔭᐅᔪᑦ ᑐᕋᒐᐅᓂᖏᓐᓄᑦ ᐆᒪᓂᖃᖅᑎᒌᒃᑐᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ.

ᐊᑯᑭᑦᑐᖅ Hᐊᓕᐸᑦᓂᒃ (Halibut) ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᓂᑦ ᐱᔭᐅᖃᑦᑕᖅᑐᑦ ᓂᐅᕕᒃᓴᐅᓂᐊᕐᓗᑎᒃ (2019-ᒥᑦ ᑲᑎᕐᓗᒋᑦ ᐱᔭᐅᔪᖕᓇᖅᑐᑦ 9,592.5 ᑕᓐ-ᙳᓚᐅᖅᑐᑦ) ᐊᒻᒪᓗ ᐅᒥᐊᕐᔪᐊᕐᒦᑦᑐᒃᑖᕐᓚᐃᑦ ᓂᐅᕕᐊᒃᓴᐅᔪᑦ ᐃᖃᓗᐃᑦ (ᐃᑯᒪᓕᒡᔪᐊᓄᑦ ᒪᑦᑎᑕᐅᑎᓄᓪᓘᓐᓃᑦ) ᐃᑎᓂᕐᒥᑦ 800-1,500 ᒦᑕᓂᒃ ᐱᔭᐅᖃᑦᑕᖅᑐᑦ ᐅᖓᓯᒃᑎᒋᔪᒥᑦ 73°N (DFO 2014), ᓂᒋᑦᑎᐊᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ. ᐃᖃᓗᒃᓯᐅᖅᑕᐅᓯᒪᓂᖏᑦ ᐃᑯᒪᓕᒡᔪᐊᒃᑯᑦ ᐊᑭᑯᑦᑐᖅ Hᐊᓕᐸᑦᓂᒃ (Halibut) ᖃᓂᑕᖓᓂᑦ ᐸᖕᓂᖅᑑᖅ, ᓄᓇᕗᑦ, ᖃᑉᓯᐊᕐᔦᐃᑦ ᓄᓇᖕᓂᑦ, ᐃᓚᐅᑉᓗᓂ ᐊᐅᓯᐃᑦᑐᖅ, ᐱᔦᒪᓂᕐᖕᓂᒃ ᖃᐅᔨᑎᑦᑎᓯᒪᔪᑦ ᓄᓇᒧᑦ ᖃᓂᑦᑐᒥᑦ ᐃᖃᓗᒃᓯᐅᕈᒪᓂᕐᒥᒃ ᐊᑭᑯᑦᑐᖅ Hᐊᓕᐸᑦᓂᒃ (Halibut) ᐊᒻᒪᓗ ᕿᓂᕐᓴᐃᓯᒪᔪᑦ ᐃᖃᓗᖕᓂᑦ ᐅᑭᐅᓂᑦ ᐊᓂᒍᖅᑐᓂᑦ (ᑕᑯᓗᒍDFO 2019). ᐊᑯᑭᑦᑑᑉ ᖃᓂᑕᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᒥᑭᔪᒥᑦ (200 ᑕᓐ ᖃᓂᑕᖓᓂᑦ ᐅᑭᐅᑕᓖᕐᒥᑦ) ᑭᓯᐊᓂᐊ ᐊᖏᓪᓕᕙᓪᓕᐊᔪᑦ ᓂᐅᕕᐊᒃᓴᓂᒃ ᐃᑯᒪᓕᒡᔪᐊᒃᑯᑦ ᐃᖃᓗᒃᓯᐅᖃᑦᑕᖅᑐᑦ ᖃᓈᖅ-ᒥᑦ, ᐱᒋᐊᖅᐸᓪᓕᐊᔪᒪᐸᓗᑎᒃ ᐊᐅᓚᐃᖃᑦᑕᕐᓂᕐᒥᒃ ᐱᑦᑕᐅᔪᓄᑦ ᐃᖃᓗᖕᓂᑦ ᓂᕆᔭᖅᑐᕐᕕᖕᓄᑦ ᑎᐊᓪᓖᒃᒥᑦ. ᐊᖏᓪᓕᒋᐊᑐᐃᓐᓇᕆᐊᖃᕐᓂᖏᑦ ᐃᖃᓗᒃᓯᐅᕐᓂᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐱᕕᖃᖅᑎᑕᐅᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓄᓇᕐᓂᑦ, ᑭᓯᐊᓂ ᐅᓗᕆᐊᓇᕐᓂᖃᑐᐃᓐᓇᕆᐊᓕᒃ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᓄᑦ, ᓲᕐᓗ ᐃᖃᓗᒃᑕᐅᖃᑦᑕᖅᑐᑦ ᐊᒥᓲᕆᐊᕐᓗᑎᒃ ᐊᓯᖏᓐᓂᒃ ᓂᕆᔭᐅᖃᑦᑕᙱᑦᑐᓂᒃ ᐃᖃᓗᖕᓂᑦ ᐅᕝᕙᔫᓐᓃᑦ ᐊᔾᔨᒌᙲᑦᑐᑦ ᐃᖃᓗᒃᑕᐅᓗᑎᒃ ᐃᖃᓗᒃᓯᐅᕈᑎᓄᑦ. ᖃᐅᔨᒪᔭᐅᔪᖅ ᐱᓕᕆᒃᑲᓂᕆᐊᖃᕐᒪᑕ

ᑐᑭᓯᐊᓂᐊᕐᓗᒋᑦ ᑭᓪᓕᒋᔭᖏᑦ ᐊᑭᑯᑦᑐᖅ Hᐊᓕᐸᑦ (Halibut) ᐊᒻᒪᓗ ᐊᒃᑐᐊᓂᖃᕐᓂᖏᑦ ᓯᓚᔾᒧᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᖃᐸᓯᐅᓂᖏᓐᓄᑦ, ᑕᒪᕐᒥᒃ ᐱᒻᒪᕆᐅᕆᔭᐅᔪᑦ ᑑᒐᓕᖕᓄᑦ.

### ᓈᓴᐅᑎᓂᑦ/ᑎᑎᖅᑲᓂᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᓂᒃ ᐱᑕᖃᙱᓐᓃᑦ

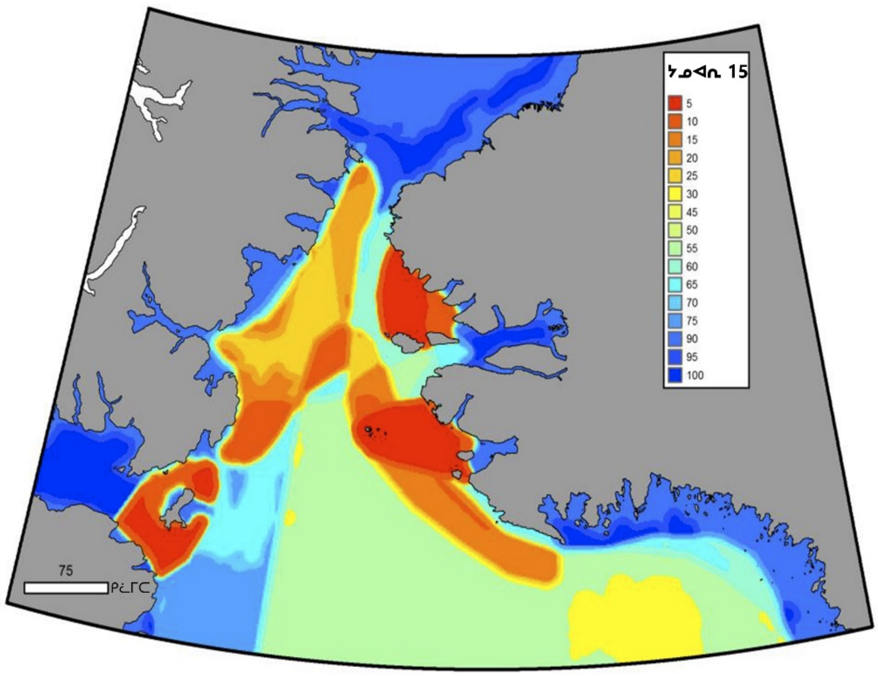
- ᑕᒪᐃᓐᓅᖓᔫᒃᑯᑦ, ᑐᑭᓯᐅᒪᔾᔪᑎᑦᕿᓂᙱᑦᑐᖅ ᑕᕆᐅᑉ ᐊᓗᐊᓃᖃᑦᑕᖅᑐᓗᒃᑖᕐᓚᖕᓄᑦ, ᐆᒪᔪᕋᓛᓄᑦ, ᐊᒻᒪᓗ ᐃᖃᓗᖕᓄᑦ ᐊᕐᕌᒍᑕᒫᒃᑯᑦ ᐅᑎᖅᑕᕐᓂᖏᓐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ.
- ᐊᖏᔪᑦ ᕿᖅᑯᐊᑦ ᓂᕿᕆᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐃᓂᓕᐅᕐᕕᐅᖃᑦᑕᖅᓘᑎᒃ ᐊᓯᖏᓐᓂᑦ ᓂᕆᔨᐅᔪᓄᑦ, ᑖᓴᕋᕐᓄᑦ, ᐊᒻᒪᓗ ᐊᐅᓚᓂᓄᑦ, ᑭᓯᐊᓂ ᑐᑭᓯᐅᒪᔪᑏᑦ ᐃᓂᖃᕐᓂᐅᑉ ᒥᒃᓵᓄᑦ ᐊᒻᒪᓗ ᐊᒥᓲᑎᑭᓂᖏᓐᓄᑦ ᐱᑕᖃᓗᐊᖏᑦᑐᑦ.
- ᖃᐅᔨᒪᓂᖃᙱᑦᑐᑦ ᐋᖅᑭᒃᓯᒪᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᐅᑎᖅᑕᖃᑦᑕᕐᓂᖏᓐᓄᑦ ᐆᒪᔪᕋᓛᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ (ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ). ᐱᓗᐊᖅᑐᒥᑦ, ᖃᐅᔨᒪᓂᖃᙱᑦᑐᑦ ᐃᓂᐅᔪᒧᑦ ᓇᒨᖓᐅᖃᑦᑕᕐᓂᖏᓐᓄᑦ (ᓴᓂᒧᑦ ᐊᒻᒪᓗ ᑯᒻᒧᑦ) ᐆᒪᔪᕋᓛᑦ, ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᓐᓂᖏᑦ ᑲᓇᖕᓇᖓᓂᑦ ᐊᒻᒪᓗ ᐱᖓᖕᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ.
- ᓇᒨᖓᐅᓂᖏᑦ ᐊᒻᒪᓗ ᐊᒥᓲᓂᖏᑦ ᐊᖏᔪᑦ ᕿᖅᑯᐊᑦ, ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ, ᐃᖃᓗᐃᑦ, ᐊᒻᒪᓗ ᐆᒪᔪᕋᓛᑦ ᓯᓚᔾᔭᓂᑦ ᐊᕙᑖᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᖃᐅᔨᒪᔭᐅᑦᑎᐊᖏᑦᑐᑦ. ᑖᒥᓂᖅᓱᖅᑐᑦ ᓱᓇᕋᓛᑦ ᐊᒻᒪᓗ ᓄᖑᑎᖅᓯᒪᔪᑦ ᐃᓂᐅᔪᓂᑦ ᐱᒪᓇᐅᓗᐊᖅᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᑦ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ ᑖᒥᓂᑦ ᐱᑕᖃᓗᐊᖏᑦᑎᐊᖅᑐᖅ.
- ᑐᑭᓯᐅᒪᔾᔪᑎᑦᕿᓂᙱᑦᑐᖅ ᐃᓂᖓᓂᒃ ᐅᑎᖅᑕᕐᕕᐅᔪᑦ, ᐃᓚᐅᑉᓗᑎᒃ ᐊᒃᑐᐊᓂᖏᑦ ᓯᓚᔾᒥᑦ ᐊᒻᒪᓗ ᐃᒪᓃᑦᑐᓄᑦ, ᐊᑭᑯᑦᑐᖅ Hᐊᓕᐸᑦᓄᑦ (Halibut) ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ. ᑐᑭᓯᐅᒪᔾᔪᑎᑦᖃᓗᐊᖏᓪᒥᔪᖅ ᐱᕈᖅᐹᓪᓕᐊᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓇᒨᖓᐅᖃᑦᑕᕐᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑭᖑᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᕝᖓᔪᓂᒃ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐃᖃᓗᒃᓯᐅᕐᓂᕐᒧᑦ ᑕᒫᓂ ᐊᔪᖕᓇᖅᑎᑦᑎᑉᓗᓂ.
- ᐊᓯᐊᙳᕐᓃᑦ ᐊᒥᓱᙳᐊᕐᓂᖏᓐᓄᑦ ᐃᔾᔪᑦ ᐃᖃᓗᐊᓛᑦ ᐊᒻᒪᓗ ᐊᓗᐊᓃᓱᑦ ᓯᐅᕋᕐᒥᐅᑕᐃᑦ ᖃᐅᔨᒪᔭᐅᖏᑦᑐᑦ.

## ᐱᔾᔪᑕᐅᔪᖅ 4. ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᓂᕐᔪᑏᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᑦ

### ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᐱᒻᒪᕆᐅᔪᑦ ᐃᓂᒋᔭᐅᔪᑦ ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ᓂᕐᔪᑎᓄᑦ

ᖃᐅᔾᔨᓂᐊᕐᓗᒋᑦ ᐊᔾᔨᒌᙱᑦᑐᓂᑦ ᐆᒪᓂᖃᖅᑎᕆᖕᓂᓖᑦ ᐊᒻᒪᓗ ᐃᒃᐱᒋᓴᕋᐃᓗᐊᕐᓂᐅᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, Christensen et al. (2017)-ᒥᑦ GIS-ᒦᖓᔪᒥᑦ ᓄᓇᙳᐊᓕᓐᓯᐊᑎ 57-ᓂᒃ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᓇᒧᙱᐅᖃᑦᑕᖅᑐᓂᒃ ᓄᓇᙳᐊᒃᑯᑦ ᐱᓕᕆᐊᖑᓚᐅᖅᑐᑦ 24-ᖑᔪᓂᑦ ᓂᕐᔪᑎᓂᑦ (ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᑦ), ᐃᓂᒋᔭᐅᔪᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ, ᐊᒻᒪᓗ ᐱᕈᖅᐹᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᓄᑦ ᐃᓚᒋᔭᐅᔪᑦ. ᖃᐅᔨᓴᐃᓂᕐᒥᑦ ᐃᓚᐅᓚᐅᖅᑐᑦ ᐊᔾᔨᒌᙱᓐᓂᓖᑦ ᐅᕐᑯᒪᐃᓐᓂᕐᒥᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᓂᕐᔪᑎᓂᒃ/ᐱᕈᖅᐹᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᓄᑦ ᐃᓚᒋᔭᐅᔪᓂᑦ (ᐊᑐᖅᓱᒋᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐅᑯᓂ Christensen et al. 2017) ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᑦᑐᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᓇᒧᙱᐅᓂᖏᑦ ᐊᑕᐅᓯᖅ ᓂᕐᔪᑏᑦ/ᐱᕈᖅᐹᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᓄᑦ ᐃᓚᒋᔭᐅᔪᑦ (ᐊᑐᖅᓱᒋᑦ ᐱᐅᓛᑦ ᒪᓂᒪᔪᑦ ᖃᐅᒪᓂᕆᔭᐅᔪᑦᓯ. ᓄᓇᙳᐊᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᔪᑦ ᖃᓄᐃᖓᓂᐅᔪᓂᑦ ᐊᑖᓂ (ᐊᔾᔩᑦ 5-8) ᑲᓚᖕᓯᒪᔪᑦ ᑐᖑᔪᐊᖓᔪᒥᑦ (ᐊᑦᑎᒃᑐᑦ ᓈᓴᐅᑏᑦ), ᖁᖅᓱᖅᑑᑉ ᖃᖓᒍᑦ, ᐊᐅᐸᓗᒃᑐᒧᑦ (ᖁᑦᑎᒃᑐᑦ ᓈᓴᐅᑏᑦ). ᕿᓂᕐᓛᖅ ᐊᐅᐸᓗᒃᑐᖅ ᓇᓗᓇᐃᖅᓯᔪᖅ 5%-ᖓᓂᑦ ᐃᓂᐅᔫᑉ ᖁᑦᑎᓛᓂᒃ ᓈᓴᐅᑎᖃᖅᓱᓂ ᐅᑉᓗᕐᒥᑦ ᓇᓗᓇᐃᖅᓯᔾᔪᑕᐅᖕᒪᑦ ᓇᓗᓇᐃᒃᑯᑕᕐᒥᑦ. ᐊᐅᐸᓗᒃᑐᖅ ᑕᑯᒃᓴᐅᑎᑦᑎᕆᐊᔭᒃᑐᖅ ᐃᓂᐅᔪᓂᑦ ᐊᒥᓱᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᓂᕐᔪᑎᑦ ᑲᑎᓯᒪᓂᖃᕐᓂᖏᓐᓂᑦ (ᐊᒥᓱᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᐆᒪᓂᖃᖅᑐᑦ) ᐅᕙᓘᓐᓃᑦ ᐃᓂᐅᔪᓂᑦ ᐱᒻᒪᕆᐅᔪᑦ ᐊᑕᐅᓯᖅ ᓂᕐᔪᑏᑦ ᐊᒥᓲᓂᖏᑦ. ᓄᓇᙳᐊᑦ ᖃᓂᓈᖅᓯᓯᒪᔪᑦ ᐊᒻᒪᓗ ᖃᓄᐃᓐᓂᖅᓴᐅᓂᖏᓐᓅᖅᑕᐅᓂᖅ ᐊᔪᖅᑐᖅ ᐅᑭᐅᑉ ᐃᓚᖓᒍᒧᑦ (ᓵᕐᓗ, ᐊᐅᐸᓗᒃᑐᐃᑦ ᐊᐅᔭᒃᑯᑦ ᐊᒥᓲᓂᖅᓴᐅᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᑦᑑᑎᐅᑉᓗᑎᒃ ᐊᐅᐸᓗᒃᑐᑦ ᐅᑭᐅᒃᑯᑦ). ᐊᑐᖅᑕᐅᔪᖅ ᑐᓂᓯᔪᖅ ᓴᙱᔪᒪᓇᖕᒥᑦ ᐊᑐᖅᑕᐅᔪᙱᖅᑐᒥᑦ ᖃᐅᔨᓂᐊᕐᓗᒋᑦ ᐃᓂᒋᔭᐅᓗᐊᖅᑐᑦ ᐆᒪᓂᖃᖅᑎᕆᒃᑐᓄᑦ, ᐱᓗᐊᖅᑐᒥᑦ

ᓇᓗᓇᐃᖅᓯᔪᖅ ᐃᑉᐱᒋᓴᕋᐃᓐᓂᓕᖕᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓃᑦᑐᓂᒃ. ᐱᒻᒪᕆᐅᔪᖅ ᖃᐅᔨᒪᔾᔭᐅᓗᓂ ᓄᓇᙳᐊᑦ ᑕᐅᑐᒐᖃᓗᐊᕐᒪᑕ ᐅᑭᐅᑉ ᐃᓚᖓᓂᑦ ᐱᓕᐅᕆᕚᓪᓕᐊᓂᕐᒥᑦ (ᑐᖑᔪᖅᑐᑦ ᐱᕈᖅᑐᐃᑦ), ᐊᒻᒪᓗ ᐊᒥᕈᓂᖕᒋᑦ ᐊᒻᒪᓗ ᓇᒨᖓᐅᓂᖕᒋᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᐊᒻᒪᓗ ᓂᕐᔨᑏᑦ. ᖃᐅᔨᓴᐃᓂᕐᒥᑦ ᐃᓚᐃᖕᒋᑦ ᖃᓂᑺᒃᑐᓂᒃ ᐆᒪᔪᕋᓘᓂᑦ ᐊᒻᒪᓗ ᐃᖃᓗᐃᑦ ᓇᒧᙵᐅᖃᑦᑕᕐᓂᖕᒋᓐᓂᑦ, ᒫᓐᓇᐅᔪᖅ ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ ᐱᑕᖃᓂᙱᓐᓂᖓᓄᑦ ᑐᓂᓯᓂᐊᕐᓗᓂ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᒃ ᓄᓇᙳᐊᓂᒃ ᑖᑉᑯᓄᙵ.




*ᐊᔾᔨ 5. ᓄᓇᙳᐊᖅ ᐆᒪᔪᖃᕐᓂᖅᒧᑦ ᐱᒻᒪᕆᐅᔪᑦ ᔮᓄᐊᕆᐅᑎᓪᓗᒍ, ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓂᖓᒍᑦ GIS ᖃᐅᔨᓵᕆᑎᕆᔭᐅᔪᓂᒃ ᐱᒻᒪᕆᐊᓛᑦ ᐆᒪᔪᐃᑦ ᑕᒫᓃᖃᑦᑕᕐᓂᖕᒋᑦ (ᑕᕆᐅᕐᒥᐅᑕᑦ ᓂᕐᔪᑎᑦ ᐊᒻᒪ ᑎᖕᒥᐊᑦ) ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᓇᔪᒐᖃᕐᕙᖕᒋᓐᓅᖓᔪᓂᒃ. ᐅᓇ ᓄᓇᙳᐊᖅ ᑕᖅᓴᖕᒋᑦ ᐋᖅᑭᒃᓯᒪᔪᑦ (ᐊᑦᑎᖕᓂᖅᐹᖓᓂᒃ) ᕿᕐᓈᖓᔪᒥᒃ ᑐᖑᔪᖅᑐᕐᒥᒃ ᖁᖅᓱᖅᑑᑉ ᖁᓛᒍᑦ, ᒪᐅᖓ ᕿᕐᓈᖓᔪᒧᑦ ᐊᐅᐸᖅᑐᒨ (ᖁᑦᑎᖕᓂᖅᓖᖓᓄᑦ). ᓄᓇᙳᐊᖅ ᐅᑭᐅᕐᒧᑦ ᐊᑐᓗᐊᖅᑐᖅ, ᐱᒋᐋᓵᖅᑎᓪᓗᒥᑦ ᐋᔪᓕᕝᕙᒃ (ᑎᓯᐱᕆ) ᐱᒋᐋᓵᖅᑎᓪᓗᒧᒧᑦ ᓇᑦᑎᐊᑦ (ᒫᑦᓯ). ᑕᐃᒪᐃᓕᕋᖓᑦ, ᐱᒻᒪᕆᐊᓛ ᖑᕙᒃᑐᑦ ᐊᐅᐸᖅᑑᑦᑐᑦ ᐃᓕᕆᔭᐅᓂᖅᓴᐅᕙᒃᑐᓂᒃ ᐅᑭᐅᒃᑯᑦ ᒪᑯᓄᖓ ᐊᐃᕙᕐᓄᑦ ᐅᕙᓃᑦᑐᓂᒃ ᒧᓯᓴᓐ ᓴᐅᓐ (Murchison Sound), ᐆᒪ ᓯᕝᑕᓐHᐆᒻ ᕙᐅᑦ ᐱᖓᓐᓇᖓᓂᒃ ᐊᒻᒪᓗ ᑰᐳ ᕿᑭᖅᑕᐅᑉ ᒥᒃᓵᓂ (ᑕᑯᓗᒍ ᐊᔾᔨ 2). ᐊᐅᐸᔮᖅᑐᖅ (ᐆᕆᓐᔾ) ᑲᓛᓖ ᓯᑯᖓ ᒪᑯᓇᙵ ᐊᔾᔨᒌᙶᑦᑑᑎᓂᒃ ᓂᕐᔪᑎᓄᑦ ᐃᓂᒋᔭᐅᓂᖓᓄᑦ ᒪᑯᓄᖓ ᕿᓚᓗᒐᕐᓄ ᑑᒐᓕᖕᓄᑦ, ᐊᐃᕙᕐᓄᑦ, ᕿᓚᓗᒐᕐᓄᑦ ᐊᒻᒪᓗ ᐅᒡᔪᒃᓄᑦ. ᐅᐊᖕᓇᖓᑕ ᐱᖓᓐᓇᖅᐸᓯᐊᓂᒃ ᐆᒪ ᓴᕐᕙᕐᔪᐊᖅ/ᐱᑭᐊᓚᓯᕐᓯᐊᖅ ᒥᒃᓯᖓᓂ (ᑲᓇᑕᐅᑉ ᓯᓪᔭᖓᓂᒃ), ᐅᓇ ᐊᐅᐸᔮᖅᑐᖅ ᓇᓗᓇᐃᒃᑯᑎᐅᔪᖅ ᐅᑭᐅᒃᑯᑦ ᕿᓚᓗᒐᐃᑦ ᓇᓃᖃᑦᑕᕐᓂᖕᒋᓐᓂᒃ (ᖃᐅᔨᕝᕙᐅᔪᖅ: Christensen et al. 2017).*

*ᐅᑭᐅᖅ*

ᐅᑭᐅᖑᑎᓪᓗᒍ ᐋᒡᔪᓕᕝᕙᒃ (ᑎᓯᐱᕆ) ᐱᒋᐋᓵᖅᑎᓪᓗᒍᒧᑦ ᓇᑦᑎᐊᑦ (ᒫᑦᓯ), ᑕᕆᐅᕐᒧᙵᐅᔪᖅ ᓯᑯ ᐊᒃᑐᖅᓯᖃᑦᑕᖅᑐᖅ ᐃᓂᐅᔪᒥᒃ ᓇᒧᙵᐅᓂᖕᒋᓐᓄᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᓂᕐᔪᑏᑦ. ᐅᑭᐅᕐᒥᑦ, ᐱᒻᒪᕆᐅᓖᑦ ᐃᓂᐅᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᖓᓯᓗᐊᖑᔪᑦ ᐅᑭᐅᒃᑯᑦ ᐃᓂᒋᔭᐅᖃᑦᑕᖅᑐᑦ ᐊᐃᕙᕐᓄᑦ (ᑕᑯᓗᒍ ᐊᔾᔨ 5, ᐊᐅᐸᓗᒃᑐᐃᑦ) Murchison Sound-ᒥᑦ, ᐱᖓᓐᓇᖓᓂᑦ Wolstenholme Fjord, Jones Sound-ᒧᐊᕆᐊᕐᓂᖓᓂᓗ ᑰᐳᒡ ᕿᑭᖅᑕᒥᑦ (Coburg) (ᐊᔾᔨ 2). ᕿᑭᖅᑖᓗᖕᒥᑦ ᐃᒪᖅ (BB), ᓛᓐᑳᔅᑐ ᓴᐅᓐᑦ (Lancaster Sound) (LS), ᐊᒻᒪᓗ Kane Basin (KB) ᐃᓚᖕᒋᑦ ᓇᓄᐃᑦ ᐊᑐᖃᑦᑕᕐᒥᔭᖕᒋᑦ ᐃᓚᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐊᑭᐊᓃᑦᑐᓪᓗ ᐅᑭᐅᒃᑯᑦ, ᐱᓗᐊᖅᑎᒥᑦ ᓂᕆᐊᓄᑦ, ᐱᖓᓐᓇᖓᓄᑦ

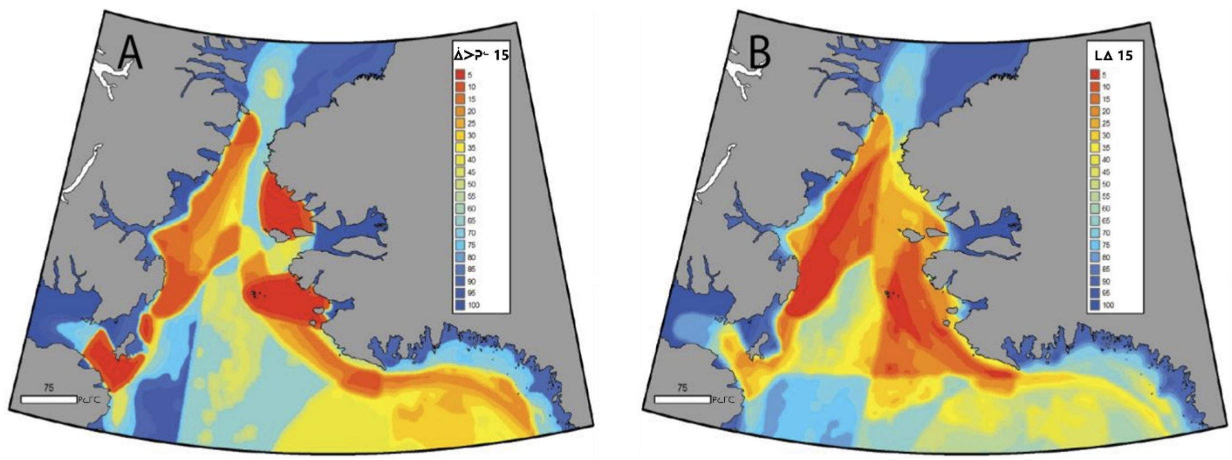
ᐊᒻᒪᓗ ᐅᐊᖕᓇᖓᑕ ᓯᑯᐃᑦ ᐊᐅᓚᓃᑦ. ᐊᐅᓱᐃᑦᑐᕐᒥᐅᑕᐃᑦ ᓇᓄᓇᐃᓚᐅᖅᑐᑦ ᓇᓄᖅᑕᖃᑦᑕᕐᓂᖓᓂᑦ Jones Sound-ᒥᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐅᑭᐅᒃᑯᑦ.

ᑑᒐᓖᑦ, ᕿᓇᓗᒐᐃᑦ, ᐊᒻᒪᓗ ᐅᒡᔪᐃᑦ ᑕᐃᒪᐅᒐᔪᖕᒥᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐅᑭᐅᒃᑯᑦ, ᐃᒪᖅᑲᕐᓃᕐᒦᔅᓱᑎᒃ (ᐊᔾᔨ 5, ᑲᑎᓯᒪᔪᑦ ᓂᕐᔪᑏᑦ ᐊᐅᐸᔫᖅᑐᖅ ᑲᓚᒥᑦ). ᑑᒐᓖᑦ ᑎᑭᖃᑦᑕᖅᑐᑦ ᑲᑖᓗᓇᕝᕙᐅᑉ (ᓄᕙᐱᓇ) ᓄᙳᐊᓂᑦ ᐅᑭᐅᒃᑯᑦ ᑕᐃᑲᓃᔅᓱᑎᒃ ᕿᑎᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐊᒻᒪᓗ ᐅᐊᖕᓇᖓᓂᑦ ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᓂᑦ. ᐊᑐᖅᑕᐅᓂᖏᑦ ᐃᓂᐅᔪᑦ ᐃᓱᒪᒋᔭᐅᔪᑦ ᐱᑕᖃᐅᕐᓂᖏᓐᓄᑦ ᐊᓯᖏᓐᓂᑦ ᓂᕆᔾᔭᑦ, ᐊᑭᑯᑦᑐᖅ Hᐊᓕᐸᑦᓂᒃ (Halibut), ᐅᑭᐅᒃᑯᑦ ᓂᕆᔭᖏᑦ ᖃᐅᔨᒪᔭᐅᓂᖓ ᐱᑕᖃᙱᒃᑲᓗᐊᖅᐳᓂ. ᐅᑭᐅᒃᑯᑦ ᐃᓂᒋᔭᐅᔪᑦ ᑲᓇᖕᓇᖅᐸᓯᖓᓂᑦ ᖁᑦᑎᒃᑐᖅ-ᕿᑭᖅᑖᓗᑉ ᐃᒪᖓᓂᑦ ᕿᓇᓗᒐᐃᑦ ᑕᐃᒪᐅᖃᑦᑕᖅᑐᑦ ᑲᓇᑕᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ (ᐊᔾᔨ 5, ᐊᐅᐸᔫᖅᑐᖅ-ᐊᐅᐸᓗᒃᑐᖅ). 15%-ᓗᐊᑦ Somerset ᕿᑭᖅᑕᒥᑦ ᕿᓇᓗᒐᐃᑦ ᖃᑉᓯᐅᓂᖏᑦ ᓇᓚᐅᑦᑖᖅᑕᐅᔪᑦ ᐅᑎᖅᑕᖃᑦᑕᕐᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᐅᑭᐅᖅᓯᐅᕐᓂᐊᖅᐳᑎᒃ ᐃᓂᐅᔪᓂᑦ ᐱᖓᖕᓇᖓᓂᑦ ᐊᑯᑭᑦᑰᑉ ᓯᒡᔭᖏᓐᓂᑦ.

*ᐅᐱᕐᖔᖅ*

ᐅᐱᕐᖔᓵᖅᑎᓪᓗᒍ, ᐊᑯᑭᑦᑰᑉ ᒥᒃᓵᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐃᒪᖅᑲᕐᓂᖅᓴᐅᖃᑦᑕᖅᑐᖅ ᐊᒻᒪᓗ ᕿᓇᓗᒐᐃᑦ ᐊᒥᒌᓂᖅᓴᐅᑉᓗᑎᒃ ᖃᐅᔨᔭᐅᓯᒪᔪᑦ ᐅᐊᖕᓇᖅᐸᓯᖓᓂᑦ ᐱᖓᖕᓇᖅᐸᓯᖓᓂᑦ ᓯᒡᔭᖓᑕ ᐊᑯᑭᑦᑰᑉ ᐊᒻᒪᓗ ᕿᑎᖅᓴᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ. ᐊᐃᕚᑦ ᑕᐃᒪᐅᖃᑦᑕᖅᑐᑦ ᓱᓕ ᑕᒪᐃᓐᓂᑦ ᐊᑯᑭᑦᑰᑉ ᑲᓇᑕᐅᑉᓗ ᒥᒃᓯᖏᓂᑦ, ᐹᖕᓚᓂ Jones Sound ᐱᒻᒪᓇᐅᕆᔭᐅᖏᓐᓇᖅᐳᓂ (ᐊᔾᔨ 6A). ᐱᕆᐊᔅᓵᖅᑐᑦ ᐊᒻᒪᓗ ᐱᐅᓯᕆᐊᖅᓯᒪᔪᑦ ᐱᓕᐅᕆᑎᑦᑎᓂᕐᒧᑦ ᐱᑎᑦᑎᔪᑦ ᐊᒥᓱᑲᓪᓚᐃᑦ ᐆᒪᐃᑦ, ᐊᒻᒪᓗ ᓯᑯᐃᑦ (squid) ᐊᒻᒪᓗ ᑭᖑᕐᓚᐃᑦ. ᑲᓇᑕᒥᑦ, Jones Sound-ᒧᐊᓇᐊᖅᐳᓂ ᐊᒻᒪᓗ ᓂᕆᐊᓂᑦ ᓯᒡᔭᖓᓄᑦ ᑎᐊᕚᓐ (Devon) ᕿᑭᖅᑕᖅ ᖃᐅᔨᔭᐅᓯᒪᖕᒥᔪᑦ ᐱᐊᓖᓕᐅᕝᕙᐅᓂᖓᓄᑦ ᐊᒻᒪᓗ ᓂᕆᔭᖅᑐᕝᕕᕆᐸᓗᒍ ᕿᓇᓗᒐᕐᓄᑦ, ᐊᒻᒪᓗ ᑲᓇᖕᓇᒥᑦ-ᐱᖓᖕᓇᒥᑦ ᐅᐱᕐᖔᒃᑯᑦ ᐅᑎᖅᑐᓄᑦ ᐊᑉᑯᑎᕆᔭᐅᑉᓗᓂ ᕿᓇᓗᒐᕐᓄᑦ ᐊᒻᒪᓗ ᑑᒐᓕᖕᓄᑦ. ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖅᑎᕐᒥᑦ ᐊᐅᓱᐃᑦᑐᒥᑦ ᖃᐅᔨᑎᑦᑎᔪᑦ ᑑᒐᓖᑦ ᒪᓕᒃᑕᖅᑐᑦ ᓯᓈᒥᑦ ᑲᓇᖕᓇᖅᐸᓯᖓᓂᑦ Jones Sound, ᓄᓕᐅᖅᐳᑎᒃ Jones Sound-ᒧᐊᓇᐊᕝᕙᖕᒥᑦ, ᐊᒻᒪᓗ ᓂᕆᖃᑦᑕᖅᐳᑎᒃ ᓯᒡᔭᓄᑦ ᖃᓂᑦᑐᓂᑦ ᐊᒻᒪᓗ ᐃᒪᐅᓂᕐᓂᑦ ᐅᐱᕐᖔᑉ ᓄᙳᐊᓂᑦ ᐊᒻᒪᓗ ᐊᐅᔭᒃᑯᑦ. ᑐᒑᓖᑦ ᐊᒥᓱᖑᓇᐊᖃᑦᑕᕐᒥᔪᑦ ᐊᑯᑭᑦᑰᑉ ᒥᒃᓵᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐅᐱᕐᖔᒃᑯᑦ, ᐱᓗᐊᖅᑎᒥᑦ Inglefeld Breding-ᒧᐊᓇᐊᕐᓂᐊᓂᑦ.

ᐅᐱᕐᖔᖅ ᐃᓱᓕᐸᓪᓕᐊᑎᓪᓗᒍ, ᐊᐃᕚᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐅᑎᖅᐸᓪᓕᐊᓕᖅᑕᖅᑐᑦ ᓄᓇᐅᑉ ᖃᓂᑕᖓᓂᑦ ᖃᒃᓯᒪᕝᕙᖕᒥᓄᑦ ᑲᓇᑕᐅᑉ ᒥᒃᓵᓂᖔᖅᑐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ (ᐱᑕᖃᙱᓚᔪᒃᑐᑦ ᐊᑯᑭᑦᑰᑉ ᒥᒃᓯᖔᖕᓚᓂᑦ ᐊᐅᔭᐅᑎᓪᓗᒍ; ᐊᔾᔨ 6B). ᑕᑉᑯᐊ ᐅᑉᓘᓕᖅᑎᓪᓗᒋᑦ, ᓄᓇᒥᐅᑕᐃᑦ ᐱᒻᒪᓇᙳᖅᑲᑦᑕᖅᑐᑦ, ᐊᐅᔭᒃᑯᑦ ᓯᒡᔭᒧᑦ ᖃᓂᓐᓂᖅᓴᐅᓕᖅᑕᖅᒪᑕ ᐊᒻᒪᓗ ᐊᒪᖏᓂᑦ ᐃᐅᓐᒥᐅ ᕿᑭᖅᑕᒥᑦ (Ellesmere Island). ᓇᓄᐃᑦ ᓯᑯᒥᑦ ᑕᐃᒪᐅᖏᓐᓇᖅᑲᑦᑕᖅᑐᑦ ᖃᓂᑕᖏᓐᓂᑦ ᐃᒪᖅᑲᕐᓃᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖏᓐᓂᑦ, ᑕᒪᓐᓇᓗ ᐊᑐᖅᓱᓂᔾᔪᒃ ᓄᓕᐊᕐᓂᓗᐊᕐᒧᑦ ᐊᒻᒪᓗ ᓂᕆᔭᒃᓴᖅᓯᐅᕐᓂᓗᐊᕐᒧᑦ.




*ᐊᔾᔨ 6. ᓄᓇᙳᐊᖅ ᐆᒪᔪᓄᑦ ᐱᓪᒪᕆᐅᔪᑦ ᐃᓂᖏᕚᒃᑕᖏᑦ ᐅᐱᕐᙵᒃᑯᑦ (ᐆᐳᕿ-15/ᒪᐃ 15) ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓂᖓᑦ GIS ᖃᓂᑖᓂᕐᓚᖕᒍᑎᒃ ᓇᓃᓐᓂᖏᑦ ᐆᒪᔪᐃᑦ (ᑕᕆᐅᕐᒥᐅᑕᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᑦ) ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᓇᔪᖠᖃᕕᖕᖏᓐᓄᑦ ᐊᒃᑐᐊᔪᓂᒃ. ᐅᓇ ᓄᓇᙳᐊᖅ ᑕᖅᓴᖏᑦ ᐋᖅᑭᒃᓯᒪᔪᑦ (ᐊᑦᑎᓐᓂᖅᐹᖓᓂᒃ) ᕿᕐᓈᖓᔪᒥᒃ ᑐᖑᔪᖅᑐᕐᒥᒃ ᖁᖅᓱᖅᑑᑉ ᖁᑏᒧᑦ, ᒪᐅᖓ ᕿᕐᓈᖓᔪᒧᑦ ᐊᐅᐸᖅᑐᒧᓐ (ᖁᑦᑎᓐᓂᖅᒫᖓᓄᑦ). A) ᐆᐳᕿ ᕿᑎᐊᓂ, ᐊᐃᕖᑦ ᐅᑭᐅᒃᑯᑦ ᐅᐸᒃᓯᒪᕚᒃᑕᖏ ᐅᓄᑏ ᖑᔪᑦ ᓄᓇᙳᐊᒥᑦ (ᐊᐅᐸᖅᑐᑦ), ᐊᒻᒪᓗ ᕿᓚᓗᒐᐃᑦ ᐅᑭᐅᕐᑯᑦ ᐅᐸᒃᓯᒪᕚᒃᑕᖏ ᐊᐅᐸᔮᖅᑐᒦᓪᓗᑎᒃ ᑲᓇᑕᐅᑉ ᒦᒃᓵᓂᒃ ᓕᓂ ᓴᕝᕙᔪᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᒥᒃᓯᖓᓂᒃ. ᑭᓯᐊᓂᓕ, ᐆᒪᔪᐃᑦ ᐃᓂᖏᕚᒃᑕᖏᑦ ᐊᒃᑐᐊᔪᑦ ᓯᑯᐃᑦ ᑭᒡᓕᖕᒋᓐᓂᒃ ᐊᐅᒃᑲᕐᓂᐅᔪᓂᒃ ᓴᖅᑭᐸᓪᓕᐊᓕᖅᓯᒪᔪᑦ (ᐊᐅᐸᔫᖅᓗᑎᒃ), ᑕᐃᒪᓐᓇᑦᑕᐅᖅ ᐅᐱᕐᙵᒃᑯᑦ ᑕᕆᐅᕐᒥ ᐱᕈᖅᑐᐃᑦ ᓴᑭᐸᓪᓕᐊᓕᖅᓗᑎᒃ ᕿᑎᐊᓂ ᐊᐅᒃᑲᕐᓂᐅᑉ (ᖁᖅᓱᖅᑐᑦ). B) ᒪᐃ ᕿᑎᐊᓂ, ᖁᐊᒃᔪᖅᑐᖅᑐᕐᒥᒃ ᑲᓛᓪᓚᑦ ᓄᓇᖓᑕ ᒦᒃᓵᓂᑦ ᐅᓚᒋᔭᐅᔪᕐᒥᑦ ᐆᒧᖓ ᓴᕝᕙᔪᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᒥᒃᓯᖓᓂ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᑦ ᐱᓪᒪᕆᐅᓂᖕᒋᓐᓂᒃ (ᐊᐅᐸᖅᑐᑦ/ᐊᐅᐸᔫᖅᑐᖅ). ᐅᓇ ᑕᐃᒪᐃᑦᔪᑎᖃᖅᑐᖅ ᐅᐱᕐᙵᒃᑯᑦ ᐃᓂᓯᔭᐅᓕᖅᐸᕐᓂᖓᓄᑦ ᒪᑯᓄᖓ ᐊᐃᕙᕐᓄᑦ, ᕿᓚᓗᒐᕐᓄᑦ ᑑᒐᓕᖕᓄᑦ, ᕿᓚᓗᒐᕐᓄᑦ ᐊᒻᒪᓗ ᐊᕐᕕᒃᓄᑦ. ᑖᒃᑯᓯᐊᖅᓯᒪᓂᐅᔪᖅ ᑲᓇᑕᐅᑉ ᓱᒡᓴᖅᐸᓯᖓᓃᑦᑐᖅ ᓴᖅᑭᑎᑦᑎᓯᒪᔪᖅ ᖃᓂᑖᓂᖓᔪᓂᒃ ᐅᐸᒻᕕᐅᕝᕕᒃᑐᓂᒃ ᒪᑯᓇᙱᑦ ᕿᓚᓗᒐᕐᓂᒃ, ᐊᐃᕙᕐᓂᒃ, ᕿᓚᓗᒐᕐᓂᒃ ᑑᒐᓕᖕᓂᒃ, ᐊᒻᒪᓗ ᓇᓄᕐᓂᒃ, ᐊᒻᒪᓗ ᑕᒪᒃᑯᐊ ᑕᕐᓴᐃᑦ ᕿᑎᖅᐸᓯᐊᓃᑦᑐᑦ ᓕᓂ ᓴᕝᕙᔪᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᒥᒃᓯᖓᓂᒃ ᓴᖅᑮᖅᑎᑦᑎᔪᖅ ᐅᐱᕐᙵᒃᑯᑦ ᑕᕆᐅᒥᒃ ᐱᕈᖅᑐᓂᒃ. ᖃᐅᔨᒪᒋᑦᑎ: ᐊᖏᔪᑦ ᐆᒪᔪᐃᑦ ᐅᐸᒃᓯᒪᖃᑦᑕᖅᑕᖏᑦ ᐊᔾᔨᒋᔭᓃᖃᑦᑕᖅᑕᖓ ᒪᐃᒥ, ᐊᒻᒪᓗ ᐱᓪᒪᕆᐅᓛ ᖑᔪᑦ ᓄᓇᙳᐊᒥᓐ B ᖃᐅᔨᒪᔭᐅᔭᕆᐊᓕᒃ ᓇᓗᓇᐃᒃᑯᑎᐅᓂᖓᓂᒃ ᕿᑎᕆᔭᐅᓂᖓᓂᒃ ᖃᓄᐃᑉᐸᓪᓕᐊᓂᖅᒧᑦ ᐊᓯᙳᖅᐸᓪᓕᐊᓂᖅᒧᑦ. ᖃᐅᔨᒪᔩᑎᑕᐅᖅ ᐅᓄᖅᑐᒪᕆᐊᓗᐃᑦ ᑎᖕᒥᐊᑦ ᑎᑭᓕᖃᑦᑕᓪᓚᑕ ᐆᐳᕿ-ᒪᐃᒥᑦ, ᑭᓯᐊᓂᓕ ᖃᐅᔨᒪᙱᓐᓂᖕᒋᓐᓄᑦ ᕿᑐᕐᙱᐅᙱᓐᓂᖕᒋᓐᓂᒃ ᐅᐸᒃᑕᐅᓯᒪᕚᒃᑐᓂᒃ, ᑕᐃᒪᓕ ᑕᒪᑐᒧᖓ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᒧᑦ ᐊᒃᑐᐊᓂᖃᙱᑦᑐᖅ. (ᖃᐅᔨᕝᕕᐅᔪᖅ: Christensen et al. 2017).*

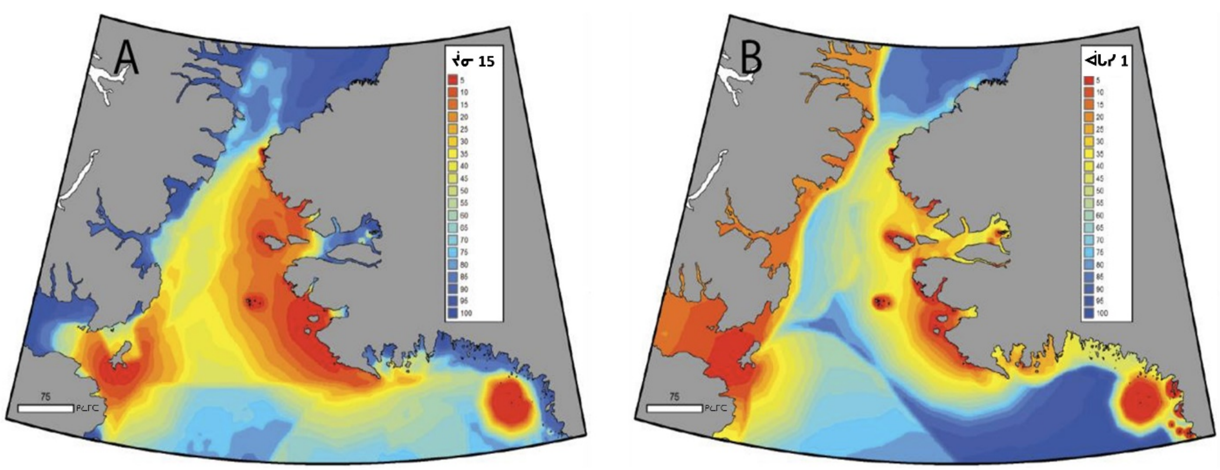
### ᐊᐅᔭᖅ – ᐅᑭᐊᒃᓴᖅ

ᐊᐅᔭᒃᑯ-ᐅᑭᐊᒃᓵᒃᑯᑦ, ᐊᐃᕖᑦ ᐊᒻᒪᓗ ᑑᒑᓖᑦ ᓂᕐᔪᑎᓗᐊᑐᐊᖑᖃᑦᑕᖅᑐᑦ ᑕᕆᐅᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐊᒻᒪᓗ ᕿᓇᓗᒐᐃᑦ ᓇᒨᕙᐅᓂᖏᑦ ᐊᓯᐊᓄᐊᖅᓯᐸᓗᑎᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐊᐅᔭᒃᑯᑦ ᐃᓂᑦᔭᖏᓐᓄᑦ ᖃᓂᑕᖓᓂᑦ Somerset ᕿᑭᖅᑕᐅᑉ, ᓛᓐᑳᔅᑐ (Lancaster) Sound (ᐊᒻᒪᓗ ᐊᑭᓂᐊᓂᑦ ᐃᒪᖃᕐᓂᑦ), ᐊᒻᒪᓗ Jones Sound. ᐊᐅᔭᖓᓂᑦ 2019 ᐊᒻᒪᓗ 2020, ᐊᒥᓱᑲᓪᓚᐃᑦ, ᑕᐃᒪᓐᓇᐃᓚᔪᙱᕐᓗᑎᒃ, ᐆᒐᐃᑦ ᑕᑯᔭᐅᓚᐅᖅᑐᑦ ᖃᓂᑕᖓᓂᑦ ᐊᐅᓱᐃᑦᑑᑉ, ᖃᐅᔨᔭᐅᑉᓗᑎᓪᓗ, ᐊᒥᓱᐃᑦ ᕿᓇᓗᒐᐃᑦ, ᑑᒑᓖᑦ, ᐊᒻᒪᓗ ᖃᐃᕈᓖᑦ (L. ᐊᐅᓚᓗᒃ, ᐊᐅᓱᐃᑦᑐᕐᒥᐅᑕᖅ).

ᐊᑯᑭᑦᑐᕐᒥᑦ, Melville Bay-ᒥᑦ ᐊᒻᒪᓗ Inglefield Bredning-ᒥᑦ ᐃᓱᒪᒋᔭᐅᔪᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᕐᕕᒻᒪᕆᐅᓂᖕᒋᓐᓄᑦ ᑑᒑᓕᕐᓄᑦ (ᐊᔾᔨ 7B, ᐊᐅᐸᔫᖅᑐᖅ). ᐊᐅᔭᒃᑯᑦ ᑑᒑᓕᕐᓄᑦ ᐃᓂᐅᓗᐊᖃᑦᑕᖅᑐᖅ ᐃᑎᓐᓂᑦ, ᐅᕕᖓᓂᖃᕐᔪᐊᖅᑐᑦ ᑲᖏᖅᓗᐃᑦ ᐃᓚᖓᒍᑦ ᓯᑯᓯᒪᔪᑦ, ᐃᒪᖄ ᒥᐊᓂᕆᔭᐅᔪᒪᕗᑎᒃ ᐋᕐᓗᖓᓂᑦ, ᐋᕐᓗᐃᑦ ᑕᑯᔭᐅᓚᐅᕐᒃᑲᓗᐊᖅᓗᑎᒃ ᐱᖓᓐᓇᖓᓂᑦ ᐊᓗᒪ ᑲᓇᓐᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ. ᐋᕐᓗᐃᑦ ᑕᐃᒪᐅᖃᑦᑕᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ

ᑎᕆᒡᒎᓐᓂᑦ (ᐖᐳᕆ) ᐊᒥᕋᐃᔭᕐᕚᓐᒧᑦ (ᓯᑎᐱᕆ), ᑭᖑᓂᐊᒍᑦ ᐱᖓᓐᓇᒨᖓᐅᓕᖅᐳᑎᒃ. ᐅᑭᐅᓂᑦ ᐊᓂᒎᕌᖅᑐᓂᑦ, ᐊᓯᖏᑦᑕᐅᖅ ᕿᓇᓗᒐᐃᑦ ᖃᐅᔾᔭᐅᓯᒪᔪᑦ ᐱᑕᕆᔭᐅᐸᓗᑎᒡᒎᓐᓃᑦ ᐊᑕᐅᔾᔫᕐᕆᕐᐳᑎᒃ ᐊᐅᔭᒃᑯᑦ ᐊᑯᑭᑦᑎᕐᒥᑦ ᒪᖃᐃᑎᓄᑦ.

ᓄᓇᒥᑦ ᖃᒃᓯᒪᕝᕙᖕᖓᑦ ᐊᐃᕝᕚᑦ ᑲᓇᑕᒥᑦ ᐱᒻᒪᕆᐅᖃᑦᑕᖅᑐᑦ ᐊᐅᔭᒃᑯᑦ ᐊᒻᒪᓗ ᐅᑭᐊᒃᓴᓖᕋᖓᓪᓚᑦ ᓯᑯᖃᓗᐊᖏᑎᓪᓗᒍ. ᖃᐃᕈᕗᑦ, ᐅᑦᔭᐃᑦ, ᐊᒻᒪᓗ ᓇᑦᑏᑦ ᑕᐃᒪᐅᓚᔪᖏᕐᒥᔪᑦ ᐊᐅᔭᒃᑲᑦ ᑕᓖᓂ. ᒪᖃᐃᑏᑦ ᖃᓈᕐᒥᑦ ᐅᖃᓚᐅᖅᑐᑦ ᐊᐃᕖᑦ ᑕᑯᔭᐅᓚᔫᖏᓐᓂᖏᓐᓄᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᐅᔭᐅᑎᓪᓗᒍ, ᓇᓗᓇᐃᖅᑕᐅᔪᖅ ᖃᖓᑦᑕᖅᑎᑕᐅᓯᒪᔫᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᔪᓂᑦ. ᑭᓯᐊᓂ, ᓯᕗᓪᓕᖅ ᓇᓗᓇᐃᖅᓯᓂᐅᔪᑦ ᓄᓇᒥᑦ ᖃᒃᓯᒪᔪᓂᑦ Wostenholem Fjord-ᒥᑦ ᖃᐅᔨᔭᐅᓚᐅᖅᑐᖅ ᒫᓐᓈᖑᔪᖅ, 50 ᐅᑭᐅᓂᑦ ᐅᖓᑖᓄᑦ ᐱᑕᖃᕐᕿᖃᖅᐳᑎᒃ. ᐱᒻᒪᕆᐅᕆᔭᐅᔪᑦ ᓇᓄᕐᓄᑦ ᐃᐅᓪᓕᒥᐅ ᓯᓪᔭᖓᓄᐊᕐᓯᒪᔪᑦ ᑖᒃᑯᓇᓂ ᐅᐸᓗᕐᓂᑦ, ᑭᓯᐊᓂ ᐃᓚᐅᖃᑕᐅᔪᑦ ᐊᑯᑭᑦᑑᑉ ᒥᒃᓵᓂᑦ Kane Basin-ᒥᑦ, ᐊᒻᒪᓗ ᓯᑯᑕᖅᐸᑦ ᐅᐊᖕᓇᖅᐸᓯᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᐅᐊᖕᓇᖅᐸᓯᖓᓂᑦ Devon ᕿᑭᖅᑕᐅᑉ ᐅᖃᐅᓯᐅᓯᒪᔪᖅ ᐱᒻᒪᕆᐅᓂᖓᓄᑦ ᓇᓄᕐᓄᑦ ᓯᑎᖃᕝᕕᐅᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᐊᐅᔭᒃᑯᑦ ᐃᓂᑦᓯᔭᐅᓗᓂ Hyde Inlet ᖃᓂᒋᔭᖓ ᐊᒥᓗ Philpots ᕿᑭᖅᑕᖅ ᑲᓐᓇᖓᓃᑦᑐᖅ Dev]on ᕿᑭᖅᑕᒥᑦ (ᑕᑯᓗᒍ ᐊᔾᔨ 2).

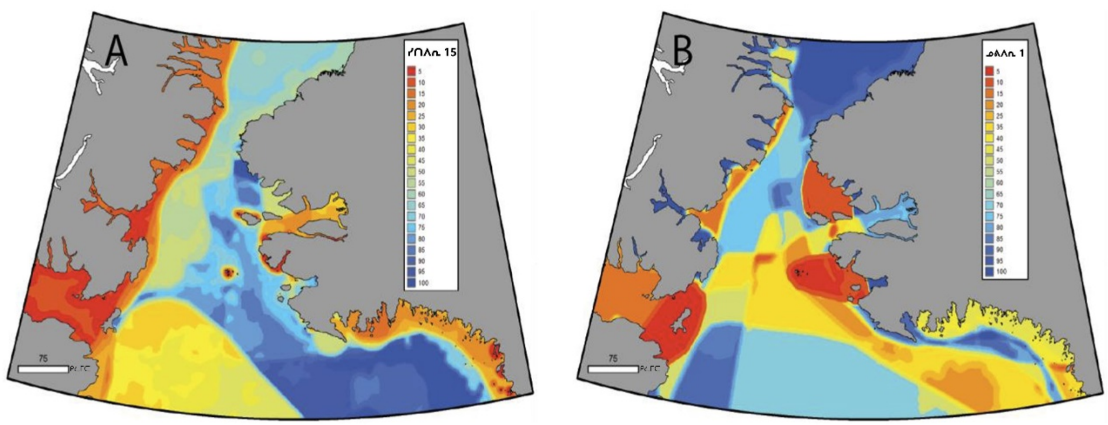



*ᐊᔾᔨ 7. ᓄᓇᙳᐊᖅ ᐆᒪᔪᓄᑦ ᐱᒻᒪᕆᐅᓂᖓᔭᐅᔪᓄᑦ ᐊᐅᔭᒃᑯᑦ (ᔩᓂ 15/ᐋᒡᓯ 1) ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓂᖓᒍᑦ ᐅᓹᓇ GIS ᖃᐅᔨᓭᕈᑎᑎᒎᑦ ᓇᓃᖅᑦᑕᕐᓂᕐᕿᑦ ᐆᒪᔪᐃᑦ (ᑕᖅᐅᕐᑌᑕᑦ ᓂᕐᔪᑏᑦ ᐊᒻᒪ ᑎᕆᒐᐊᑦ) ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᓇᔪᒐᖃᕝᕕᖏᓐᓄᑦ ᐃᓚᒋᔭᐅᔪᑦ. ᐅᓇ ᓄᓇᙳᐊᖅ ᑕᖅᓴᕐᕿᑦ ᐋᖅᑭᒃᓯᒪᔪᑦ (ᐊᑦᑎᖕᓂᖅᐹᖓᓂᒃ) ᕿᕐᓈᖓᔪᒥᒃ ᑐᙳᔪᖅᑐᕐᒥᒃ ᖁᖅᓯᖅᑑᑉ ᖁᑐᒑᒍᑦ, ᒪᐅᖓ ᕿᕐᓈᖓᔪᒧᑦ ᐊᐅᐸᖅᑐᒨ (ᖁᑦᑎᖕᓂᖅᑮᖓᓄᑦ). (A) ᔩᓂ ᕿᑎᐊᓃᑦᑕᖅᑎᓪᓗᒍ, ᐅᓄᖅᑐᒻᒪᕆᐊᓗᐃᑦ ᑕᕆᐅᕐᐅᑕᑦ ᑎᕆᒐᐊᑦ ᒪᓐᓂᑦᑐᑦᑕᖃᑦᑕᖅᑐᑦ ᐅᓄᖅᑑᑎᐅᑦᑎᓯᒪᓪᓗᑎᒃ ᒦᓂ ᓭᕝᕙᖅ/ᐱᑭᐊᓚᓯᕐᓯᐊᖅ ᒥᒃᓯᖓᓂᒃ, ᐊᒻᒪᓗ ᓂᕆᑲᑦᑦᕙᐅᕝᑐ ᑕᒪᒃᑯᐊ ᐅᐸᒃᑕᐅᓯᒪᔪᑦ ᖃᓂᒋᔭᕆᓐᓂᒃ, ᑖᓂᓗ ᑎᕆᒐᖅᑕᖃᐅᖅᐸᒃᓗᓂ ᐊᒻᒪᓗ ᐱᒻᒪᕐᓂᖏᓐᓂᖅᓴᐅᑦᑎᖅᐳᑎᒃ ᐃᓂᒋᔭᐅᔭᒃᑐᓂᒃ. ᐊᕐᕆᔪᑦ ᐊᐅᐸᖅᑐᑦ ᐃᓂᒋᔭᐅᔪᑦ ᒪᑯᓂᖓ ᐃᓂᒋᔭᐅᓂᖅᓴᐅᕝᑐᑦ ᐊᐸᖕᓄᑦ, ᐱᑦᑎᐅᓵᓄᑦ, ᐊᒻᒪᓗ ᒥᑎᕐᓄᑦ ᐃᓂᒋᔭᐅᕝᑐᑦ. ᐊᖑᔪᖅ ᐊᐅᐸᖅᑐᖅ ᐊᖓᓗᖅᓯᒪᔪᖅ ᐅᕙᓂ ᒥᐊᕙᐊᓪ ᐸᐃᒥ ᓴᖅᑭᑎᑦᑎᓯᒪᔪᖅ ᐊᕆᔪᓂᒃ ᓇᐅᔭᖅᑕᖅᑐᕐᓂᖓᓂᒃ (Sabine's Gull) (ᐊᒻᒪᓗ ᐃᒥᖅᑯᑕᐃᓚᕐᓄᖅ) ᐃᓂᒋᔭᐅᔪᓂᒃ. (B) ᐋᒡᓯ ᐱᕆᐊᓕᕐᖅᓯᒪᑎᓪᓗᒍ, ᓂᕆᕝᕙᐊᕝᑐᑦ ᐅᓄᖅᑐᓂᒃ ᑎᕆᒐᓄᑦ ᐃᓂᒋᔭᐅᔪᓂ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᖅ ᐱᒻᒪᕆᐅᓂᕐᕿᓂᒃ (ᐊᐅᐸᖅᑐᒥᒃ), ᒪᑯᐊᑦᑕᐅᖅ ᒥᑎᖅᑎᑐᑦ ᐊᒻᒪ ᐊᒪᐅᓕᑦᔪᐊᖅᓄᓪᓗ ᐃᓂᒋᔭᐅᕝᑐᑦ ᑲᓛᓐᑦ ᓯᓪᔭᕐᕿᓐᓂᒃ. ᑭᓯᐊᓂᓕ ᐅᑯᐊ ᑕᐅᑐᒃᓱᒋ ᓄᓇᙳᐊᖅ A, ᐱᒻᒪᕆᐅᓂᕆᔭᐅᔪᑦ ᑲᓇᑕᐅᑉ ᒥᒃᓵᓅᖓᓂᖅᓴᐅᓯᒪᔪᑦ, ᑖᓂ ᒪᑯᐊ ᕿᓚᓗᒐᐃᑦ ᑑᒐᓖᑦ, ᐊᐃᕖᑦ ᐊᒻᒪᓗ ᓇᓄᐃᑦ ᐃᓂᒋᓂᖅᓴᐅᕝᑕᕐᕿᓐᓂᑦ (ᐊᕐᕆᔪᕈᓗᒃ ᐊᐅᐸᖅᑐᖅ). ᐃᙳᕙᐅᑉ ᐳᕋᑦᓂᖕ (Inglefield Bredning) ᐊᒻᒪᓗ ᒥᐊᕙᐊᓪ ᐸᐃ (Melville Bay) ᐱᒻᒪᕆᐅᕐᒥᔪᖅ ᒪᑯᓄᖓ ᕿᓚᓗᒐᓄᑦ ᑑᒐᓕᖕᓄᑦ, ᐊᒻᒪᓗ ᕿᓚᓗᖓᒐᓄᑦ ᑑᒐᓕᖕᓄᑦ ᐊᒻᒪ ᓇᓄᖃᕐᓂᖓᓄᑦ. (ᖃᐅᔨᕝᕕᐅᔪᖅ: Christensen et al. 2017).*

### ᐊᐅᔭᒃᑯᑦ ᐱᐊᓖᓕᐅᕐᓃᑦ, ᓂᕆᙵᑦ ᐊᒻᒪᓗ ᐅᐸᓗᖃᕐᕕᐅᔪᖅ ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ᑎᖕᒥᐊᓄᑦ

ᐊᐅᔭᖔᖅᑎᓪᓗᒍ, ᒥᓕᔭᓐᖏᓐᓃᑦᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᖃᓂᑕᖕᖓᓄᑦ ᑎᑭᓪᓗᑎᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖕᖓᓄᑦ ᐱᐊᓖᓕᐅᕆᐊᖅᑐᖅᓗᑎᒃ ᐊᒻᒪᓗ ᓂᕆᔭᖅᑐᖅᓗᑎᒃ (ᐊᔾᔩᑦ 7A, ᐊᐅᐸᓗᒃᑐᑦ). 14-ᓃᒃ ᐊᔾᔨᒌᙶᖏᑦᑐᓂᒃ ᑎᖕᒥᐊᖅᑕᖅᖅᑐᖅ ᐱᐊᓖᓕᐅᕆᐊᖅᑐᖅᓗᑎᒃ ᐊᒻᒪᓗ ᐃᒥᔩᓚᖑᖃᕐᑕᖅᑐᑦ ᐱᑦᓯᐅᓖᖅ/ᒥᑭᓂᖅᓴᐃᑦ, 30 ᒥᓕᔭᓐ ᐅᖓᑖᓄᑦ ᓄᕐᕆᐅᖅᓗᑎᒃ. ᐃᓚᒋᔭᐅᔪᖅ, ᑕᓪᓕᒪᐃᑦ ᑲᑎᕐᒪᔪᑦ ᐊᖅᐸᐃᑦ ᑕᐃᒪᐅᔪᑦ ᑕᒫᓂ (ᐅᖓᑖᓄᑦ 308000 ᓂᕆᐅᖅᑐᑦ) ᑕᐅᓯᓐᖏᓐᓃᑦᑐᓪᓗ ᒥᑏᑦ. ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ‘ᐃᓂᒋᔭᐅᔪᑦ’ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᑲᑎᓯᒪᓂᖅᓴᐅᖃᑦᑕᖅᑐᑦ ᐊᐅᔭᒃᑯᑦ, ᐱᔪᑎᖃᖅᓗᑎᒃ ᒪᓐᓂᓕᐅᕐᓂᖏᑦ ᐊᖅᐸᐃᑦ, ᐱᑦᓯᐅᓖᑦ *(ᐱᑕᖃᙱᑦᑐᑦ ᑲᓇᑕᒥᑦ)*, ᓇᐅᔾᔪᐊᑦ ᐊᒻᒪᓗ ᐃᒥᖅᑯᑕᐃᓚᐃᑦ. (ᐊᔾᔨ 7A). ᐊᐅᔭᒃᑯᑦ/ᐅᑭᐊᒃᓴᕋᓕᐊᓕᖅᑎᓪᓗᒍ ᓱᓗᐃᔭᖃᑦᑕᖅᑐᑦ ᒥᑏ, ᑕᐃᒪᓐᓇᐃᓐᓂᖅᓴᐅᖃᑦᑕᖅᓱᓂ ᐊᑯᑭᑦᑑᑦ ᓯᕗᓐᖏᓐᓂᑦ, ᑲᑎᒪᕖᕙᐅᖃᑦᑕᕆᐸᓗᓂ (ᐊᔾᔨ 7B, 8A).

ᑰᐳᒡ ᕿᑭᖅᑕᖅ (ᓂᕐᔪᑎᖃᕐᕕᒃ ᒥᖑᐃᖅᓯᕐᒥᑦ) ᐱᒪᕆᐅᑦᔪᐅᖃᑕᐅᔪᖅ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᐅᐸᓗᓕᐅᕐᕕᒋᐸᓗᒍ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖓᓂᑦ, ᐱᓗᐊᖅᑐᑦ ᐱᑦᓯᐅᓖᓄᑦ, ᓇᐅᔾᔪᐊᓄᑦ, ᓇᐅᔾᔪᐊᕐᓚᐃᓪᓗ, ᐊᒻᒪᓗ ᐊᖅᐸᓐᓄᑦ. ᖃᑯᖅᑐᑦ ᓇᐅᔾᔪᐊᑦ, ᐱᑕᖃᕈᓐᓃᕆᐊᒃᓴᖏᓐᓄᑦ ᐅᓗᕆᐊᓇᖅᑐᒦᑦᑐᑦ (COSEWIC 2006), ᐅᑭᐅᑦ ᖃᑉᓯᐊᕐᔪᓐᓅᓕᖅᑐᖅ ᐊᒥᓱᙳᕆᐊᖅᐸᒃᓗᑎᒃ ᐊᒥᒌᔪᓐᓃᖅᐸᒃᓗᑎᒃ ᑕᐃᒪᓐᓇᐃᓯᒪᔪᑦ, ᑕᐃᒪᓐᓇᒧᑦ ᐅᐸᓗᖃᕐᕕᑐᐊᖏᑦ ᑲᓇᑕᒥᑦ ᐃᐅᓪᓕᒥᐅ (Ellesmere) ᕿᑭᖅᑐᕐᒦᑦᑐᑦ, ᓄᓇᕗᒻᒥᑦ.




*ᐊᔾᔨ 8. ᓄᓇᖔᐊᖅ ᐆᒪᔪᖃᕐᓂᖕᒐᓄᑦ ᐱᒪᕆᐅᔪᑦ ᐅᑭᐊᒃᓵᒃᑯᑦ (ᓯᑎᐱᕆ 15/ᓄᕕᐱᕆ 1) ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓂᖕᒎᑦ GIS ᖃᐅᔨᓴᕈᑎᑎᒍ5 ᐃᓂᒋᔭᐅᔪᓂᒃ ᐱᒪᕆᓐᓄᑦ ᐆᒪᔪᓄᑦ (ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ᓂᕐᔪᑎᓄᑦ ᐊᒻᒪ ᑎᖕᒥᐊᓄᑦ) ᐊᒻᒪᓗ ᐆᒪᔪᐃᑦ ᓇᔪᖃᕐᕕᒋᓐᓄᑦ. ᐅᓇ ᓄᓇᖔᐊᖅ ᑕᖅᓴᖏᑦ ᐋᖅᑭᒃᓯᒪᔪᑦ (ᐊᑦᑎᖕᓂᖅᐹᖕᖓᓂᒃ) ᕿᓈᖓᔪᒥᒃ ᑐᖑᔪᖅᑐᕐᒥᒃ ᖂᖅᓯᖅᑑᑉ ᖂᓖᒎᑦ, ᒪᐅᖓ ᕿᓈᖓᔪᒧᑦ ᐊᐅᐸᖅᑐᒧᓐ (ᖁᑎᖕᓂᖅᒑᖓᓄᑦ). A) ᓯᑎᐱᕆ ᕿᑎᖅᐸᓕᖅᑎᓪᓗᒍ ᑕᕆᐅᕐᒥᑦ ᑎᖕᒥᐊᑦ ᑕᒫᓃᑦᑐᓐᓃᖅᐸᒃᑐᑦ ᐊᒻᒪᓗ ᑕᒪᕐᒥᐸᓗᑦ ᐊᐅᓚᖅᐸᒃᓗᑎᒃ. ᑭᓯᐊᓂᓕ, ᒥᑏᑦ ᐊᒻᒪ ᐊᒪᐅᓕᒡᔪᐊᑦ ᐃᓂᒋᕙᒃᑕᖏᑦ ᑲᓖᓖᑦ ᓯᕗᓐᖏᓐᓂᒃ ᓱᓕ ᐱᒪᕆᐅᓯᒪᔪᑦ. ᑲᓇᑕᐅᑉ ᓯᕗᓐᖏᑦ ᐱᒪᕆᐊᓅᒪᑕ ᐱᔾᔪᑎᒋᓪᓗᒍ ᐊᖅᑰᕕᐅᕙᓐᓂᖏᓐᓂᒃᑦ ᒪᑯᓄᖓ ᐊᐃᕙᕐᓄᑦ, ᓇᓄᓐᓄᑦ ᐊᒻᒪ ᕿᓚᓗᒐᕐᓄᑦ ᑑᓖᓐᓄᑦ. ᐃᖖᘁᕙᐅᑉ ᐳᕋᑦᓂᖕ (Inglefield Bredning) ᐊᒻᒪᓗ ᒥᐊᕙᐊᓪ ᐸᐃ (Melville Bay) ᐱᒪᕆᐅᖕᒥᔪᖅ ᒪᑯᓄᖓ ᕿᓚᓗᒐᕐᓄᑦ ᑑᓖᓐᓄᑦ, ᐊᒻᒪᓗ ᕿᓚᓗᖕᒐᕐᓄᑦ ᑑᓖᓐᓄᑦ ᐊᒪ ᓇᓄᖃᕐᓂᖕᒐᓄᑦ. B) ᐅᒃᑑᐱᕆ ᐃᓱᓕᓕᖅᑎᓪᓗᒍ/ᓄᕕᐱᕆ ᐱᒋᐊᓕᕋᖅᑎᓪᓗᒍ, ᐊᐃᕚᑦ ᐅᑭᐅᒃᑯᑦ ᐅᐸᒃᓯᒪᓂᐊᖅᑕᖏᓐᓂᓕᖃᑦᑕᖅᑐᑦ (ᐱᖕᒐᓱᑦ ᐊᐅᐊᖅᑐᑦ ᐃᓂᐅᔪᑦ). ᕿᓚᓗᒐᐃᑦ ᑑᓖᓖᑦ ᓅᐸᓪᓕᐊᓕᖃᑦᑕᖅᑐᑦ ᐊᐅᔭᒃᑯᑦ ᐅᐸᒃᓯᒪᔭᖏᓐᓂᑦ (ᑲᓇᑕᐅᑉ ᓯᕗᓐᖏᓐᓂᒃ ᒫᓂ ᐃᖖᘁᕙᐅᑉ ᐳᕋᑦᓂᖕ (Inglefield Bredning) ᐊᒻᒪᓗ ᒥᐊᕙᐊᓪ ᐸᐃ (Melville Bay) ᐅᑭᐅᒃᑯᑦ ᒫᓐᓂᐊᖅᓗᑎᒃ ᓴᕿᔪᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ ᒥᒃᓯᖓᓂᒃ. ᑕᒫᓂ ᑲᑎᕐᖓᕙᒃᑐᑦ ᕿᓚᓗᒐᐃᑦ ᐅᑭᐊᒃᓵᒃᑯᑦ ᐊᓯᐊᓄᙵᐅᕙᓕᐊᑎᓗᒋᑦ ᐊᒻᒪᓗ ᓇᓄᐃᑦ ᐊᓯᐊᓄᙵᐅᕙᓕᐊᑎᓗᒋᑦ ᑲᓇᑕᐅᑉ ᓯᕗᓐᖏᓐᓂᒃ ᐊᒻᒪᓗ ᒥᐊᕙᐊᓪ ᐸᐃᒥ ᓱᑯᕙᓕᐊᓂᖕᒐᓄᑦ. ᖃᐅᔨᒪᒋᑦᑎ: ᐅᓄᖅᑐᑦ ᐆᒪᔪᑦ ᓇᓃᓐᓂᖏᑦ ᐊᓯᔾᔨᖃᑦᑕᖅᑐᑦ ᐅᑭᐊᒃᓵᒃᑯᑦ, ᐊᒻᒪᓗ ᐃᓂᒋᔭᐅᕙᒃᑐᑦ ᓄᓇᖔᐊᒥᒃ ᑕᐅᑐᒃᑕᐅᔪᕆᐊᖃᖅᓱᓂ ᐃᓂᒋᓚᐅᑲᑐᐃᓐᓇᕐᓂᖕᒐᓂᒃ ᖃᓄᐃᑉᐸᓕᐊᓂᖏᑦᑎᒍᑦ. (ᖃᐅᔨᕚᐅᔪᖅ: Christensen et al. 2017).*

### ᓯᖣᓄᑦ ᖃᓂᑦᑐᓂᑦ ᐃᓂᒋᔭᐅᔪᑦ ᐱᒪᕆᐅᕆᔭᐅᔪᑦ ᓂᕿᕆᔭᐅᐸᓗᑎᒃ ᓂᕐᔪᑏᑦ

ᓯᖣᒧᑦ ᖃᓂᑦᑐᑦ ᑰᑦ, ᐃᒃᑲᓐᓃᑦ ᓯᖣᐃᑦ, ᐊᒻᒪᓗ ᐊᐅᓚᔪᑦ ᓯᑯᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᒪᕆᐅᔪᑦ ᐃᓂᒋᔭᐅᐸᓗᑎᒃ ᒪᖃᐃᑕᐅᖃᑦᑕᖅᑐᓄᑦ ᓂᕐᔪᑎᓄᑦ ᓱᕐᓗ ᕿᓇᓗᒐᐃᑦ, ᑑᒑᓖᑦ, ᐊᐃᕖᑦ, ᓇᓄᐃᑦ, ᓇᑦᓰᑦ, ᐃᖃᓗᒃᐲᑦ, ᐊᑯᑭᑦᑐᖅ Hᐊᓕᐸᑦ (Halibut), ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᑦᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ. ᑭᓯᐊᓂ, ᐊᒥᓱᓄᑦ ᓂᕐᔪᑎᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᖃᐅᔨᒪᓂᖄᓂᖏᑦᑐᑦ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᐃᓂᒋᔭᐅᖃᑦᑕᖅᑐᓂᒃ ᐊᒥᓯᑦ ᓄᓇᒥᑦ ᓯᖣᒧᑦ ᖃᓂᑦᑐᓂᑦ ᐃᒪᕐᓂᑦ ᐊᒻᒪᓗ ᑲᖏᕐᖑᖕᓂᑦ. ᐃᖃᓗᒃᐲᑦ ᑕᐃᒪᙵᓂᑐᖃᖅ ᐱᒪᕆᐅᕆᔭᐅᖃᑦᑕᖅᑐᑦ ᓂᕿᕆᔭᐅᐸᓗᑎᒃ ᑑᓕ ᐃᓄᖕᓄᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ, ᐊᔾᔨᕐᓚᙵᓗ ᐃᖃᓗᒃᓯᐅᖅᑕᐅᖃᑦᑕᕐᒥᔪᑦ ᖃᓂᑕᙵᓂᑦ ᐊᐅᓯᐃᑦᑑᑉ. ᖃᐅᔨᓴᐅᔪᑦ ᐅᐸᓗᒥᒧᑦ ᑎᑭᖑᓗᒍ ᐱᐊᓚᔪᒥᑦ ᐊᓯᐊᙳᕐᓂᖏᑦ ᕿᖅᑯᐊᑦ ᓄᓇᒧᑦ ᖃᓂᑦᑐᓂᑦ ᓯᖣᖏᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᕆᐅᖅ ᐆᓇᖅᓯᕙᓪᓕᐊᑎᓪᓗᒍ ᐊᒻᒪᓗ ᓯᑯᐃᑦ ᐱᑕᖅᑭᖕᓃᖅᐸᓪᓕᐊᑎᓪᓗᒋᑦ. ᑕᐃᒪᓐᓇᒧᑦ, ᐊᒥᓲᖑᕆᐊᑐᐃᓐᓇᕆᐊᖅᑐᑦ ᕿᖅᑯᐊᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᙱᓂᑦ, ᓄᑖᓂᒃ ᐃᓂᑖᖅᑎᑦᑎᓗᑎᒃ ᐃᖃᓗᖕᓄᑦ ᐊᓯᙳᓐᓄᓪᓗ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᐆᒪᔪᕋᓛᓄᑦ.

ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᖁᓛᓂᑦ ᐅᖃᐅᓯᐅᖅᑲᐅᔪᓗᒃᑖᑦ, ᑕᐃᑉᐱᒪᓂᑐᖃᕐᒥᑦ ᐱᑕᕆᔭᐅᖃᑦᑕᖅᓯᒪᔪᑦ ᓂᕿᒃᓴᕆᔭᐅᐸᓗᑎᒃ ᓄᓇᓕᖕᓂᑦ ᖃᓂᑦᑐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ. ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᐃᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐅᐸᓗᖃᕙᐅᔪᑦ ᐊᒻᒪᓗ ᐱᐊᓛᖃᕙᐅᔪᑦ, ᕿᑭᖅᑕᓂᐅᕙᔪᓗᐊᖅᑐᑦ (ᓱᕐᓗ ᑰᐳᒃ (Coburg) ᕿᑭᖅᑕᖅ) ᐊᒻᒪᓗ ᓄᓇᒥᑦ ᑕᕆᐅᑉ ᐃᒪᖓᓄᑦ ᖃᓂᑦᑐᑦ, ᖃᖅᑲᓂᑦ ᓯᖣᒧᑦ ᖃᓂᑦᑐᓂᑦ, ᐊᒻᒪᓗ ᐃᒻᓈᕈᔭᖏᓐᓂᑦ ᐊᑯᑭᑦᑑᑉ ᐊᒻᒪᓗ ᐃᐅᓕᒥᐅ (Ellesmere) ᕿᑭᖅᑕᒥᑦ, ᐃᒪᖅᑕᖃᐃᓐᓇᓲᒥᑦ ᐊᐅᔭᒃᑯᑦ. ᓯᖣᒥᑦ ᓯᑯᐃᑦ ᐱᒻᒪᕆᐅᖏᔪᑦ ᓇᒨᕐᒐᐅᓂᖏᓐᓄᑦ ᐃᓚᖏᑦ ᑎᖕᒥᐊᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᓯᑯᑕᖅᑎᓪᓗᒍ ᓯᖣᓂᑦ ᐃᓚᖏᓐᓂᑦ ᓂᕆᔭᒃᓴᖅᓯᐅᖅᑎᑦᑎᔾᖕᓇᕐᒪᑕ ᐅᖓᓯᒃᖕᓂᖅᓴᒧᑦ ᑕᕆᐅᕐᒥᑦ. ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᓂᕐᔪᑏᑦ ᒪᖃᐃᑕᐅᓗᐊᖃᑦᑕᖅᑐᑦ ᓄᓇᑏᑦ ᖃᓂᑕᖏᓐᓂᑦ, ᓯᖣᓂᑦ ᓯᑯᖃᙱᑦᑐᓂᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓯᓈᓂᑦ ᓯᑯᓂᒃ ᐊᐅᓚᓂᖃᖅᑐᓂᑦ ᐅᑭᐅᒃᑯᑦ. ᑕᕆᐅᕐᒥᑦ ᓯᑯᖃᕈᖅᓃᕋᖓᑦ ᐊᐅᔭᒃᑯᑦ, ᓇᓄᐃᑦ ᐃᓂᖏᑦ ᐊᓯᐊᓄᑦ ᐊᒥᓲᙱᓐᓂᖅᓴᓄᑦ ᓯᑯᓄᑦ ᑲᑎᓯᒪᔪᓅᖃᑦᑕᖅᑐᑦ ᑕᐃᒪᓐᓇᓖᓪᓗ ᓇᓄᐃᑦ ᖃᓂᓐᓂᖅᓴᐅᓕᖅᐳᑎᒃ ᓄᓇᒧᑦ, ᓇᓚᐅᑦᑖᖅᑕᐅᐸᓗᓂ ᐊᑐᕐᓂᖅᓴᐅᓕᕐᓂᐊᕐᓂᖏᓐᓂᑦ ᓯᖣᓂᑦ-ᓄᓇᒥᑦ ᐃᓂᐅᔪᑦ ᓯᕗᓂᒃᓴᒥᑦ.

### ᓈᓴᐅᑎᓂᑦ/ᑎᑎᖅᑲᓂᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᖃᕐᓂᐅᔪᓂᒃ ᐱᑕᖃᙱᓐᓂᑦ

- ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ ᑲᑎᖅᓱᐃᓂᖅ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᐋᖅᑭᒃᓯᒪᓂᖏᓐᓄᑦ, ᓇᒧᙵᐅᓂᖏᓐᓄᑦ, ᐊᐅᓚᓐᓂᖏᓐᓂᑦ, ᖃᑉᓯᐅᓂᖏᓐᓄᑦ, ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖏᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᐊᒻᒪᓗ ᓂᕐᔪᑏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᐊᓂᒃᓯᒪᒐᔪᙱᑦᑐᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓄᑕᐅᖏᓐᖑᑎᒃ.
- ᖃᐅᔨᒪᔭᐅᓗᐊᖏᑦᑐᑦ ᐱᖁᓯᖏᑦ, ᐊᐅᓚᓐᓂᖏᑦ, ᐅᑎᖅᑕᖃᑦᑕᕐᓂᖏᑦ, ᓂᕆᕝᕕᖏᑦ, ᐊᒻᒪᓗ ᐅᑭᐅᒃᑯᑦ ᑑᒑᓖᑦ ᐃᓂᖏᓐᓂᑦ Jones Sound-ᒥᑦ, Smith Sound, ᐊᒻᒪᓗ Inglefield Bredning-ᒥᑦ. ᐱᓗᐊᖅᑐᒥᑦ, ᖃᐅᔨᓴᐃᔾᔩᑦ ᖃᐅᔨᒪᙱᑦᑐᑦ ᓱᓕ ~3,600-ᓗᐊᖑᔪᑦ ᑑᒑᓖᑦ ᐅᑭᐅᓕᖅᑲᑦᑕᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐊᐅᔭᒃᑯᑦ ᓇᒨᕐᒐᐅᖃᑦᑕᕐᒪᖔᑕ, ᐊᒻᒪᓗ ~24,000-ᓗᐊᖑᔪᑦ ᑑᒑᓖᑦ Smith Sound-ᒥᑦ ᐊᒻᒪᓗ Inglefield Bredning-ᒥᑦ ᓇᒨᕐᒐᐅᖃᑦᑕᕐᒪᖔᑕ ᐅᑭᐅᒃᑯᑦ. ᖃᐅᔨᒪᓂᖄᓂᙱᑦᑐᑦ ᑕᕆᐅᕐᒥᑕᓂᒃ ᐊᑐᖃᑦᑕᖅᑐᓂᒃ ᓄᓇᒧᑦ ᖃᓂᑦᑐᓂᑦ ᐃᒪᕐᓂᑦ.
- ᑕᕆᐅᑉ ᐃᒪᖓ ᐆᓇᖅᓯᕚᓕᐊᑎᓗᒍ, ᓂᓪᓕᓇᖅᑐᒥᑦ ᐃᒪᕐᒦᖃᑦᑕᖅᑐᑦ ᐊᕐᕖᑦ ᐊᓯᐊᙳᑐᐃᓐᓇᕆᐊᖅᑕᖏᑦ ᐱᖅᑯᓯᕆᔭᖏᑦ ᐊᒻᒪᓗ ᐅᐊᖕᓇᒨᕐᒐᐅᙵᕐᓗᑎᒃ. ᐱᒪᕆᐅᔪᖅ ᖃᐅᔨᓴᕐᓗᒋᑦ ᑕᒪᒃᑯᐊ ᓂᕐᔪᑏᑦ ᐱᔾᔪᑎᒋᐸᓗᒍ ᓇᓚᐅᑦᑖᖅᑕᐅᓯᒪᔪᖅ ᐆᓇᖅᓯᕚᓕᐊᓂᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ, ᐊᓯᐊᙳᑐᐃᓐᓇᕆᐊᖅᑲᕐᔪᖅ ᐅᑎᖅᑕᕐᓂᕐᒧᑦ ᐊᕿᑯᑎᒋᔭᖏᑦ.
- ᐊᐃᕖᑦ 50 ᐅᑭᐅᖑᓕᖅᑐᓄᑦ ᐱᑕᖃᙱᑦᑐᑦ ᑕᐃᑉᐱᒪᓂᒥᑦ ᓄᓇᒥᑦ ᖃᒃᓯᒪᕝᕕᒋᖃᑦᑕᖅᑕᖏᑦ ᐱᖖᓇᖖᓂᑦ ᐊᑯᑭᑦᑑᑉ. ᑭᓯᐊᓂ, 2018-ᒥᑦ ᓯᕗᓪᓕᖅᐹᖅ ᖃᐅᔾᔭᑕᐅᓚᐅᖅᑐᖅ ᓄᓇᒥᑦ ᐊᐃᕖᑦ ᖃᒃᓯᒪᕝᕕᖏᑦ ᖃᓂᑕᖖᓂ ᑑᓕ ᑎᖕᒥᓲᖃᕝᕕᖕᒥᑦ / ᐱᑐᕝᕕᒃ. ᖃᐅᔨᓴᐅᓚᐅᖅᑐᑦ ᖃᐅᔨᓴᖅᑕᐅᒃᑲᓐᓂᕆᐊᖃᖅᑐᖅ, ᑭᐅᔾᔪᑎᐅᑐᐃᓐᓇᕆᐊᖃᕐᒪᑦ

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᓯᑯᐃᑦ ᓵᓪᓕᕚᓪᓕᐊᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐊᐃᕚᑦ ᓇᓂᓯᓂᖅ ᓯᑯᓂᑦ ᖃᒃᓯᒪᕝᕙᒃᓯᐊᕐᓂᖅ ᐊᔪᕐᓂᖅᓴᐅᓕᕐᓗᑎᒃ.

- ᖃᐅᔮᒪᔭᐅᓗᐊᖕᒋᑦᑎᐊᖅᑐᖅ ᖃᑉᓯᐅᓂᖕᒋᓐᓄᑦ ᐱᕙᓪᓕᐊᓂᕐᒥᑦ ᐊᒻᒪᓗ ᐱᔾᔪᑕᐅᓗᐊᖅᑐᓃᑦ ᐱᑦᓯᐅᕈᑦ ᖃᑉᓯᐅᓂᖕᒋᓐᓄᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐊᓯᐊᙳᕐᓂᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᓂᕿᑦᓯᔭᐅᔪᑦ ᐱᑎᑦᑎᓂᐊᕐᓂᖕᒋᑦ ᓂᕐᔪᑏᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᖕᒋᓐᓄᑦ ᐱᒻᒪᕆᐅᒋᓛᕆᔭᖕᒋᓐᓂᑦ ᓄᕐᕆᐅᕐᕕᒋᔭᖕᒋᑦ.

## ᐊᒃᓱᕈᕐᓇᖅᑎᑦᑎᔪᑦ

### ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐋᖅᑭᐅᒪᔪᖅ ᐃᒃᐱᒋᓴᕋᐃᑦᑎᐊᖅᑐᒥᒃ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ ᐊᕙᑎᖓᓂᑦ, ᐱᔾᔪᑕᐅᑉᓗᑎᒃ ᓄᓇ ᐊᓯᐊᙳᖅᑕᕐᓂᖕᒋᓐᓄᑦ ᐊᒻᒪᓗ ᓯᓚᒥᑦ ᐱᑎᑦᑎᔪᓄᑦ. ᐃᓂᐅᔪᖅ ᐊᓄᕆᑐᓚᔪᒃᑑᑎᓪᓗᒍ, ᐃᒃᐱᒋᓴᕋᐃᑦᑎᐊᖅᑐᖅ ᓯᓚ ᐊᓯᐊᙳᕐᓂᖓᓄᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᓂᒃ. ᓄᓇᕗᑦ ᑕᒫᓂ ᖃᐅᔨᑎᑦᑎᔪᑦ ᐊᓄᕕᑦ ᕿᑭᖅᑖᕈᑉ ᐃᒪᖓᓂᑦ ᓴᙱᓂᖅᓴᐅᓕᖅᑐᑦ, ᐊᔾᔨᒌᖃᑦᑕᙱᓂᖅᓴᐅᓕᖅᓱᑎᒃ, ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᓚᒃᓴᐅᖕᒋᓕᖅᓱᑎᒃ ᑕᐃᑉᓱᒪᓂᒥᐅᖓᓂᑦ. ᐊᐅᓱᐃᑦᑐᖅ ᑎᑎᕋᐃᓯᒪᓕᖅᑐᖅ ᒪᕐᑯᒃᑕᕐᓂᖅᓴᐅᓕᖅᑐᓂᒃ, ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᖃᐅᓯᕐᓂᐅᔪᓂᒃ (L. ᐊᐅᓪᓚᓗᒃ, ᐊᐅᓱᐃᑦᑐᖅ, ᐱᒻᒪᕆᐅᔪᖕᓇᖅᑐᖅ ᓇᓕᓇᐃᖅᓯᓂᕐᒧᑦ ᓯᓚᒥᑦ ᐱᔪᓂᒃ ᐊᓯᐊᙳᕐᓂᐅᔪᓂᑦ. ᐅᐊᓐᓇᖅᐸᓯᐊᕈᙳᔪᖅ Nares Strait-ᒥᑦ (ᖃᓂᑕᖕᒐᓂᑦ ᓕᖕᑲᓐ ᑕᕆᐅᖅ (Lincoln Sea) ᐊᓯᐊᙳᖅᐸᓪᓕᐊᑐᐃᓐᓇᕆᐊᖃᖅᑐᖅ ᐊᒥᓱᓄᑦ ᐅᑭᐅᓄᑦ ᓯᑯᖃᖅᐸᖕᓂᕐᒥᑦ ᐅᑭᐅᑉ ᐃᓚᖕᒐᒍᑦ ᐱᑕᖃᙱᓪᓗᑎᒃ ᐊᐅᔭᒃᑯᑦ. ᓵᓐᓂᖅᓴᐅᓕᖅᑐᑦ ᐊᒻᒪᓗ ᓴᙲᓐᓂᖅᓴᐅᓕᖅᑐᑦ ᓯᑯᐃᑦ ᒥᒃᓵᓂᐊᖅᓯᓯᒪᔪᑦ ᐊᑯᓂᐅᑎᕆᔪᖅ ᓯᑯᖃᑦᑕᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᓯᑯᐃᑦ ᐊᓯᐊᙳᖅᑕᕐᓂᖕᒋᓐᓂᑦ Nares Strait-ᑯᑦ. ᑕᐃᒪᓐᓇᒧᑦ ᐅᑎᖅᑕᕐᓂᖕᒋᑦ ᓯᑯᐃᑦ ᐊᐅᓚᔪᑦ ᓵᙳᓕᕚᓪᓕᐊᔪᑦ. ᓄᓇᕗᑦ ᐅᐊᓐᓇᖅᐸᓯᖕᒐᓂᑦ ᐱᖕᒐᓐᓇᖅᐸᓯᖕᒐᓂᑦ ᐅᑯᑭᑦᑑᑦ ᐊᓯᐊᙳᕐᓂᕋᐃᖕᒥᔪᑦ ᓯᑯᐃᑦ ᖃᓄᐃᓐᓂᖕᒋᓐᓄᑦ ᓯᑯᓗᒃᑖᖃᑦᑕᙱᓂᖅᓴᐅᓕᖅᓱᑎᒃ. ᓛᓐᓇᓵᕐᓚᒃ ᑕᕆᐅᕐᒥᑦ ᐊᒻᒪᓗ ᑕᕆᐅᑉ ᓯᑯᖕᒐᓂᑦ ᐊᔾᔭᖕᒐᓐᓂᓕᐅᕆᓚᐅᖅᑐᑦ (1981-2070) ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐊᒻᒪᓗ ᐅᐊᓐᓇᖅᐸᓯᖕᒐᓂᑦ ᕿᑭᖅᑖᕈᑉ ᐃᒪᖕᒐᓂᑦ (Myers et al. 2019) ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᓯᕗᓂᒃᓴᒥᑦ ᒥᒃᓵᓂᐊᕐᔭᐊᕐᓂᐊᕐᓂᖕᒋᓐᓄᑦ ᑕᕆᐅᕐᒥᑦ ᓯᑯᐃᑦ ᐊᒻᒪᓗ ᐃᐸᔪᓂᖕᒐᓂᑦ, ᖁᑦᑎᓐᓂᖅᓴᒥᑦ ᑕᕆᐅᖅ ᐆᓇᕐᓂᖅᓴᐅᓕᕐᓗᓂ, ᐊᒻᒪᓗ ᐊᓯᐊᙳᕐᓗᓂ ᑕᕆᐅᕆᓐᓂᖕᒐ (ᐊᑐᖅᑐᖅ ᐊᖕᒋᑎᒋᓂᖕᒐᑕ ᓇᓚᐅᑦᑖᖅᑕᐅᔪᑦ ᓯᕗᓂᒃᓴᒥᑦ ᑯᕙᔪᓄᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ). ᐊᓯᐊᙳᕐᓂᐅᒧᑦ ᖃᓂᐃᖕᒐᓕᕐᓂᐊᕐᓂᖕᒐᓄᐊᖅᑐᑦ ᐱᑕᖃᕐᓂᖅᓴᐅᓕᖅᑐᓂᒃ, ᐱᑕᖃᖕᒋᓐᓂᖅᓴᐅᓕᖅᑐᓂᓪᓘᓐᓃᑦ ᖃᓕᓐᓕᖕᒐᓗᓂ ᑕᒪᓐᓇ, ᑕᒫᓂ ᐊᒃᑐᖅᓯᓂᖃᕐᔪᐊᕐᓗᓂ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒥᑦ.

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐅᑭᐅᕐᒥᑦ ᐊᔾᔨᒌᙱᓐᓂᐅᖃᑦᑕᖅᑐᑦ ᐱᔾᔪᑕᐅᔪᙳᐊᖅᑐᑦ ᐊᔾᔨᒌᖃᑦᑕᙱᓐᓂᖕᒋᓐᓄᑦ ᐅᑭᐅᒥᑦ ᐅᑭᐅᒧᑦ ᓯᑯᖃᑦᑕᕐᓂᖅ, ᐊᒻᒪᓗ ᐃᓪᓗᓕᖕᓂᖕᒋᑦ ᑕᕆᐅᑉ (ᓱᕐᓗ, ᑕᕆᐅᕐᒥᑦ ᐊᐅᓚᓃᑦ ᐊᒻᒪᓗ ᐆᓇᕐᓂᖅ) ᐊᒻᒪᓗ ᓯᓚᒥᑦ ᐱᑎᑦᑎᔪᓂᒃ, ᐊᑯᓂᐅᓂᖅᓴᖅ ᐊᒻᒪᓗ ᓇᐃᓐᓂᖅᓴᐅᔪᓂᒃ ᐱᕈᖅᑐᑦ ᐱᒋᐊᕐᓂᖅᑲᖅᓗᑎᒃ ᐅᑭᐅᓂᑦ ᓯᑯᖃᓗᐊᖕᒋᑦᑐᓂᒃ ᓯᑯᑎᐊᖅᑐᓂᓪᓗ. ᑭᓯᐊᓂ, ᐅᑭᐅᓂᑦ ᐊᔾᔨᒌᖃᑦᑕᙱᓐᓂᐅᓚᐅᖅᑎᓪᓗᒍ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓ ᐊᒃᑐᖅᑕᐅᓯᒪᔪᖅ ᐅᑭᐅᑦ ᖁᓕᐅᓕᖅᑐᓄᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᒥᒃᓵᓂᖓ ᐅᑎᖅᑕᖅᑐᓂᑦ ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᖅᑕᐅᔪᙳᐊᖅᑐᓄᑦ ᐱᓕᐅᕆᕙᓪᓕᐊᓃᑦ ᑕᐃᑉᓱᒪᓂᒥᑦ (Niemi et al. 2019). ᒥᒃᓵᓂᐊᕐᓂᖅ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐱᔾᔪᑕᐅᓂᖃᖅᑕᐅᔪᖅ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᓂᖕᒋᓐᓄᑦ ᖃᓄᐃᓐᓂᐅᔪᑦ ᐊᓯᐊᙳᖅᑎᑦᑎᓯᒪᐸᓗᑎᒃ ᐊᕙᑎᒥᑦ (ᓱᕐᓗ, ᖃᓂᓐᖑᓂᖃᐅᕐᓂᖅᓴᐅᓕᖅᓱᓂ ᐊᒻᒪᓗ ᒥᒃᓵᓂᐊᖅᑐᑦ ᐊᑯᐸᓕᖅᑎᓇᓃᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᐃᒻᒥᖅᑐᓄᑦ). ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐱᔾᔪᑕᐅᓗᐊᖅᑐᖅ ᐊᓯᐊᙳᕐᓂᖅ ᑕᕆᐅᕐᒥᑦ ᓯᑯᐃᑦ ᖃᓄᐃᓐᓂᖕᒋᓐᓄᑦ ᐊᒻᒪᓗ ᓯᑯᓇᕵᖃᑦᑕᕐᓂᕐᒧᑦ, ᐱᑕᖃᖕᒋᓂᕐᒧᓪᓘᓐᓃᑦ, ᓯᑯᓂᖕᒐᑕ Nares Strait-ᒥᑦ. ᑲᑎᕐᒪᔪᑦ ᓯᑯᐃᑦ ᒥᒃᓵᓂᐊᕐᓂᖅ ᐊᖕᒋᔪᒥᒃ ᐊᒃᑐᖅᓯᓂᖃᕐᓇᕐᒥᔪᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖅᑲᑎᒋᓐᓂᖕᒋᓐᓄᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᐊᓯᐊᙳᕐᓂᖕᒋᑦ ᖃᑉᓯᐅᓂᖕᒋᓐᓄᑦ, ᖃᓄᐃᓐᓂᖕᒋᓐᓄᑦ, ᖃᖕᒑᒃᑯᑦ, ᐅᕝᕙᓘᓐᓃᑦ ᐱᕗᔪᑦ ᑳᐸᓐᒥᒃ (carbon) ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ.

ᓱᕗᓃᑲᒥᑦ ᐊᒃᑐᖅᓯᓂᐅᔪᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ ᐊᐅᒃᐸᓪᓕᐊᓂᖏᓐᓄᑦ ᓯᕐᕕᑦ, ᑕᒪᐃᓐᓂᑦ ᓯᓚᒥᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᖕᓂᑦ ᐊᒻᒪᓗ ᑕᕆᐅᖅ ᐆᓇᖅᓯᕗᓪᓕᐊᓂᖕᖓᓄᑦ, ᐊᖏᔫᔪᖕᓇᖅᑐᖅ. ᓄᕐᕆᐅᖃᑦᑕᕐᓃᑦ ᓂᕆᐅᒋᔭᐅᔪᑦ ᐊᖏᒡᓕᓂᐊᕐᓂᖏᓐᓄᑦ ᓯᓚᕗᑦ ᐆᓇᖅᓯᕗᓪᓕᐊᑎᓪᓗᒍ, ᐊᒥᓲᓂᖅᓴᓂᒃ ᐱᕐᖁᓚᔪᖃᐅᓕᕐᓗᓂ ᐊᒻᒪᓗ ᓯᑯᓂᒃ ᕿᑭᖅᑕᓂᑦ Nares Strait-ᒧᖔᐅᔪᓂᒃ. ᐊᖏᔪᑦ ᓯᑯᐃᑦ, ᐊᓗᐊᓄᐊᖅᐸᑕ, ᑲᑎᑦᑎᓂᐊᖅᑐᑦ ᓯᑯᓂᒃ ᐊᒻᒪᓗ ᓱᑲᐃᓕᖅᑎᓪᓗᒋᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓂᖏᑦ, ᐊᒃᑐᖅᓯᔪᖕᓇᖅᓱᓂ ᓯᑯᓂᕐᒥᑦ, ᑕᐃᒪᓐᓇᒧᑦ ᐊᐅᓚᓂᕐᓂᒃ ᓯᑯᖃᐅᓕᕐᓗᓂ. ᐊᒻᒪᓗ, ᓯᕐᒥᓂᑦ ᐊᐅᒃᐸᓪᓕᐊᔪᖅ ᐃᒪᖅ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᒻᒪᓗ ᐃᐅᓪᓚᒥᐅ ᕿᑭᖅᑕᒥᑦ (Ellesmere Island) ᐊᖏᓪᓕᑦᑎᐊᖅᓯᒪᓕᖅᑐᖅ ᐅᑭᐅᓂᑦ ᐊᓂᒍᖅᑐᓂᑦ, ᓴᖏᔪᒥᒃ ᐃᒪᑦᑎᐊᕙᒡᒎᖅᑎᑦᑎᑉᓗᑎᒃ ᖃᓂᑕᖏᓐᓂᑦ ᐃᒪᕐᓂᑦ. ᐃᒪᑦᑎᐊᕙᖃᓕᖃᑦᑕᕐᓂᖅ (ᑕᒪᐃᓐᓂᑦ ᖌᖓᓂᑦ ᐊᒻᒪᓗ ᓯᕐᒥᓄᑦ ᐃᓚᒋᔭᐅᔪᓂᑦ), ᐊᒻᒪᓗ ᐊᒃᑐᖅᓯᓂᖏᑦ ᖃᓕᓈᖓᓂᕐᒥᑦ, ᓂᕿᑦᑎᐊᕙᖃᕐᓂᑦ ᐊᒻᒪᓗ ᐆᒪᔪᕋᓛᓃᑦᑐᑦ ᐅᑎᖅᑕᕐᓂᖏᑦ (ᓃᕐᓗ, ᕐᑯᒻᒧᖓᔪᒥᑦ ᐆᓇᕐᓂᖃᓕᕐᓂᖅ ᐊᒻᒪᓗ ᓂᕿᑦᑎᐊᕙᕐᓂᐅᔪᓂᒃ ᐃᑎᓂᖅᓵᑦ ᐃᒪᕐᓄᐊᕐᓂᖏᑦ), ᑕᕆᐅᑉ ᐊᐅᓚᓐᓂᖓ, ᑕᕆᐅᑉ ᓯᑯᖓᓂᑦ, ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒥᑦ ᐱᒻᒪᕆᐅᓂᐊᖅᑐᑦ ᐊᓯᐊᙳᕐᓂᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ.

ᐊᓯᐊᙳᕐᓃᑦ ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᓐᓂᖏᑦ ᑕᕆᐅᕐᒥᑦ ᓯᑯᐃᑦ ᖃᓄᐃᓐᓂᖏᓐᓄᑦ (ᓃᕐᓗ, ᒥᒃᓵᒋᐊᖅᑐᑦ ᑕᕆᐅᕐᒥᑦ ᓯᑯ, ᓯᑯᖃᕈᓐᓂᕐᓂᖅ) ᐊᒃᑐᖅᓯᓂᖃᖅᑐᑦ ᐃᓂᒋᔭᐅᔪᑦ ᒪᓂᒪᓂᖏᓐᓄᑦ, ᓂᕿᒋᔭᐅᔪᓂᒃ, ᐱᒡᒎᓂᖏᓐᓂᑦ ᐊᒻᒪᓗ ᐊᓯᒥᑦ ᓂᕆᖃᑦᑕᖅᑐᓂᒃ ᐊᓯᐊᙳᖅᑎᑦᑎᑉᓗᑎᒃ ᐅᑎᖅᑕᕐᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᓇᒨᖓᐅᓂᖏᓐᓂᒃ ᐊᒥᓱᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓂᕐᔪᑏᑦ, ᐱᓗᐊᖅᑐᒥᑦ ᑲᓇᖕᓇᖓᓂᑦ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖓᓂᑦ. ᖃᓄᐃᓐᓂᖅᓴᐅᓂᖏᑦ 1990-ᖏᓐᓂᑦ 2010-ᒧᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᔪᖅ ᐊᒥᓱᒃᓚᐃᑦ ᓇᓄᐃᑦ ᕿᑭᖅᑖᓘᑉ ᐃᒪᖓᓂᑦ, ᓂᕆᖅᐸᓯᐊᓂᑦ ᐃᓱᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᓇᓗᓇᖏᑦᑐᑦ ᐊᒃᓱᕈᕐᓇᕐᓂᖓᓄᑦ, ᐊᒥᓲᖏᓐᓂᖅᓴᐃᑦ Kane Basin-ᒥᑦ, ᐅᐊᖕᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐱᐅᓯᕆᐊᖅᓯᒪᔪᖕᓇᖅᓱᑎᒃ ᐃᓂᒋᔭᐅᔪᑦ ᖃᓄᐃᓐᓂᖏᓐᓂᑦ. Kane Basin ᖃᓂᑕᖓ, ᐅᐊᖕᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᐊᓯᐊᙳᖅᐸᓪᓕᐊᓕᐊᓂᒃᑐᖅ ᐃᓂᐅᓚᐅᖅᓱᓂ ᐱᑕᖃᐅᑎᐊᖅᑐᓂᒃ ᐊᒥᓱᓄᑦ ᐅᑭᐅᓂᑦ ᓯᑯᓂᒃ ᐃᓚᖓᒍᑦ ᐅᑭᐅᒥᑦ ᓯᑯᖃᕐᓂᖅᓴᐅᓕᖅᑐᒧᑦ, ᐊᓯᐊᙳᖅᑎᑦᑎᑉᓗᓂ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᕐᒥᑦ ᐊᒃᑐᖅᓯᔪᖅ ᐱᔾᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᐊᑕᐅᓯᐅᖏᑦᑐᒥᑦ.

ᑲᑎᑉᐸᓪᓕᐊᔪᖃᕈᖕᓇᕐᓂᖅ ᑕᒫᓂᕐᒥᐅᑕᐅᖏᑦᑐᓂᒃ ᐃᒪᕐᒥᐅᑕᓂᒃ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᐊᒃᑐᖅᓯᓂᖃᕈᖕᓇᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐋᖅᑭᐅᒪᓂᕆᔭᖓᓂᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᐅᕚᓗᐃᑦ, ᐱᑕᖃᐅᖅᑐᑦ ᒦᓇᐅᔪᖅ ᓂᒋᖅᐸᓯᐊᓂᑦ ᕿᓪᓕᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᐊᒥᓲᒍᕆᐊᕈᖕᓇᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᓗᒃᑖᖓᓂᑦ ᐆᓇᖅᓯᕗᓪᓕᐊᓂᖓᓄᑦ ᓯᓚ. ᐅᕚᓗᐃᑦ ᐋᖅᑭᒃᓯᕐᑲᑦᑕᖅᑐᑦ ᖃᓕᓈᖓᓂᕐᒥᑦ ᐊᒥᓲᒍᓇᐊᖅᓱᑎᑦ ᐊᓯᖏᑦ ᐆᒪᔪᐃᑦ; ᑕᐃᒪᐅᓂᖏᑦ ᖃᐅᔨᓇᖅᑐᑦ ᐊᒃᑐᖅᓯᓂᖅᑐᑦ ᐋᖅᑭᐅᒪᓂᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ. ᑖᒥᓂᕐᒥᐅᑕᐅᔪᓄᑦ ᐊᒻᒪᓗ ᐅᑎᖅᑕᖃᑦᑕᖅᑐᓄᑦ ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ᐊᒻᒪᓗ ᑎᖕᒥᐊᓄᑦ, ᐃᓚᖏᑦ ᓂᕐᔪᑏᑦ ᐊᓯᖏᓐᓂᐅᖓᓂᑦ ᐊᒃᑐᖅᑕᐅᓴᕋᐃᓐᓂᖅᓴᐅᔪᑦ ᐱᔾᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᐊᓯᐊᙳᕐᓂᖏᓐᓄᑦ. ᐊᑕᐅᓯᖅ ᐃᓱᒫᓘᑕᐅᓗᐊᖅᑐᖅ ᐱᑦᓯᐊᕌᖅ, ᖃᐅᔨᒪᔭᐅᔪᖅ "ᐊᑕᐅᓯᕐᒥᑦᓂᕆᔭᒃᓴᕐᒥᒃ ᐱᖃᑦᑕᖅᑐᖅ", ᐅᑎᕈᔾᔨᖃᑦᑕᖅᑐᖅ ᐊᑕᐅᓯᑐᐃᓐᓇᕐᒥᑦ ᓂᕿᒥᒃ ᐱᐊᕋᖏᓐᓄᑦ ᓂᕆᔭᐅᓂᐊᖅᑐᒥᑦ, ᑕᐃᒪᓐᓇᒧᑦ ᐊᒃᑐᖅᑕᐅᓂᐊᖅᑐᖅ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ ᒪᓂᒪᓂᖏᓐᓄᑦ ᓂᕿᖏᑦ ᐊᒻᒪᓗ ᐊᓯᐊᙳᕐᓂᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᓂᕿᒋᔭᐅᔪᑦ.

### ᑭᓪᓕᒋᔭᐅᔪᑦ ᐊᓯᐊᓂᑦ ᐊᒻᒪᓗ ᑖᒥᓂᕐᒥᐅᑕᐅᖏᑦᑐᑦ ᐊᒃᓱᕈᖅᑎᑦᑎᔪᑦ

ᐱᔾᔪᑕᐅᔪᑦ ᐱᑦᑕᐅᖏᑦᑐᖅᑕᕋᑦ ᐊᓯᖏᓐᓄᓪᓗ ᐃᓄᖕᓄᑦ ᐱᔭᐅᔪᓂᒃ ᐊᒃᓱᕈᖅᑎᑦᑎᔪᑦ ᓯᓚᑖᓃᙶᖅᑐᓂᒃ ᐅᑭᐅᖅᑕᖅᑑᑉ ᐊᖏᔪᒥᒃ ᐊᒃᑐᖅᓯᐸᓗᑎᒃ ᐃᓂᐅᔪᒥᑦ ᒫᓇᔅᓴᕐᒥᑦ ᐲᖏᑦᑐᑦ. ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐃᓄᖕᓄᑦ ᐱᔭᐅᔪᑦ ᐱᑦᑕᐅᖏᑦᑐᖅᑕᕋᑦ ᐊᒻᒪᓗ ᐱᐅᖏᑦᑐᐃᑦ, ᓃᕐᓗ ᑕᐃᒪᐅᖏᓐᓇᖅᑐᑦ ᓄᓇᒥᑦ ᐱᔪᑦ ᐱᔪᕐᓗᐃᑦ (POP) ᐊᒻᒪᓗ ᓴᕕᑦ, ᖃᐅᔨᔭᐅᖃᑦᑕᖅᓯᒪᔪᑦ ᐱᑕᖃᕐᓂᖏᓐᓄᑦ. ᐆᒪᓂᖃᖅᑐᑦ ᐊᖏᓪᓕᒋᐊᖅᓱᒋᑦ ᐱᔾᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓂᑦ, ᐃᓚᖏᑦ ᑎᖕᒥᐊᑦ ᓱᓇᑐᐃᓐᓇᖅᑐᖃᑦᑕᕐᓂᖏᑦ ᖃᐅᔨᒪᔭᐅᔪᑦ, ᓃᕐᓗ ᖃᑯᖅᑐᑦ ᓇᐅᔭᔾᔪᐊᑦ, ᑲᑎᑉᐸᓪᓕᐊᔪᓂᒃ ᐱᔪᖕᓇᖅᑐᑦ ᐱᐅᖏᑦᑐᓂᒃ, ᐅᓗᕆᐊᓇᖅᑑᑎᑦᑎᑉᓗᑎᒃ ᐱᑦᑕᐅᖏᑦᑐᒥᒃ ᐱᔪᓂᒃ ᖃᓄᐃᖓᓕᕐᓂᖏᓐᓄᑦ. ᐊᐅᒃᑖᑦ (ᐊᖏᔪᑦ ᐊᒻᒪᓗ ᒥᑭᔪᑦ) ᐱᐅᖏᑦᑑᖏᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐱᑦᑕᐅᖏᑦᑐᒥᒃ ᖃᓄᐃᖓᓕᖅᑎᑦᑎᔪᖕᓇᖅᓱᑎᒃ ᐊᒻᒪᓗ ᑎᒥᒥᒃ ᐋᓂᖅᑎᑦᑎᓗᑎᒃ ᐆᒪᓂᖅᑐᓄᑦ, ᓃᕐᓗ ᐃᖃᓗᖕᓂᑦ, ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᓂᕐᔪᑎᓂᒃ, ᐊᒻᒪᓗ ᑎᖕᒥᐊᓂᑦ,

ᓂᕆᑐᓂᔾᔪᒃ, ᐊᔪᖅᓯᔾᔪᑎᒋᑐᓂᔾᔪᒃ, ᐊᓯᖏᓪᓗ ᐱᐅᖏᑦᑐᑦ ᖃᓄᐃᓕᐅᖃᑎᒋᓂᒃᑯᑦ. ᐊᐅᒃᑕᔫᓂᒃ ᐱᔪᑦ ᐃᓱᒫᓘᑕᐅᓕᖅᐸᓪᓕᐊᔪᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ, ᐊᒻᒪᓗ ᐃᓱᒪᒋᔭᐅᔭᕆᐊᖃᖅᑐᖅ ᑭᒡᓕᐅᔪᒥᑦ ᐊᓯᐊᓂᑦ ᐊᒃᓱᕈᖅᑎᑦᑎᓂᖏᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᓄᑦ.

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐃᓂᐅᔪᖅ ᐱᒻᒪᕆᐅᔪᖅ ᑭᐴᑎᖃᕐᓂᕐᒧᑦ ᐅᖅᓯᓂᒃ ᐊᑯᓐᓂᖏᓐᓂᑦ ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑕ ᐊᒻᒪᓗ ᑕᕆᐅᑉ. ᐅᑭᐅᖑᑎᓪᓗᒍ/ᐅᐱᕐᖔᒥᑦ, ᓯᑯᓯᒪᙱᑦᑐᑦ ᐃᒪᐃᑦ ᐊᐅᓚᔪᓂᒃ ᓯᑯᓖᑦ ᑳᐸᓐ ᑕᐃᔮᒃᓴᐃᑦᑲᓕᑲᑦᑕᑦᑐᑦ (carbon dioxide) ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᖓᓂᑦ ᑕᕆᐅᕐᒧᐊᖅᑐᓂᑦ, ᐊᓂᖅᓵᖅᑐᖅᑕᑉᑎᖓᓂᑦ ᓲᕐᓗ ᑳᐸᓐᓂᒃ (carbon) ᑲᑎᖅᓱᐃᕝᕕᒃ. ᐊᖏᓪᓕᒋᐊᖅᓯᒪᔪᖅ ᓄᖑᑎᖅᓯᒪᔪᑦ ᑳᐸᓐ ᑕᐃᔮᒃᓴᐃᑦ (carbon dioxide) ᒥᒃᓵᒋᐊᖅᑎᑦᑎᔪᑦ pH-ᒥᑦ ᑕᕆᐅᕐᒦᑦᑐᒥᑦ, ᑕᐃᒪᓐᓇ ᑕᕆᐅᕐᒥᑦ ᐋᓯᑦᑲᓕᖅᑎᑦᑎᑉᓗᓂ ᑖᒪᓂ ᐱᐅᖏᑦᑐᒥᒃ ᐊᒃᑐᖅᓯᓂᖃᕈᓐᓇᖅᖢᓂ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ. ᖃᓄᐃᖕᒐᓕᖅᑎᑦᑎᔾᔪᓐᓇᖅᑐᑦ ᑕᕆᐅᕐᒥᑦ ᐋᓯᑦᑕᐅᕆᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐃᓚᓯᔪᖅ ᐊᒃᓱᕈᕐᓇᐅᑎᒥᒃ ᐃᓱᒪᒋᔭᐅᔭᕆᐊᖃᕐᓂᐊᖅᖢᓂ ᖃᐅᔨᓴᐃᓂᕐᒥᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐊᓯᐅᔨᑦᑕᐃᓕᕐᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᓄᑦ.

ᒫᓐᓇᓵᖅ ᑭᒡᓕᒋᔭᐅᔪᑦ ᐊᓯᐊᓂᑦ ᐱᔾᔪᑎᓕᖕᓄᑦ ᖃᐅᔨᓚᐅᕐᒥᔪᑦ ᓴᑉᑯᐃᓂᕐᒥᒃ ᕿᒪᒃᑎᑦᑐᓂᒃ ᐅᖅᓯᕐᒥᑦ ᕈᐊᓴᒥᐅᑕᐃᑦ ᖃᖓᑦᑕᖅᑎᑕᖏᓐᓂᙶᖅᑐᒥᑦ ᕿᑭᖅᑖᓗᑉ ᐃᒪᖓᓄᑦ ᑲᑕᓚᔪᒃᑐᖅ ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒧᑦ. ᐊᒃᑐᖅᓯᓂᐅᔪᓐᓇᖅᑐᑦ ᐅᖅᓯᕐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓄᑦ ᓇᓗᓇᖅᑐᑦ ᐊᒻᒪᓗ ᖃᓄᐃᓕᑎᑦᑎᔪᓐᓇᕐᓂᖓ ᐅᖅᓰᑉᓗ ᓂᒡᓕᓇᖅᑐᒥᑦ ᐃᒪᕐᓂᑦ ᖃᐅᔨᒪᔭᐅᖏᒃᑭᑉᓗᓂ. ᖃᓄᐃᖕᒐᓕᖅᑎᑦᑎᔪᓐᓇᕐᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᓄᑦ ᐱᔪᓐᓇᖅᑐᑦ ᖃᖓᑦᑕᖅᑎᑕᐅᑲᑦᑕᖅᑐᓄᑦ ᐃᓱᒫᓗᓐᓇᖅᑐᖅ.

### ᓯᕗᓂᒃᓴᒥᑦ ᐊᒃᑐᖅᓯᓂᐅᔪᓐᓇᖅᑐᑦ ᖃᓂᑦᑐᒥᑦ ᐱᕝᕕᐅᔪᓂᒃ ᐱᕙᓪᓕᐊᓂᕐᓄᑦ

ᐅᖓᓯᒃᑐᒦᓐᓂᖓᓄᑦ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᖃᓄᐃᓕᐅᕐᕕᐅᓂᖃᓗᐊᖅᓯᒪᙱᑦᑐᖅ. ᐅᒥᐊᕐᔪᐊᑦ ᐅᑭᐅᖅᑕᖅᑐᒧᑦ ᑎᑭᖃᑦᑕᓗᐊᙱᖦᖢᑎᒃ, ᑭᓯᐊᓂ ᐱᖁᑎᓂᒃ ᐊᓪᔭᖅᑐᐃᔭᕌᖑᓚᑕ ᓄᓇᓕᖕᓄᑦ. ᓂᐅᕕᐊᒃᓴᓂᒃ ᐃᖃᓗᒃᓯᐅᕐᓃᑦ ᑕᐃᒪᐅᖃᑦᑕᖅᑐᑦ ᓂᒋᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐊᒻᒪᓗ ᐊᒃᑐᖅᓯᓂᖃᕈᓐᓇᖅᑐᑦ ᐆᒪᓂᖃᖅᑐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒦᑦᑐᓂᒃ. ᐆᒃᑑᑎᒋᓗᒍ, ᐱᑕᕆᔭᐅᑦᑎᐊᖃᑦᑕᕐᓂᖏᑦ ᐊᑯᑭᑦᑐᕐᒥᑦ ᐃᖃᓗᒡᔪᐊᑦ ᐃᑯᒪᓕᒡᔪᐊᒃᑯᑦ ᐃᖃᓗᒃᓯᐅᕐᓂᒃᑯᑦ ᐊᓯᖏᓐᓂᑦ ᐃᓂᐅᔪᓂᑦ ᐊᒻᒪᓗ ᐃᒃᐱᒋᓱᑦᓯᐊᑦᑐᑦ ᑕᕆᐅᑉ ᐊᓗᐊᓂᕐᒥᐅᑕᐃᑦ ᐃᓂᖏᑦ ᓱᕐᕋᒃᑕᐅᔪᓐᓇᖅᑐᑎᒃ ᐊᓗᐊᓂᑦ ᐊᒍᐊᕆᓂᕐᒧᑦ ᐱᔪᓂᒃ. ᐃᒥᓱᖑᕆᐊᕐᓂᖏᑦ ᐅᒥᐊᕐᔪᐊᑦ (ᓲᕐᓗ, ᓄᓇᒥᑦ ᐅᔭᕐᑲᑕᐊᑦ) ᐊᒻᒪᓗ ᐳᓚᕋᖅᑐᑎᑖᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐊᒃᓱᕈᖅᑎᑦᑎᓂᖃᕈᓐᓇᕐᒥᔪᑦ ᐊᒻᒪᓗ ᐃᖕᖏᐃᓵᕆᓗᑎᒃ ᐃᒃᐱᒋᓱᑦᓯᐊᑦᑐᑦ ᐃᖃᓗᖓᓄᑦ, ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᓄᑦ ᐊᒻᒪᓗ ᓂᕐᔪᑏᑦ ᐃᓂᖏᓐᓄᑦ (ᓲᕐᓗ, ᓂᐱᖃᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐃᓂᐅᔪᒥᑦ ᐃᖕᖏᐃᓵᕆᓂᕐᓄᑦ).

ᒫᓐᓇᐅᔪᖅ, ᐅᔭᕋᒃᑕᕆᐊᓕᕆᓃᑦ ᐊᒻᒪᓗ ᐅᖅᓱᐊᓗᓕᕆᓂᕐᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᑕᖃᓗᐊᖏᑦᑐᑦ ᑕᐅᑐᙴᖅᖢᒋᑦ ᐊᓯᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᓂᐅᔪᑦ, ᑭᓯᐊᓂ ᐅᔭᕋᒃᑕᕆᐊᕐᓂᖅᑕᖅᑲᐳᖅᓇᖅᑐᖅ ᐊᒻᒪᓗ ᐅᖅᓱᐊᓗᓕᕆᓂᕐᓂᒃ ᓯᕗᓂᒃᓴᒥᑦ. ᐱᓗᐊᖅᑐᒥᑦ, ᖃᓂᑦᑐᒥᑦ ᐅᒥᐊᕐᔪᐊᑦ ᐃᖏᕐᕋᔭᒃᑐᑦ ᐊᒻᒪᓗ ᐅᑭᐅᓗᒃᑖᒥᑦ ᐋᔭᐃᓃᑦ ᐊᖏᖅᑕᐅᑉᐸᑕ ᐊᖏᓪᓕᒋᐊᕐᓂᐊᕐᓴᓯᕗᐅᔪᑦ ᐅᔭᕋᒃᑕᕐᓃᑦ ᐱᓪᓗᓇᓪᓗᓂ ᐅᑯᑦᑐᕐᒥᑦ. ᐅᓗᕆᐊᓇᕐᓂᐅᔪᓐᓇᖅᑐᓂᑦ ᓱᓇᑐᐃᓐᓇᓂᒃ ᐆᔭᐃᓂᕐᓄᑦ ᑕᐃᑲᓂ ᖃᓂᑕᙱᓂᕐᓗᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐃᓚᐅᔪᑦ ᓴᓇᕚᓕᐊᓂᕐᒥᑦ ᐊᒃᑐᖅᓯᔾᔪᑕᐅᔪᑦ, ᐅᖅᓱᕐᓂᑦ ᑯᕝᕚᔭᐊᖅᑐᓂᑦ (ᐃᓚᐅᔪᑦ ᐅᖅᓱᐊᓗᒃ), ᐊᒻᒪᓗ ᐃᒪᐅᑉ ᐃᓗᐊᓂᑦ ᓂᐱᖃᕐᓂᖅ ᐅᒥᐊᕐᔪᐊᓂᒃ ᐱᔪᓂᒃ ᐊᒻᒪᓗ ᓴᔪᕋᖅᑎᑦᑎᓂᕐᓂᑦ ᐅᖅᓱᐊᓗᓕᕆᓂᕐᒧᑦ.

ᐃᓄᐃᑦ ᐊᒥᓲᓂᖏᑦ ᐱᑕᖃᓗᐊᖏᑦᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᑕᐃᒪᓐᓇᒎᓪᓗ ᓂᕆᔭᒃᓴᓂᒃ ᒪᖃᐃᓐᓂᑦ ᖃᓄᐃᖏᓂᕐᓴᖅᑕᐅᔪᑦ ᑖᒥᓂ. ᑭᓯᐊᓂ, ᒪᖃᐃᑕᐅᓂᖏᑦ ᑑᓕᓐᓂᑦ (Heide-Jørgensen et al. 2020) ᐊᒻᒪᓗ ᐊᐃᕚᑦ ᖁᑎᒃᑑᔪᓐᓇᖅᑐᑦ ᐊᑯᑭᑦᑑᑉ ᒥᒃᓵᓂᖏᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ, ᐊᒻᒪᓗ ᐱᑕᖅᑕᐅᔪᑦ ᖁᑎᖏᓂᖅᓴᐅᕙᓪᓗᑎᒃ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔪᓂᒃ ᐅᐊᖓᓇᖏᓂᑦ ᐊᑦᓛᓐᑎᒃ (Atlantic) ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᑲᒪᔾᑯᓐᓂᑦ (NAMMCO) ᐊᒻᒪᓗ ᐊᑕᐅᑦᑎᒃᑯᑦ ᑲᑎᒪᔩᓄᑦ ᑑᓕᖓᓄᑦ ᐊᒻᒪᓗ ᕿᓇᓗᒐᕐᓄᑦ (JCNB).

## ᓯᕗᓂᒃᓴᒥᑦ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᖅ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᓂᖅ

ᑲᓇᑕᒥᑦ, ᐃᓄᐃᑦ ᖃᓄᖅᑑᕆᓂᖓᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ (NISR) ᐋᖅᑭᒃᓯᔪᖅ ᓄᑖᒥᒃ ᐊᑐᖅᑕᐅᔫᒃᓴᒥᒃ ᖃᐅᔨᓴᐃᓂᐅᕐᓗᓂ ᐃᓄᐃᑦ ᓄᓇᖓᓐᓂᑦ. ᖃᓄᖅᑑᕈᑎ ᐱᔾᔪᑎᖃᓗᐊᖅᑐᖅ ᐃᒃᐱᒍᓱᓪᓚᕗᐅᔭᕆᐊᖃᕐᓂᖏᑦ ᐃᓄᐃᑦ ᓇᖕᒥᓂᖅ-ᖃᐅᔨᔭᖏᓐᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐊᒻᒪᓗ ᑎᑎᕋᖅᓯᒪᐸᓗᓂ ᓯᕗᓪᓕᖅᐸᐅᑎᔭᐅᔭᕆᐊᓕᖏᓂᑦ ᐱᔾᔪᑎᖃᖅᑐᓂᒃ ᐃᓄᐃᑦ ᐊᐅᓚᑦᑎᓂᖏᓐᓄᑦ ᖃᐅᔨᓴᐃᓂᕐᒥᑦ (ᓵᕐᓗ, ᐊᓯᐅᔨᑦᑕᐃᓕᓂᕐᒥᒃ, ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔭᕆᐊᓖᑦ, ᐋᖅᑭᐅᒪᓂᖓ ᑮᓇᐅᔭᖃᖅᑎᑕᐅᓃᑦ ᐃᓄᐃᑦ ᓯᕗᓪᓕᖅᐸᐅᑎᔪᒪᔭᕆᐊᓄᑦ, ᐱᔭᐅᔫᖕᓇᕐᓂᖅ, ᓇᖕᒥᓂᖃᕐᓂᖅ ᐊᒻᒪᓗ ᐊᐅᓚᑦᑎᓂᖅ ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ ᐊᒻᒪᓗ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᒃ, ᐊᒻᒪᓗ ᐃᓂᓕᐅᕆᓂᕐᒥᒃ). ᑕᑯᒃᓴᐅᑎᑦᑎᖕᒥᔪᖅ ᐱᓕᕆᖃᑎᒌᖕᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔭᕆᐊᓕᖕᒥᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐱᐅᓯᕆᐊᖅᓯᐸᓗᓂ ᐃᑲᔫᑕᐅᔪᓂᒃ ᐃᓄᐃᑦ ᓄᓇᓕᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐃᓄᖃᑎᒌᓄᑦ. ᐊᑯᓂᑐᕐᒥᑦ, ᐱᓕᕆᖃᑎᒌᖕᓂᖃᑦᑎᐊᖅᑐᑦ ᐊᐅᓚᑦᑎᔾᔪᑦ, ᖃᐅᔨᓴᐃᔾᔪᑦ ᐊᒻᒪᓗ ᓄᓇᓕᖕᒥᐅᑕᐃᑦ, ᐱᓕᕆᖃᑎᒌᖕᓂᐅᔪᓪᓗ ᓴᙱᒃᑎᕆᐊᖅᑕᐅᕙᓪᓕᐊᔪᑦ ᓄᑖᑦ ᐱᓕᕆᐊᑦ ᐋᖅᑭᒃᓯᖅᑕᐅᔪᓐᓇᖅᑕ. ᐅᒃᑑᑎᒋᓗᒍ, ᐊᑐᖅᑕᐅᔪᓐᓇᖅᑐᑦ ᑐᙵᕕᑦ (ᓵᕐᓗ, ᖃᕆᑕᐅᔭᓄᑦ/ᐅᖃᓘᑎᐊᓖᓄᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᖅᑐᑦ, ᖃᕆᑕᐅᔭᒥᑦ ᑕᑯᔭᐅᕆᐊᖅᑕᕐᕙᖕᓂᑦ ᓄᓇᙳᐊᑦ) ᑲᑎᑎᓐᓂᐊᕐᓗᒋᑦ ᐊᔾᔨᒌᙱᕆᑦᑐᑦ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᓄᑦ ᐋᖅᑭᐅᒪᔪᑦ ᓯᕗᓂᒃᓴᒥᑦ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐃᑲᔪᕐᓂᐊᖅᑐᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ.

ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᖅ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᑎᖕᒥᐊᓂᑦ ᐊᒻᒪᓗ ᓂᕐᔪᑎᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ, ᐱᕙᖅᑎᑦᑎᔪᖅ ᖃᐅᔨᓂᐊᕐᓗᒋᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᐊᕙᑎᖓᓄᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᕐᓗᒋᑦ ᖃᓄᖅ ᓂᕐᔪᑏᑦ ᐊᔪᕆᖅᑕᕐᓂᖏᑦ ᐱᐊᓚᔪᒥᑦ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᔪᒥᑦ ᐊᕙᑎᐸ ᖃᓄᐃᓐᓂᖓᓄᑦ. ᐱᓪᓕᐅᔪᖅ ᑲᑎᖅᓱᐃᖏᓐᓇᕐᓗᓂ ᓂᕐᔪᑎᓅᖓᔪᓄᑦ ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ (ᓵᕐᓗ, ᖃᑉᓯᐅᓂᖏᓐᓄᑦ ᖃᐅᔨᓴᐃᓃᑦ, ᐊᐅᓚᓐᓂᖏᓐᓄᑦ ᖃᐅᔨᓴᐃᔾᔪᑎᓂᒃ ᐊᑐᕐᓗᑎᒃ ᖃᐅᔨᓴᐃᓃᑦ) ᐊᒻᒪᓗ ᓱᓇᑐᐃᓐᓇᐃᑦ ᓴᖅᑭᑕᐅᓯᒫᓂᒃᑐᓂᒃ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓗᓂ (ᓇᐃᑦᑐᒥᑦ ᐊᑯᓂᐅᔪᒥᑦ) ᑐᕌᖓᔪᓂᑦ. ᐅᑯᓂᑦᑐᕐᒥᑦ, ᐊᑯᓂᐅᔪᒥᑦ ᖃᐅᔨᓴᐃᓂᖅ ᐊᒻᒪᓗ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᑕᐃᒪᐅᓕᐊᓂᒃᑐᑦ ᖃᑯᑎᒃᑯᖓᖃᑦᑕᖅᑑᒃ. ᐊᑐᖅᑕᐅᒐᔪᒃᑐᑦ ᑕᑕᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᐊᒻᒪᓗ ᓂᕐᔪᑎᓂᒃ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᕐᓄᑦ ᑐᙵᓗᔪᑦ, ᐱᓕᕆᐊᖑᖃᑦᑕᖅᑐᑎᒃ ᐊᑯᓂᐅᔪᒥᑦ ᓄᓇᒥᑦ ᐱᕙᐅᔪᓕᕆᔾᔪᓐᓄᑦ (GINR). ᐊᑯᓂᐅᔪᒥᑦ ᑎᖕᒥᐊᓂᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᖓᓐᓂᑦ, ᖃᐅᔨᓴᐃᖃᑦᑕᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓐᓂᑦ 5-10 ᐅᑭᐅᑖᖅᑯᑦ ᐱᑦᓯᐅᑏᓄᑦ ᐊᒻᒪᓗ ᓇᐅᔾᔭᐃᓄᑦ. ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᖅ ᑕᑕᐅᕐᒥᐅᑕᓂᒃ ᐊᑯᓂᐅᔪᒥᑦ ᒪᓕᒃᑕᖅᑐᑦ ᐸᕐᓇᐅᑎᒥᒃ ᐋᖅᑭᒪᔪᑦ ᖃᐅᔨᓴᐃᓂᐊᕐᓗᑎᒃ ᕿᓇᓗᒐᓗᖕᓂᑦ ᐊᒻᒪᓗ ᐅᖃᐅᔾᔨᓂᕐᒧᑦ ᐊᐃᕙᑦ ᒥᒃᓵᓄᑦ, ᕿᓇᓗᒐᐃᑦ, ᐊᒻᒪᓗ ᑑᒑᓖᑦ, ᐊᑐᕐᓗᑎᒃ ᖃᖓᑕᔫᓂᒃ 5-10 ᐅᑭᐅᑖᖅᑯᑦ. ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ ᐊᔾᔨᕐᓕᕆᔭᖓ ᑲᓇᑕᒥᑦ, ᑭᓯᐊᓂ ᑭᖑᓪᓕᖅᐹᒥᑦ ᖁᑦᑎᒃᑐᒥᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᖃᐅᔨᓴᐃᓂᖅ (2013) ᖃᐅᔨᓴᐃᑐᐃᓐᓇᓚᐅᖅᑐᖅ ᑑᒑᓕᖕᓂᑦ ᐊᒻᒪᓗ ᐊᕐᕙᖕᓂᑦ, ᐊᒻᒪᓗ ᑕᒪᒃᑖᖅᑲᔭᖅ ᐊᐃᕙᑦ ᐊᒻᒪᓗ ᕿᓇᓗᒐᐃᑦ ᐊᒥᓲᓂᖏᓐᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒦᑦᑐᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᙱᑦᑐᑦ ᐅᑭᐅᑦ ᖁᓕᑦ ᐅᖓᑖᓄᓕᖅᑐᓄᑦ. ᑕᒪᕐᒥᑦ Kane Basin (ᐅᐊᖕᓇᖓᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ) ᐊᒻᒪᓗ ᕿᑭᖅᑖᓗᑉ ᐃᒪᖓ (ᓂᒋᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ) ᐃᓚᖏᑦ ᓇᓄᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓚᐅᖅᑐᑦ ᐱᓕᕆᖃᑎᒌᒃᓱᑎᒃ ᑲᓇᑕ/ᐊᑯᑭᑦᑐᖅ 1992-1997-ᒥᑦ, ᐊᒻᒪᓗᒃᑲᓐᓂᖅ 2011-2014-ᒥᑦ (SWG 2016). ᑯᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐱᓕᕆᐊᖅᑐᑦ ᑲᓇᑕᒥᑦ/ᐊᑯᑭᑦᑐᕐᒥᑦ ᐊᑕᐅᑦᑎᒃᑯᑦ ᐱᓕᕆᔩᑦ ᓇᓄᕐᓄᑦ (JCPB) ᓄᑖᓂᒃ ᐊᓯᙱᓂᒃ ᖃᐅᔨᓴᐃᕐᑯᔨᔪᑦ ᕿᑎᕈᔪᐊᓂᑦ 2020-ᖏᓐᓂᑦ, ᐊᒻᒪᓗ ᐊᑕᐅᑦᑎᒃᑯᑦ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᒃᓴᐅᑉᓗᓂ ᑲᒪᒋᔭᐅᓗᓂ JCPB-ᑯᓐᓄᑦ ᐱᒋᐊᓕᕆᖅᑎᓪᓗᒋᑦ 2020. ᑳᓐᑳᔅᑐ Sound-ᒥᑦ (Lancaster) ᐃᓚᖏᑦ ᓇᓄᐃᑦ, ᑲᓇᖕᓇᖕᒐᓂᑦᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᖃᐳᔨᐅᓂᖏᓐᓄᑦ ᓈᓴᐃᓂᐊᖅᑐᑦ ᐅᐱᕐᖓᖑᓕᖅᐸᑦ 2021-ᒥᑦ.

ᐊᑐᕐᓗᒋᑦ ᒪᓕᒐᖏᑦ NISR-ᑯᑦ, ᓯᕗᓂᒃᓴᒥᑦ ᖃᐅᔨᓴᐃᓂᖅ ᐊᒻᒪᓗ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐱᔪᓐᓇᐃᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓄᑦ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᒃᑯᑦ ᐱᕚᓪᓕᐊᓂᒃᑰᓂᐊᖅᑐᒃᓴᐅᔪᖅ, ᖃᐅᔨᓴᐃᔩᑦ ᐊᒻᒪᓗ ᓄᓇᓕᖕᒥᑦ ᖃᐅᔨᒪᓂᖅᑐᑦ ᐱᓕᕆᖃᑎᒌᓪᓗᑎᒃ ᐋᖅᑭᒃᓯᓂᐊᕐᓗᑎᒃ ᑲᒪᖅᑕᐅᓗᑎᒃ ᖃᐅᔨᓯᐊᖃᑕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑐᖔᖓᔪᓂᒃ ᓴᙱᒃᑎᑦᑎᔪᑦ ᑕᒪᐃᓐᓂᒃ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᓂᒃ ᐋᖅᑭᒃᓯᔪᓄᑦ. ᐊᑯᓂᐅᔪᒥᑦ, ᐃᓚᐅᑎᑦᑎᔪᒪᔪᑦ 'ᐊᑐᖅᑎᐅᑉ ᖃᐅᔨᒪᓂᖓᓂᒃ' ᐱᓕᕆᐊᖏᓐᓂᑦ, ᐃᓚᐅᓗᑎᒃ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᑦ ᒪᖃᐃᑎᓂᑦ, ᐃᖃᓪᓕᐊᖅᑎᓂᑦ ᐊᓯᖏᓐᓂᓪᓗ ᐊᑐᖃᑦᑕᖅᑐᓂᒃ. ᓄᑖᖅ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᖃᓄᖅᑑᕈᑎ ᓈᓚᒋᔭᐅᔪᓐᓇᖅᑐᖅ ᐊᑯᑭᑦᑐᕐᒥᑦ ᓚᕝᒪᒃᑯᓐᓄᑦ ᐊᒻᒪᓗ

ᓴᖅᑭᑕᐅᓗᓂ 2021-ᒥᑦ. ᖃᐅᔨᒪᓂᓗᒃᑖᕐᓚᐃᑦ ᐱᔾᔪᑎᖃᓗᐊᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐱᓂᐊᖅᑐᑦ ᓄᓇᓕᖕᓂᑦ ᖃᐅᔨᒪᓂᖃᖅᑐᓂᑦ. ᓂᕆᐅᒋᔭᐅᔪᖅ ᓯᕗᓂᒃᓴᒥᑦ ᐃᓚᓕᐅᑎᓂᐊᕐᓂᖏᑦ ᑕᒪᕐᒥᒃ ᐃᓄᐃᑦ ᖃᐅᔨᒪᔭᑐᖃᖏᑦ, ᐊᒻᒪᓗ ᓄᓇᓕᖕᒥᐅᑕᐃᑦ ᐊᒻᒪᓗ ᒪᖃᐃᑏᑦ ᖃᐅᔨᒪᓂᖏᓐᓂᑦ, ᐊᑕᐅᑦᑎᒃᑯᑦ ᐃᓚᐅᓗᑎᒃ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᖃᐅᔨᒪᔭᐅᔪᑦ, ᐃᓗᐃᑦᑑᖓᔪᒥᒃ ᑐᑭᓯᐊᓕᖅᑎᑦᑎᓂᖃᕐᓂᐊᖅᑐᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓄᑦ ᐋᖅᑭᐅᒪᔪᒥᑦ ᐱᓕᕆᐊᖃᕐᓂᐊᕐᓗᓂ ᓯᕗᓪᓕᖅᐸᐅᑎᔭᐅᔨᒪᔪᓂᒃ ᐊᖏᖃᑎᒌᒃᓯᒪᔫᒃᑯᑦ ᐱᒻᒪᕆᐅᔪᒥᑦ. ᐃᓄᐃᑦ ᐊᒻᒪᓗ ᓄᓇᓕᖕᒥᐅᑕᐃᑦ ᐊᑐᖃᑦᑕᖅᑐᑦ ᑕᒫᓂ ᐊᒃᑐᐊᓂᖃᑦᑎᐊᖅᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᖃᑦᑎᐊᖅᑐᑦ ᑕᒫᓐᓂᑦᑐᓂᒃ ᓂᕐᔪᑎᓂᒃ, ᐃᓚᐅᑉᐳᑎᒃ ᑕᐃᑉᓱᒪᓂᑐᖃᕐᒥᑦ ᑐᑭᓯᐅᓂᑦ ᖃᓂᑦᑐᒥᑦ ᐊᓯᐊᙳᕐᓂᖕᒋᓐᓂᑦ. ᑕᐃᒪᓐᓇᒎᑦ, ᓄᓇᓕᖕᒥᐅᑕᐃᑦ ᐊᔾᔨᐅᖕᒋᑦᑐᒃᑯᑦ ᐃᓂᖃᖅᑎᑕᐅᔪᑦ ᐅᑭᐅᓗᒃᑖᕐᒥᑦ, ᐊᔪᖏᓐᓂᐊᖅᑐᓂᒃ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓗᑎᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ (ᓘᕐᓗ, ᐃᓄᖕᓄᑦ ᑲᒪᒋᔭᐅᓗᑎᒃ ᑐᕌᖓᔪᑦ, ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ 2020), ᑐᑭᓯᐊᓕᖅᑎᑦᑎᔪᓐᓇᖅᑐᖅ ᐅᑭᐅᑉ ᐃᓚᖓᒍᑦ ᐊᒻᒪᓗ ᐊᑯᓂᐅᔪᒥᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᐊᔪᐊᙳᕐᓂᖕᒋᑦ ᐊᔪᕐᓇᕋᔭᖅᑐᖅ ᖃᑯᑎᒃᑯᑦ ᓇᐃᑦᑑᓗᒋᑦ ᖃᐅᔨᓴᐃᓂᒃᑯᑦ. ᓄᓇᓕᖕᒥᑦ ᑐᑭᓯᐅᒪᔾᔪᐃᑏᑦ ᑐᓂᐅᑕᐅᔪᑦ, ᓄᑖᑦ ᐃᓚᒋᔭᐅᔪᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐊᒃᓱᕈᕐᓇᖅᑎᑦᑎᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓄᑦ ᖃᐅᔨᔭᐅᔪᖕᓇᖅᑐᑦ, ᐃᑲᔪᕐᓗᑎᒃ ᓯᕗᓂᒃᓴᒥᑦ ᖃᓂᐃᖓᓂᐊᕐᓂᓕᕆᓂᖃᑕᐅᓂᕐᒧᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᑐᑦᓯᕋᔪᓂᑦ. ᐱᒻᒪᕆᐅᔪᖅ ᒐᕙᒪᐃᑦ ᐊᒻᒪᓗ ᓱᓇᑐᐃᓐᓇᓕᕆᔪᖅ/ᖃᐅᔨᓴᐃᔪᖅ ᓄᓇᓕᒃ ᐱᕙᓪᓕᐊᑎᑦᑎᖃᑕᐅᓗᑎᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐊᑐᕐᓂᐊᖅᑐᓂᒃ, ᖃᐅᔨᓴᐃᓂᐅᔪᖅ ᐃᑲᔪᐃᓂᖃᕐᓂᐊᕐᓗᓂ ᓄᓇᓕᖕᓂᑦ.

ᐃᓚᖏᑦ ᓇᓗᓇᓗᐊᖅᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓂᕐᒥᒃ ᐱᑕᖃᙱᑦᑐᑦ ᑎᑎᕋᖅᓯᒪᔪᑦ ᑕᒡᕙᓂ ᐅᓂᑉᑲᒥᑦ ᐃᑲᔪᐃᓂᖃᕆᐊᖃᖅᑐᑦ ᓯᕗᓂᒃᓴᒥᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᓯᕗᓪᓕᖅᐸᐅᑎᔭᐅᔪᕈᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐊᒻᒪᓗ ᐱᓕᕆᐊᖃᕐᓗᑎᒃ ᑐᓴᐅᒪᓂᖃᕐᓂᒃᑯᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐊᑐᐊᓚᓕᐅᕆᓂᕐᒧᑦ ᐃᓱᒪᓕᐊᕐᔪᓂᐊᖅᑐᓂᒃ. ᑭᓯᐊᓂ, ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᓯᕗᓪᓕᖅᐸᐅᑎᔭᐅᔪᓪᓚᑦ ᐊᑯᓂᐅᓂᖅᓴᒥᒃ ᖃᕆᒃᑯᕐᓚᓂᖃᕆᐊᖃᕐᓂᐊᖅᑐᑦ ᑲᒪᔭᖃᑎᐊᕐᓂᐊᕐᓗᓂ ᓱᓇᑐᐃᓐᓇᓂᒃ ᑐᑭᖃᖅᑯᑦ ᐊᔪᐊᙳᕐᓂᐊᕐᓗᓂ ᐊᕐᕌᒍᑎᓐᓂᐊᖅᑐᒥᒃ ᐋᖅᑭᐅᒪᔪᖅ. ᐱᓕᕆᖅᑎᒋᓐᓂᖃᕐᓂᐊᕐᓂᐊᕐᒥᔪᖅ ᑲᓇᑕᒧ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᖅ ᐱᕙᓪᓕᐊᓂᐊᕐᓗᒍ ᐊᕐᕆᕌᔪᖅ ᐊᔾᔨᖏᙵᕐᑐᓄᑦ ᑲᒪᒋᔭᐅᔪᖅ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓄᑦ ᐋᖅᑭᐅᒪᔪᒥᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓯᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐸᕐᓇᐅᑎ.ᑲᓇᑕ, ᐊᑯᑭᑦᑐᖅ, ᐊᒻᒪᓗ ᑎᐊᓖᒃ ᓯᕗᓪᓕᖅᐸᐅᑎᔭᕆᐊᓕᖕᓂᑦ ᐱᓕᕆᐊᓂᒃᓯᒪᔪᑦ ᐊᒻᒪᓗ ᐱᓕᕆᖃᑎᒋᐸᓗᒋᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑲᑎᒪᔩᑦ. ᓱᓇᑐᐃᓐᓇᓕᕆᔩᑦ, ᐊᒻᒪᓗ ᐊᔪᙱᓐᓂᖃᖅᑐᑦ ICC-ᑯᓐᓂᑦ, ᖃᐅᔨᒋᐊᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑐᕌᖓᔪᓕᕆᐸᓗᑎᒃ ᐊᓯᐅᔨᑦᑕᐃᓕᔪᑦ ᐅᑭᐅᖅᑐᖅᑐᒥᑦ ᐱᕈᖅᑐᓕᕆᔩᒃᑯᑦ ᐊᒻᒪᓗ ᐆᒪᔪᓕᕆᔩᒃᑯᓐᓂᑦ (CAFF) ᐊᒻᒪᓗ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᖅ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑐᕌᖓᔪᓕᕆᔩᒃᑯᓐᓂᑦ (AMAP). ᐃᓚᐅᔪᑦ ᐱᓕᕆᖃᑎᒋᒃᑐᑦ ᓴᖅᑭᑕᓚᐅᖅᑐᑦ ᒪᓕᒃᑯᒋᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒪᔪᑦ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᑐᕌᖓᔪᖅ (CBMP), ᐊᒻᒪᓗ AMAP ᐱᐅᖕᒋᑦᑐᓕᕆᓂᕐᒧᑦ ᑐᕌᖓᔪᖅ, ᐊᒻᒪᓗ ᐊᐳᑎ, ᐃᒪᖅ, ᓯᑯ ᐊᒻᒪᓗ ᖁᐊᙳᐃᓐᓇᐅᔭᖅᑐᖅ ᐅᑭᐅᖅᑐᖅᑐᒥᑦ (SWIPA) ᖃᐅᔨᓴᐃᓂᖅ (AMAP 2017). ᐊᒻᒪᓗᒃᑲᓂᖅ, ᐅᑭᐅᖅᑐᖅᑐᒥᑦ ᑲᑎᒪᔩᑦ, ᒥᐊᓂᖅᓯᔪᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᐊᕙᑎᖓᓐᓂᑦ (PAME), ᐊᔪᙱᓐᓂᖃᖅᑐᓂᒃ ᑲᑎᒪᔩᑖᓚᐅᖅᑐᑦ, ᐊᒻᒪᓗ ᒪᓕᒃᑕᐅᔫᓴᓂᒃ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᓂᒃ ᓯᕗᓪᓘᒋᐊᕐᓂᐊᕐᓗᒋᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒎᒃᑐᓂᒃ ᐊᐅᓚᑦᑎᓂᕐᒧ ᐊᒻᒪᓗ ᐱᕙᓪᓕᐊᔭᐅᓂᖕᒋᑦ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᒥᐊᓂᖅᓯᕚᐅᔪᓄᑦ ᐱᓕᕆᖃᑎᒌᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᓗᒃᑖᕐᒦᖕᒑᔪᒥᑦ. ᐆᒃᑑᑎᒋᓗᒍ, ᐱᒻᒪᕆᐅᔪᖅ ᐊᐅᓚᑦᑎᓂᐊᕐᓗᓂ ᐊᒃᑐᐊᖃᑎᒌᓐᓂᖅᑐᒃᑯᑦ ᐱᓕᕆᖃᑎᒌᖕᓂᕐᒥᒃ (ᓘᕐᓗ, ᑕᓪᓗᕈᑎᐅᑉ ᐃᒪᖓ ᑲᓇᑕᒥᑦ ᑕᕆᐅᕐᒥᐅᑕᓂᒃ ᐊᓯᐅᔨᑦᑕᐃᓕᖅᕕᐅᔪᖅ ᐊᒻᒪᓗ ᑐᕙᐃᔭᐃᑦᑐᖅ ᑲᓇᑕᒥᑦ). ᐃᓱᒪᒋᔭᐅᔭᕆᐊᖃᖅᑐᑦ ᑖᑯᐊ ᐱᓕᕆᖃᑎᒋᒃᑐᑦ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᔫᓴᐃᑦ ᐱᕙᓪᓕᐊᓂᐊᕐᓗᓂ ᓯᕗᓂᒃᓴᒥᑦ, ᓄᓇᕐᔪᐊᕐᒥᑦ ᐊᑕᐅᑦᑎᒃᑯᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐊᒻᒪᓗ/ᐅᕝᕙᓘᓐᓃᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ.

**ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐃᓱᒪᒃᓴᖅᓯᐅᕈᑎᑦ**

1. ᑲᔪᓯᔪᒥᒃ ᐊᒻᒪᓗ ᐊᑯᓂᐅᔪᒥᒃ ᑲᑎᖅᓱᐃᓗᓂ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑯᓄᑦ ᓈᓴᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ ᐃᑲᔪᕐᓂᐊᖅᑐᖅ ᖃᐅᔨᒪᓂᕐᓂᒃ ᐱᔭᐅᔭᕆᐊᓖᑦ ᓯᕗᓂᒃᓴᒥᑦ ᐃᓱᒪᓕᐅᕆᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᒦᒃᓵᓄᑦ. ᐋᖅᑭᒃᓯᕐᑯᔨᓯᒪᔪᑦ ᐅᑭᐅᓗᒃᑖᕐᒥᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᓂᕐᒧᑦ (ᓘᕐᓗ, ᑕᒡᕙᐅᓗᑎᒃ) ᐃᓂᐅᔪᓂᒃ ᑕᒫᓂ ᕿᒥᕐᕈᓂᐊᕐᓗᒍ ᑕᕆᐅᖅ, ᑕᕆᐅᕐᒥᑦ ᓯᑯ, ᐊᒻᒪᓗ ᐊᓂᖅᓵᖅᑐᖅᑕᑎᖕᓂᑦ ᐃᓚᒋᔭᐅᔪᑦ, ᑕᒪᒃᑯᐊ ᐱᔭᕆᐊᖃᕐᒪᑕ ᑐᑭᓯᐊᓂᐊᕐᓗᓂ ᑕᒪᑐᒥᙵᑦ,

ᐆᒪᓂᖃᖅᑐᓂᒃ, ᐊᒻᒪᓗ ᐃᓚᒋᔭᐅᔪᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᓐᓄᑦ, ᐊᒻᒪᓗ ᐊᓯᐊᙳᖃᑦᑕᕐᓂᖅ ᐊᒻᒪᓗ ᐊᓯᐊᙳᕐᓂᖓᑕ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ. ᐱᓗᐊᖅᑐᒥᑦ, ᓄᓇᓕᖕᒦᖕᖓᔪᒥᑦ ᓯᓚᒥᒃ ᖃᐅᔨᔭᐅᔪᑦ ᐃᑲᔪᕈᓐᓇᖅᑐᑦ ᖃᐅᔨᓂᐊᕐᓗᓂ ᐊᒻᒪᓗ ᖃᐅᔨᒪᓕᖅᐹᓕᖅᑎᑦᑎᒃᑲᓐᓂᕐᓗᓂ ᓯᓚᐅᑉ ᒥᒃᓵᓄᑦ ᐱᑕᖃᙱᑦᑐᓂᒃ.

2. ᓯᕗᓂᒃᓴᒥᑦ ᑕᒫᓂ ᐊᐅᓚᑦᑎᓂᕐᒥᑦ ᐃᓱᒪᒋᔭᐅᔪᖅ, ᖃᐅᔮᓵᓂᖅ ᑕᕆᐅᑉ ᓯᑯᖓᓂᑦ (ᓱᕐᓗ, ᖃᐅᔮᔭᐅᔪᑦ ᓯᑯᐃᑦ ᐊᐅᓚᖅᑐᑦ, ᑕᒪᐃᓐᓂᒃ ᓯᑯᐃᑦ ᐊᒻᒪᓗ ᓯᕐᒥᑦ, Nares Strait-ᑯᑦ, ᐊᒻᒪᓗ ᓯᑯᕙᓪᓕᐊᓂᖅ ᐊᒻᒪᓗ ᐊᐅᒃᐸᓪᓕᐊᓂᖓ ᓯᑯᓯᒪᔩᑉ) ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᓪᓚᐅᓂᐊᖅᑐᖅ ᖃᐅᔨᒪᓕᖅᐹᓕᕐᓗᒍ ᖃᓄᖅ ᒥᒃᓯᒋᐊᕐᓃᑦ ᑕᕆᐅᑉ ᓯᑯᖏᑦ ᐱᑎᑦᑎᓇᔭᕐᓂᖏᑦ ᐊᑯᓂᐅᑎᒋᓂᖏᓐᓄᑦ ᓯᑯᐃᑦ ᐊᐅᓚᔪᑦ, ᐱᓕᐅᓇᕙᓪᓕᐊᓗᐊᕐᓂᕐᓂᒃ, ᐊᒻᒪᓗ ᒪᓂᒪᓂᖏᑦ ᐃᓂᐅᔪᑦ ᓯᑯᒥᑦ ᐊᑐᖃᑦᑕᖅᑐᓄᑦ ᓂᕐᔪᑎᓄᑦ. ᐊᒻᒪᓗ, ᐱᓪᓚᐅᖅᒥᔪᖅ ᑐᑭᓯᐊᓗᒋᑦ ᐱᓕᕆᐊᕐᑎᒌᖕᓂᖏᑦ ᓯᕐᒥᑦ ᐊᒻᒪᓗ ᐃᒪᐃᑦ ᖃᓄᐃᓕᐅᕐᓂᕋᔾᔨᑦ, ᐊᒻᒪᓗ ᓱᑎᑦᑎᓂᖏᑦ ᐱᓕᐅᓇᕙᓪᓕᐊᓗᐊᖅᑐᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ.

3. ᖃᐅᔨᒋᐊᖃᑦᑕᐃᓐᓇᓇᐊᖃᖅᑐᑦ ᖃᐅᔮᓵᐃᓗᑎᓪᓗ ᖃᐅᔨᓂᐊᕐᓗᒋᑦ ᓇᓗᓇᐃᖅᓯᔾᔪᑏᑦ ᐊᓯᐊᙳᕐᓂᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐋᖅᑭᐅᒪᔪᖅ. ᐆᒃᑑᑎᒋᓗᒍ, ᐅᐊᙵᓗᑦ ᐊᐅᓚᓂᖏᑦ ᓂᒋᕐᒥᐅᑕᐃᑦ ᓂᕆᔪᐃᑦ ᓱᕐᓗ ᐅᕘᓗᐃᑦ, ᐃᖁᑦ ᐃᖃᓗᐊᓛᑦ, ᐊᒻᒪᓗ ᓯᐅᕌᕐᒥᐅᑕᐃᑦ, ᓇᓗᓇᐃᖅᓯᔾᔪᑕᐅᔪᐃᓐᓇᓇᐊᖃᖅᑐᑦ ᐊᓯᐊᙳᕐᓂᖓᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ. ᑎᒥᐊᑦ ᐊᒻᒪᓗ ᑕᓇᐅᕐᒥᐅᑕᐃᑦ ᓂᕆᔪᐃᑦ ᓇᓗᓇᐃᖅᓯᔾᔪᑎᑦᑎᐊᕙᐅᔪᓐᓇᕐᒥᔪᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᐊᓯᐊᙳᕐᓂᖏᓐᓄᑦ ᑲᑎᖃᑦᑕᕐᒪᑕ ᐃᓂᐅᔪᓂᑦ ᐱᓕᐅᓇᕙᓪᓕᐊᓂᖃᖅᑐᓂᒃ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᔪᙾᖅᑐᑦ ᖃᐅᔨᓂᐊᕐᓗᓂ ᐃᓂᒋᔭᐅᔪᓂᒃ, ᐊᒻᒪᓗ ᖃᐅᔨᑎᑦᑎᓗᑎᒃ ᐊᓯᐊᙳᕐᓂᖏᑦ ᐅᑎᖅᑕᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᓂᖓᑕ ᐃᓂᐅᔪᖅ ᐅᑭᐅᒥᑦ ᐅᑭᐅᒧᑦ.

4. (ᐱᑦᓯᐅᑌᑦ ᐊᒻᒪᓗ ᐊᖅᐸᐃᑦ ᑕᒪᕐᒥᒃ ᐃᒃᐱᒋᓴᕋᐃᑦᑑᔫᒃ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ ᓂᕿᒋᔭᐅᔪᓄᑦ, ᐊᒻᒪᓗ ᑖᑉᑯᐊᒃ ᐱᓪᓚᐅᓂᖅᐹᙳᑉᓗᑎᒃ ᖃᐅᔮᓴᕐᓗᒋᑦ (ᓱᕐᓗ, ᖃᑉᓯᐅᓂᖏᓐᓄᑦ ᐱᕚᓕᐊᓂᖅ, ᒪᓂᔪᑦ ᓂᕿᒋᔭᐅᔪᑦ, ᓂᕆᖃᑦᑕᕐᓂᖏᑦ ᐱᐊᕌᖏᑦ, ᐊᒻᒪᓗ ᐱᐊᕌᓕᐅᑎᐊᕈᓐᓇᕐᓂᖏᑦ).

5. ᖃᐅᔮᓵᓂᖅ ᐊᒻᒪᓗ ᐆᒃᑐᕋᐃᓗᓂ ᐱᔭᐅᔪᑦ ᓂᕐᔪᑎᒃ ᐊᔪᕐᓇᙱᑦᑐᖅ ᖃᐅᔨᓂᐊᕐᓗᓂ ᐊᓯᐊᙳᖅᑐᒃ ᐊᕙᑎᒥᑦ. ᐃᓂᙵᓄᑦ ᐊᔪᕐᓇᖅᑑᔪᑦ ᐅᙱᓯᒃᑐᓐᑐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ, ᑭᓯᐊᓂ ᐱᓪᓚᐅᔪᖅ ᐊᖏᔫᖓᔫᒃᑯᑦ ᐊᓯᐊᙳᕐᓂᐅᔪᓄᑦ.

6. ᓄᑖᙳᖅᑎᕐᓗᒋᑦ ᑐᑭᓯᐅᒪᔾᔪᑎᑦ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᔪᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᓄᑦ, ᐃᓚᐅᓗᑎᒃ ᐱᔾᔪᑕᐅᔪᑦ ᐃᓄᐃᑦ ᖃᓄᐃᓕᐅᕐᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐊᒃᓱᕈᕐᓇᐅᑎᑦ. ᐱᔭᓇᐊᖃᖅᑐᖅ ᐃᑲᔪᕐᓂᐊᕐᓗᓂ ᐊᔪᙱᓐᓂᐊᖅᑐᒥᒃ ᓂᕐᔪᑎᓂᒃ ᐊᓯᐅᔾᑕᐃᓕᕐᓂᒧᑦ ᐊᒻᒪᓗ ᓂᕿᒋᔭᐅᓗᑎᒃ ᐊᒻᒪᓗ ᓂᐅᕙᐊᒃᓴᓄᑦ ᐱᑕᓇᔭᐅᔪᑦ ᑕᐃᑲᓂ ᐊᑭᐊᓂᓘᓐᓃᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ.

7. ᐃᓂᐅᔪᒥᑦ ᓄᓇᙳᐊᓕᐅᕆᓗᓂ/ᖃᕆᑕᐅᔭᒃᑯᑦ ᑐᖅᑯᖅᓯᒪᔪᓂᒃ ᐊᒻᒪᓗ ᐃᓂᒋᔭᐅᖃᑦᑕᖅᑐᓂᒃ ᖃᐅᔮᓵᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐱᓪᓚᐅᔪᑦ ᐊᑐᖅᑕᐅᓂᐊᕐᓗᑎᒃ ᑮᓕᓕᐅᓇᓂᕐᒧᑦ ᐃᑲᔪᕐᓂᐊᖅᑐᓂᒃ ᓯᕗᓂᒃᓴᒥᑦ ᐅᖃᓪᓗᓇᒃᓴᐅᑕᐅᓂᐊᕐᓗᑎᒃ ᐱᓪᓚᐅᔪᑦ ᐊᒻᒪᓗ ᐊᒃᑐᖅᑕᐅᓴᕋᐃᑦᑐᑦ ᐃᓂᐅᔪᓂᒃ, ᐊᒻᒪᓗ ᐊᙳᑉᓕᒋᐊᖅᑕᐅᔪᓇᑎᐊᕐᓗᑎᒃ ᓯᕗᓂᒃᓴᒥᑦ (ᓱᕐᓗ ᓄᑖᙳᖅᑎᕐᓗᒋᑦ ᖃᓕᓈᑦ, ᐱᕝᕙᐅᔪᑦ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᒃ). ᐊᒻᒪᓗ, ᑐᓂᐅᑎᖃᑦᑕᐅᑎᓃᑦ ᐅᒃᑯᐃᙵᔫᒃᑯᑦ-ᐱᔭᐅᔪᙾᕐᓗᑎᒃ ᓈᓚᐅᑎᓄᑦ/ᑎᑎᖅᑲᓄᐊᕈᑏᑦ ᐱᐅᓂᖅᓵᒥᒃ ᐊᔾᔨᒌᙳᔪᙾᖅᑐᑦ ᐊᒻᒪᓗ ᐱᔭᐅᓗᑎᒃ ᑕᒪᒃᑯᓄᙵ ᓈᓚᐅᑎᓄᑦ/ᑎᑎᖅᑲᓄᑦ ᑲᑎᓯᒪᔪᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᓄᓇᓂᑦ.

## ᑭᓪᓕᖃᕐᓃᑦ ᐊᒻᒪᓗ ᓈᓚᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᖃᑯᑎᒃᑯᑦ ᖃᐅᔮᓴᖅᑕᐅᖃᑦᑕᖅᓯᒪᑎᓪᓗᒍ ᑕᐃᒪᙵᓂᑦ 1867-ᒥᑦ, ᐊᒥᓱᓂᑦ ᖃᐅᔨᒪᓂᕋᔭᐅᔪᑦ ᐱᑕᖃᕐᓯᑦᑐᑦ ᐊᒻᒪᓗ ᐊᒃᓱᕈᕐᓇᖅᑎᑦᑎᔪᖅ ᕿᒥᕐᕆᓂᐊᖅᑎᓗᑎᒃ ᐊᑯᓂᐅᔪᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᓂᒃ. ᐅᖃᖅᓯᒪᓂᙵᑐᑦ ᖃᑌᓂᑦ, ᐊᒥᓱᐃᑦ ᐱᔾᔪᑕᐅᔪᑦ ᐱᑕᖃᕐᓯᑦᑐᑦ ᓈᓚᐅᑎᓂᒃ/ᑎᑎᖅᑲᓂᒃ (ᓱᕐᓗ, ᓯᑯᒦᑦᑐᑦ ᑐᙳᔪᖅᑐᑦ ᐱᕈᖅᑐᐃᑦ, ᐊᔾᔨᐅᖏᑦᑐᑦ ᓯᑯᒥᑦ ᐃᓂᒋᔭᐅᖃᑦᑕᖅᑐᑦ, ᐃᒪᐃᑦ/ᓯᓪᓯᐃᑦ ᐱᓕᐅᓇᕙᓪᓕᐊᓗᐊᖅᑐᓄᑦ, ᐊᒻᒪᓗ ᓯᓚᒧᑦ ᓇᓚᐅᑦᑖᕆᓃᑦ).

ᐱᔾᔪᑎᖃᕈᓐᓇᖅᑐᖅ, ᐃᓚᙵᒍᑦ, ᐅᙵᓯᙳᓂᙵᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ, ᖁᑦᑎᒃᑐᒥᑦ ᑲᑎᓐᓂᖃᕐᓂᖕᒋᑦ ᐊᒻᒪᓗ ᐊᖕᒋᔩᓂᙵᑕ, ᖃᑯᑎᒃᑯᓪᓗ, ᑭᒡᓕᖃᕐᓂᕐᒧᑦ ᐊᒃᓱᕈᕐᓇᐅᑎᑦ. ᑕᐃᒪᓐᓇᒧᑦ, ᖃᑯᑎᒃᑰᙵᔪᑦ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᑐᕌᙵᔪᑦ ᐊᒻᒪᓗ ᐊᔾᔨᙶᕆᑦᑐᓂᒃ ᐆᒃᑐᕋᐃᓃᑦ ᑲᓇᑕᓗ ᐊᑯᑭᑦᑐᕐᓗ, ᓇᐃᑦᑐᓂᒃ ᐱᕕᖃᕐᓂᐅᔪᓂᒃ ᐊᒻᒪᓗ ᓇᓗᓇᖅᑐᓂᒃ ᖃᓄᐃᓐᓂᖅᓴᐅᓂᖕᒋᓐᓅᖅᑐᓂᒃ ᖃᓇᑕᐅᔭᒃᑯᑦ ᑐᖅᑯᖅᓯᒪᔪᓄᑦ, ᑲᑉᐳᔾᔭᓅᖅᑐᑦ ᐊᒻᒪᓗ ᑲᑎᖅᓱᐃᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐱᕚᓪᓕᐊᓯᒪᔪᑦ. ᐊᒻᒪᓗ, ᑲᑎᖅᓱᐃᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᒪᓂᒪᔪᑦ ᓴᖅᑭᑕᐅᓯᒪᔪᑦ ᖃᐅᔨᒪᓂᕆᔭᐅᔪᑦ (ᓄᓇᖃᖅᑳᖅᑐᑦ/ᓄᓇᓕᖕᒥᑦ ᐊᒻᒪᓗ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ) ᐊᔾᔨᒌᙱᑦᑐᙵᖅᑐᑦ ᑲᓇᑕᒥᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᑦ, ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᐃᒪᓐᓈᖅᑐᐃᓂᖃᕈᑕᐅᕝᕙᑎᒃ ᐊᒻᒪᓗ/ᐅᕝᕚᓘᓐᓃᑦ ᖃᐅᔨᒋᐊᖃᑦᑕᕐᓂᕐᒧᑦ ᖃᓄᐃᓕᐅᕐᓂᕆᔭᖕᒋᑦ ᐊᑐᓂ ᓄᓇᓖᒃ. ᓇᓗᓇᐃᖅᓯᓚᐅᖅᑐᑦ ᐃᓚᖕᒋᑦ ᑕᐃᑉᓱᒪᓂᒥᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᓈᓴᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ ᐋᑑᑎᖃᙱᑐᐃᓐᓇᕆᐊᖃᕐᓚᑕ ᒫᓐᓇᐅᔪᖅ ᐃᓱᒪᒋᔭᐅᔪᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᒋᒃᑐᓄᑦ ᐊᒻᒪᓗ ᐊᑯᓂᐅᔪᒥᑦ ᐋᓐᓂᐊᖃᖅᑕᐃᓕᒪᓂᖕᒋᓐᓄᑦ ᐊᒻᒪᓗ ᓈᓴᐅᑏᑦ/ᑎᑎᖅᑲᐃᑦ ᓈᒻᒪᑐᐃᓐᓇᕆᐊᖃᖅᑐᑦ ᐃᓱᒪᒋᔭᐅᔪᑎᒃ ᐊᒃᑐᖅᓯᓂᐅᖃᑦᑕᖅᑐᑦ ᓇᐃᑦᑐᒥᓪᓗᓐᓃᑦ ᐊᓯᐊᙳᖅᑐᓂᒃ ᑕᒪᑐᒨᖓ.

## ᖃᐅᔨᔭᐅᔪᑦ

ᓴᕝᕙᔭᐊᖅ/ᐱᑭᐊᓚᓱᕐᓯᐊᖅ ᑎᑭᐅᑎᓯᒪᔭᖅ ᓄᓇᕙᔭᐊᕐᒥᑦ ᑭᒡᓕᐅᔪᒧᑦ (ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ 2020). ᐃᓂᐅᔪᖅ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖅᑎᒌᒃᑐᑲᓪᓚᖕᓄᑦ, ᐱᖅᑯᓯᕆᔭᐅᔪᒥᑦ, ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒧᑦ, ᐊᒻᒪᓗ ᒐᕙᒪᓄᑦ ᐱᓕᕆᐅᑉᓗᓂ, ᑲᑎᑦᑎᔪᖅ ᓄᓇᓕᖕᓂᑦ ᐱᕖᕙᐅᕖᕙᖃᑦᑎᐊᖅᑐᓂᑦ ᐊᒻᒪᓗ ᓂᕈᐊᑎᓂᒃ. ᑲᑎᓐᓂᖃᖅᑐᖅ ᐃᑲᔪᖅᑕᐅᔪᖅ ᑕᐃᒪᐅᓂᖕᒋᑦ ᓯᑯᐃᑦ ᐊᐅᓚᓃᑦ, ᓯᑯᖃᑦᑕᖅᑐᓄᑦ, ᐊᒻᒪᓗ ᖃᓂᑕᙵᓃᑦᑐᓄᑦ ᓯᓪᓭᓄᑦ ᐊᒻᒪᓗ ᓄᓇᒧᑦ ᓯᑯᓯᒪᔪᒧᑦ, ᐃᓂᒋᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐅᑎᖅᑕᕕᐅᖃᑦᑕᕐᓂᕐᒧᑦ ᐊᑦᖁᑎᒋᔭᐅᔪᑦ ᐊᒥᓱᓄᑦ ᐱᒻᒪᕆᐅᔪᓄᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᓂᕿᑎᓄᑦ. ᐅᑭᐅᒃᑯᑦ ᐊᒻᒪᓗ ᐅᐱᕐᙸᒃᑯᑦ, ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐃᒪᐅᖃᑦᑕᖅᑐᑦ ᐊᒻᒪᓗ ᐱᒻᒪᕆᐅᔪᑦ ᓯᑯᐃᑦ ᐃᓱᖕᒋᑦ ᐃᓂᕆᔭᐅᑉᓗᑎᒃ ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ᓂᕿᑎᓄᑦ. ᐊᐅᔭᕚᙵᑦ, ᒥᓕᔭᓐᖏᓐᓃᑦᑐᑦ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ ᐅᑎᖅᑲᑦᑕᖅᑐᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᙵᓄᑦ ᓂᕆᔭᖅᑐᖅᑰᑎᒃ ᐊᒻᒪᓗ ᐅᑉᓗᓕᕆᓇᐊᖅᑐᖅᑰᑎᒃ ᐊᒥᓱᓂᑦ ᓯᓪᓭᖕᒋᓐᓂᑦ ᐃᓪᓈᕿᔭᐃᑦ ᐊᒻᒪᓗ ᐃᒪᐃᑦ. ᑕᒪᓗᒃᑖᕐᓚᒃ ᐃᒪᐃᑦ ᐊᒻᒪᓗ ᓯᓪᓭᐃᑦ (ᓱᕐᓗ, ᑯᑦ ᐸᖕᒋᑦ, ᐃᓪᓈᕿᔭᐃᑦ, ᓯᕐᕖᑦ ᐃᓱᖕᒋᑦ) ᖃᓂᑕᙵᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᕿᒥᕐᕈᔭᐅᕌᓂᒃᓯᒪᙱᑦᑐᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᖅᑕᐅᕌᓂᒃᓯᒪᙱᖕᓗᑎᒃ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᒃᑯᑦ, ᑭᓯᐊᓂ ᐊᔾᔨᐅᙱᑦᑐᑦ ᐊᒻᒪᓗ ᐱᓕᕆᕙᓪᓕᐊᓂᕐᒧᑦ ᐃᓂᒋᔭᐅᔪᑦ (ᑕᕆᐅᕐᒥᐅᑕᓄᑦ ᐊᒻᒪᓗ ᓄᓇᒥᐅᑕᓄᑦ) ᐊᑐᖅᑕᐅᒪᕆᒃᑐᑦ ᓄᓇᓕᖕᒥᐅᓄᑦ ᓂᕿᑦᔭᐅᑉᓗᑎᒃ, ᓱᕐᓗ ᐃᖃᓗᒃᐱᒃ, ᕿᓇᓗᒐᖅ, ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᐅᑕᐃᑦ ᑎᖕᒥᐊᑦ. ᐊᒻᒪᓗ, ᐃᓚᖕᒋᑦ ᐅᑎᖅᑕᖃᑦᑕᖅᑐᑦ ᓂᕈᐋᑦ, ᓱᕐᓗ ᑑᒑᓖᑦ, ᒪᖃᐃᑕᐅᖃᑦᑕᖅᑐᑦ ᑲᓇᑕᒥᐅᓄᑦ ᐊᒻᒪᓗ ᐊᑯᑭᑦᑐᕐᒥᐅᓄᑦ ᐃᓄᖕᒋᓐᓄᑦ ᑎᑭᕝᕙᒍᒍ ᑯᓪᓗᐊᕐᓯᐊᖅ ᐊᒻᒪᓗ ᕿᑭᖅᑕᕐᔭᐊᖅ.

ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᑕᐃᒪᙶᓂᑐᖃᖅ ᐃᓱᒪᒋᔭᐅᔪᖅ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐆᒪᔪᓂᒃ ᐱᓕᐅᕆᕙᓪᓕᐊᖑᓛᖑᓂᙵᓄᑦ, ᑐᑭᓕᐅᖅᑕᐅᔪᖅ ᐱᒋᐊᕌᖅᑐᓄᑦ ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᖅᑕᐅᔪᙵᖅᑐᓄᑦ ᐱᕈᖅᑐᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖕᒋᓐᓄᑦ, ᐊᔾᔨᐅᙱᑦᑐᒃᑯᑦ ᐊᑐᖅᑕᖅᑐᑦ ᐊᒥᓱᓄᑦ ᐊᖕᒋᔪᒥᒃ ᐃᓂᐅᔪᒧᑦ ᐊᒻᒪᓗ ᐆᒪᓂᖅᑲᑎᖕᓂᕐᒧᑦ ᖃᓄᐃᓕᐅᕐᓂᖕᒋᓐᓄᑦ ᐊᐅᓚᑦᑎᓂᐅᔪᓄᑦ. ᖃᓄᐃᓕᐅᕐᓃᑦ ᓱᓕᔫᓗᐊᖅᑎᓪᓗᒋᑦ, ᐊᖕᒋᓂᕆᓪᓚ, ᐃᓂᓪᓚ, ᐊᒻᒪᓗ ᖃᙵᒃᑰᙵᓂᙵᑕ ᐱᓕᐅᕆᕙᓪᓕᐊᓂᐅᑉ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᔪᖅ. ᓇᓗᓇᐃᖅᓯᓂᖃᖅᑐᑦ ᓯᓚᐅᑉ ᐊᓱᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᒃᑐᖅᓯᙵᓪ ᐅᑭᐅᑉ ᐃᓚᙵᒍᑦ ᐊᒻᒪᓗ ᖃᙵᒃᑰᙵᓂᖕᒋᑦ ᐊᑐᓂ ᐃᓂᐅᔩᑉ ᐊᒻᒪᓗ ᑕᑎᐅᑉ ᐱᕙᓪᓕᐊᓂᖕᒋᓐᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᕐᒥᑦ, ᐊᒻᒪᓗ ᑲᑎᓐᓂᖃᕈᓐᓇᖅᑎᑦᑎᑉᓗᓂ ᐱᓕᐅᕆᕙᓪᓕᐊᓗᕐᓂᕐᒥᒃ ᐊᒻᒪᓗ ᖁᑦᑎᓐᓂᖕᓴᒥᑦ ᓂᕿᕆᔭᐅᔪᓄᑦ. ᖃᙵᒃᑰᙵᓂᙵᓚ ᐊᒻᒪᓗ ᐊᔾᔨᒌᙱᓐᓂᖕᒋᑦ ᐱᕙᓪᓕᐊᓃᑦ ᐱᓪᓕᕆᐅᔪᑦ ᐃᑲᔪᐃᓂᐊᕐᓗᑎᒃ ᓂᕆᔭᒃᓴᖅᓯᐅᕐᓂᖕᒋᓐᓄᑦ ᓂᕈᐊᖏᑦ ᑕᒫᓂᕐᒥᐅᑕᓄᑦ ᐊᒻᒪᓗ ᐅᑎᖅᑕᖃᑦᑕᖅᑐᓄᑦ ᐅᑭᐅᑉ ᐃᓗᐊᓂᑦ. ᓯᑯᖃᑦᑕᖅᑐᑦ ᐊᑐᖅᑕᐅᓂᖅ ᐊᔪᖅᐸᓪᓕᐊᑐᐃᓐᓇᖅᑐᑦ ᐊᒻᒪᓗ ᐊᔾᔨᖃᑦᑕᙱᖕᓗᑎᒃ, ᐊᒻᒪᑦᑕᐅᖅ ᓯᑯᐃᑦ ᐃᓱᙱᑦ ᕿᑎᐊᓂᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᐊᒥᓱᙳᕆᐊᖅᓯᒪᔪᑦ ᓯᑯᐃᑦ ᐃᒪᕐᒥᑦ ᐊᐅᓚᔪᑦ ᑕᒫᓂ, ᐊᒻᒪᓗ ᖃᓕᓈᙵᔪᓂᒃ ᐊᒃᑐᖅᓯᓂᖅᑲᖅᑐᓂ ᓂᒋᒃᑲᓐᓂᐊᓄᑦ ᕿᑭᖅᑖᓗᑉ ᐃᒪᙵᓂᑦ.

ᑐᑭᓯᐊᓂᕗᑦ ᑕᒪᓗᒃᑖᕐᒧᑦ ᐊᓯᐊᙳᖅᐸᓪᓕᐊᓂᙵ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐋᖅᑭᐅᒪᔩᑉ ᐊᖕᒋᓪᓕᕙᓪᓕᐊᖕᒋᓐᓇᖅᑎᓪᓗᒍ, ᐊᖕᒋᓪᓕᕙᓪᓕᐊᔭᕆᐊᖃᖅᑐᖅᑕᐅᖅ ᑐᑭᓯᐊᓂᕗᑦ ᐊᒃᑐᐊᓂᖕᒋᑦᑕ ᖃᓂᑦᑐᒥᑦ ᖃᓄᐃᓕᐅᕐᓂᖕᒋᑕ, ᐊᒻᒪᓗ ᓄᓇᕙᔭᐊᕐᒥᑦ

ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓ ᐊᒻᒪᓗ ᐊᔾᔨᒌᖏᑦᑕᙱᓐᓂᖓ. ᐱᒻᒪᕆᐅᔪᖅ ᑎᑎᕋᐅᓯᕆᓗᒥᑦ ᐊᒻᒪᓗ ᑐᑭᓯᐊᓗᒥᑦ ᐊᓯᐊᙶᖅᐸᓪᓕᐊᓂᒃᑐᑦ, ᓯᕗᓂᒃᓴᖓ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓ ᓇᓗᓇᕐᒪᑦ. ᐅᖃᐅᓯᐅᖃᐅᓂᖓᑐᑦ, ᓯᕗᓂᒃᓴᒥᑦ ᑐᕌᖓᔪᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᓂᐅᓂᐊᖅᑐᑦ ᑲᔪᓰᕆᐊᖃᖅᑐᑦ ᐱᕙᓪᓕᐊᔭᐅᖃᑕᐅᓂᐊᕐᓗᑎᒃ ᓄᓇᓕᖕᒥᐅᓄᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐃᔨᓄᑦ ᑕᒪᐃᓐᓄᑦ ᓴᓂᖏᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ, ᑐᕌᖃᖅᕐᓗᑎᒃ ᑐᑭᓯᐊᓂᖅᓴᐅᓂᐊᕐᓗᒍ ᐊᒻᒪᓗ ᓇᓚᐅᑦᑖᕐᓗᑎᒃ ᖃᓄᖅ ᓯᕗᓂᕐᒥᑦ ᖃᓄᐃᓐᓂᐅᔪᑦ ᐊᒻᒪᓗ ᖃᓄᐃᓕᐅᕐᓂᐅᔪᑦ ᑕᒫᓂ ᐊᒃᑐᖅᓯᓂᐊᕐᓂᖏᑦ ᓄᓇᓕᖕᓂᑦ ᐊᒻᒪᓗ ᑕᕆᐅᕐᒥᑦ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᓯᒃᑐᓂᑦ. ᐱᓕᕆᖃᑎᒋᖕᓂᖅ ᑲᔪᓯᑎᓪᓗᒍ ᓄᓇᕐᔪᐊᕐᒥᑦ ᐱᓕᕆᖃᑎᒋᒃᑐᓄᑦ ᐊᒻᒪᓗ ᐃᓚᒋᔭᐅᔪᓄᑦ ᓯᕗᒻᒧᕆᐊᖅᑎᑦᑎᓂᐊᖅᑐᖅ ᒥᐊᓂᕆᔭᐅᓂᖓᓄᑦ ᓴᕐᕙᕐᔪᐊᖅ/ᐱᑭᐊᓚᓱᕐᓱᐊᖅ. CSAS ᑲᑎᒪᑎᓪᓗᒋᑦ, ᐃᓱᒪᓕᐅᓚᐅᖅᑐᑦ ᑉᓕᖅᑲᕐᓂᐊᕐᒋᓐᓂᖓᓄᑦ ᖃᐅᔨᓴᐃᕝᕕᐅᓂᐊᖅᑐᒥᑦ. ᐊᕐᑉᓕᒋᐊᖅᑎᑦᑎᔪᖅ ᑐᑭᓯᐊᓂᕐᒥᒃ ᐱᕙᓪᓕᐊᓂᕐᓂᑦ ᐊᒻᒪᓗ ᐊᓯᐊᙶᖅᐸᓪᓕᐊᔪᓂᒃ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖓᓂᑦ ᐋᖅᑭᐅᒪᔪᒥᑦ ᒪᓕᙱᑦᑐᑦ ᓄᓇᓄᑦ ᑉᓕᕆᐅᔪᓂᒃ, ᐊᒻᒪᓗ ᐱᓕᕆᖃᑎᒌᒃᑎᑦᑎᓂᐊᖅᑐᖅ ᑭᐅᔭᐅᓂᐊᕐᓗᑎᒃ ᐊᕐᕆᔪᑦ ᐊᒻᒪᓗ ᓱᓇᓗᒃᑖᓄᑦ ᐃᓗᐃᓗᑕᐅᔪᓂᑦ. ᑕᐅᑐᖓᖃᕐᓗᓂ ᐱᐅᓯᕆᐊᕐᓂᐊᕐᓗᒍ ᑐᑭᓯᐊᓂᕗᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᐅᑉ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᖃᑎᒌᒃᑐᑦ ᒥᒃᓴᓄᑦ ᐱᓕᕆᐊᖑᔭᕆᐊᖃᖅᑐᑦ ᐃᑲᔪᕐᓂᐊᕐᓗᓂ ᐊᓯᐅᔨᑦᑕᐃᓕᓂᕐᒧᑦ ᐊᒻᒪᓗ ᒥᐊᓂᕆᔭᐅᓂᖓᓄᑦ ᐃᓂᐅᔪᖅ, ᐊᒻᒪᓗ ᐃᓄᐃᑦ ᒪᖃᐃᖃᑦᑕᕐᓗᑎᒃ ᐊᒻᒪᓗ ᓂᕿᖃᖅᑎᓪᓗᒋ ᐊᔪᙱᓐᓂᐊᖅᑐᒥᒃ ᓯᕗᓂᒃᓴᒥᑦ.

## ᑎᑎᕋᖅᓯᒪᔪᑦ ᑲᑎᒪᓂᕐᓂᑦ ᐃᓚᐅᓚᐅᖅᑐᑦ ᐊᒻᒪᓗ ᐃᑲᔪᐃᔪᑦ

ᐃᓚᐅᖃᑕᐅᔪᓗᒃᑖᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐱᓕᕆᖃᑎᒌᒃᑐᑦ ᕿᒥᕐᕈᓂᕐᒥᑦ ᓂᕆᐅᒋᔭᐅᔪᑦ ᐃᓚᐅᓂᐊᕐᓂᖏᓐᓄᑦ ᐱᔭᒃᓴᐅᑎᓕᕆᔨᑦ ᐊᒻᒪᓗ ᖃᐅᔨᒪᔭᖅᑐᑦ ᐃᓄᐃᑦ ᐱᔾᔪᑕᐅᔪᒥᒃ ᕿᒥᕐᕈᔭᐅᔪᒥᑦ; ᑭᒡᖑᐃᓂᐅᕐᒥᑦᑐᖅ ᐅᕝᕙᓘᓐᓃᑦ ᐱᔾᔪᑎᖃᙱᑦᑐᖅ ᑭᑐᑐᐃᓐᓇᕐᓄᑦ ᐱᔪᒪᓂᖃᖅᑐᓄᑦ.

| ᐊᑎᖓ | ᐱᓕᕆᕝᕕᒋᑦ/ᐱᔾᔪᔾᔨᔪᖅ |
|---|---|
| Jason Stow<br>(ᐃᒃᓯᕚᐅᑕᐅᖃᑕᐅᔪᖅ) | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ |
| Tom Christensen<br>(ᐃᒃᓯᕚᐅᑕᐅᖃᑕᐅᔪᖅ) | ᐋᕐHᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᑦ |
| Claire Hornby<br>(ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᓯᕗᓕᐅᖅᑎ) | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ |
| Kevin Scharffenberg<br>(ᐅᓂᑉᑳᓂᒃ ᑲᑎᖅᓱᐃᔨ) | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ |
| Elizabeth Worden<br>(ᐅᓂᑉᑳᓂᒃ ᑲᑎᖅᓱᐃᔨ) | ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Bethany Schroeder | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᑕᕆᐅᕐᒥᑦ ᐸᕐᓇᐃᓂᖅ ᐊᒻᒪᓗ ᐊᓯᐅᔨᑦᑕᐃᓕᓂᖅ, ᐅᑭᐅᖅᑕᖅᑐᖅ |
| Glenn Benoy | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᑲᓇᑕᒥᑦ ᐱᕐᑯᑎᕐᔪᐊᓄᑦ |
| Steve Ferguson | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ |
| Cory Matthews | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆᓂᑦ |
| Humfrey Melling | ᐃᖃᓗᓕᕆᔨᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐸᓯᕕᒃ (Pacific) |

| ᐊᑎᖓ | ᐱᓕᕆᖃᑎᒌᑦ/ᐱᔾᔪᔾᔨᔨᖅ |
|---|---|
| Maya Gold | ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᓄᓇᕐᔪᐊᕐᒥᑦ ᑕᕆᐅᕐᓄᑦ ᐊᑐᐊᒐᖅ, ᑲᓇᑕᒥᑦ ᐱᕐᑯᑎᕐᔪᐊᓄᑦ |
| Garry Stenson (ᐃᑲᔪᐃᔪᖅ) | ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᓂᐅᕚᓐᓛᓐ ᐊᒻᒪᓗ ᓛᐳᕋᑐᐊ |
| Christine Michel | ᐃᖃᓗᓕᕆᔩᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ |
| Monika Pućko | ᐃᖃᓗᓕᕆᔩᒃᑯᑦ - ᓱᓇᑐᐃᓐᓇᓕᕆᓂᖅ, ᐋᓐᑎᐅᕆᔪ ᐊᒻᒪᓗ ᐳᕆᐅᕆ (Prairie) ᓄᓇᓂᑦ |
| David Murray | ᑲᓇᑕᒥᑦ ᒥᕐᖑᐃᖅᓯᕝᕕᓕᕆᓂᕐᒧᑦ ᐱᔾᔪᔾᔨᔨᒃᑯᑦ |
| Grant Gilchrist | ᑲᓇᑕᒥᑦ ᐊᕙᑎᓕᕆᔩᒃᑯᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ |
| Evan Richardson | ᑲᓇᑕᒥᑦ ᐊᕙᑎᓕᕆᔩᒃᑯᑦ ᓯᓚᐅᑉ ᐊᓯᔾᔨᖅᐸᓪᓕᐊᓂᖓᓄᑦ |
| Bjarne Lyberth | ᓄᓇᒥᑦ ᐊᒻᒪᓗ ᐊᕙᑎᓕᕆᔩᒃᑯᑦ, ᐊᑯᑭᑦᑐᕐᒥᑦ ᒐᕙᒪᒃᑯᑦ |
| Inge Thaulow | ᓄᓇᒥᑦ ᐊᒻᒪᓗ ᐊᕙᑎᓕᕆᔩᒃᑯᑦ, ᐊᑯᑭᑦᑐᕐᒥᑦ ᒐᕙᒪᒃᑯᑦ |
| Andres Mosbech | ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᑦ |
| Søren Rysgaard | ᐋᕐᕼᐅᔅ (Aarhus) ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᑦ |
| Paul Myers | ᐃᐋᐳᑕᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Andrew Hamilton | ᐃᐋᐳᑕᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Luke Copland | ᐋᑐᕚᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Lauren Candlish | ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| David Barber | ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Tim Papakyriakou | ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Dorthe Dahl-Jensen | ᒫᓂᑑᐸᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ/ᑰᐱᓐᕼᐋᒐᓐᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑎᐊᓐᒫᒃ |
| Connie Lovejoy | ᓚᕚᓪᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Philippe Archambault | ᓚᕚᓪᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Jean-Éric Tremblay | ᓚᕚᓪᒥᑦ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Maxime Geoffroy | ᒥᒨᓇᐅᓪ ᓯᓚᑦᑐᖅᓴᕐᕕᒡᔪᐊᖅ, ᑲᓇᑕ |
| Larry Audlaluk | ᐊᐅᓱᐃᑦᑐᖅ, ᑲᓇᑕ |
| Stephanie Meakin | ᐃᓄᐃᑦ ᐅᑭᐅᖅᑕᖅᑐᒃᑖᒥᑦ ᑲᑎᒪᔩᑦ, ᑲᓇᑕ |
| Chris Debicki | ᑲᓇᑕᒥᑦ ᑕᕆᐅᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ |
| Annie Eastwood | ᑲᓇᑕᒥᑦ ᑕᕆᐅᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ |
| Erin Keenan | ᓄᓇᕐᔪᐊᕐᒥᑦ ᓂᕐᔪᑎᓕᕆᓂᕐᒧᑦ ᕿᓇᐅᔭᖅᑎᑦᑎᔩᒃᑯᑦ, ᑲᓇᑕ |
| Nynne Hjort Nielsen | ᐊᑯᑭᑦᑐᕐᒥᑦ ᓄᓇᒥᑦ ᐱᕝᕕᐅᔪᑦ, ᐊᑯᑭᑦᑐᖅ |

| ᐊᑎᖓ | ᐱᓕᕆᖃᑎᒋᑦ/ᐱᔾᔪᑎᔪᖅ |
|---|---|
| Fernando Ugarte | ᐊᑯᑭᑦᑐᕐᒥᑦ ᓄᓇᒥᑦ ᐱᕝᕕᐅᔪᑦ, ᐊᑯᑭᑦᑐᖅ |
| Andrew Randall | ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ, ᑲᓇᑕ |
| Andrew Bresnahan | ᕿᑭᖅᑕᓂᑦ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᑦ, ᑲᓇᑕ |

# ᐱᕝᕕᐅᔪᑦ ᑐᑭᓯᐅᒪᔾᔪᑎᓂᑦ

ᑖᒻᓇ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔨᓂᕐᒧᑦ ᐅᓂᑳᖅ ᑕᖅᑮᓐᓇᖅᐊᖅ (ᔭᓄᐊᕆ) 22-24, 2020-ᒥᐅᓚᐅᖅᑐᖅ, ᑲᑎᒪᓚᐅᖅᑐᑦ ᐅᐃᓂᐹᒃ, ᒫᓃᑑᐸᒥᑦ, ᕿᒥᕿᐸᓗᑎᒃ ᐆᒪᓂᖃᕐᓂᖓᓄᑦ ᐊᒻᒪᓗ ᐱᕈᖅᐸᓪᓕᐊᓂᖃᕐᓂᖓᓄᑦ ᕿᒥᕿᓂᕐᒧᑦ ᐅᑭᐅᖅᑕᖅᑐᒥᑦ ᐃᒪᖅ ᐊᒻᒪᓗ ᐊᑭᐊᓃᑦᑐᑦ. ᐅᖃᓖᒐᓕᐊᕗᓯᒪᖕᒥᔪᑦ ᑲᑎᒪᓂᕐᒥᑦ ᐃᓕᔭᐅᓂᐊᖅᑐᑦ [ᑲᓇᑕᒥᑦ ᐃᖃᓗᓕᕆᔾᑯᑦ ᓱᓇᑐᐃᓐᓇᓕᕆᓂᕐᒧᑦ ᐅᖃᐅᔾᔫᑦ ᑎᑎᖅᑲᖓᓐᓂᑦ] ᒪᓂᒪᓕᕌᖓᑕ.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## ᐅᑯᐊ ᐅᓂᒃᑳᓕᐊᑦ ᐊᑐᐃᓐᓇᐅᕗᑦ ᐅᕙᖕᒐᑦ:

ᐱᓕᕆᕕᖓᓂ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᔪᓂᒃ ᐅᖃᐅᔾᔨᒋᐊᕐᕕᖓᑦ
ᐋᓐᑎᐅᕆᔩᒥᓗ ᓇᐹᖅᑐᖃᖕᒋᓐᓂᕐᒥᓗ ᐊᕕᒃᑐᖅᓯᒪᓂᕐᒥ

ᐃᖃᓗᓕᕆᔩᕐᔪᐊᒃᑯᑦ ᑕᕆᐅᕐᒥᐅᑕᓕᕆᔩᓪᓗ ᑲᓇᑕᒥ
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