

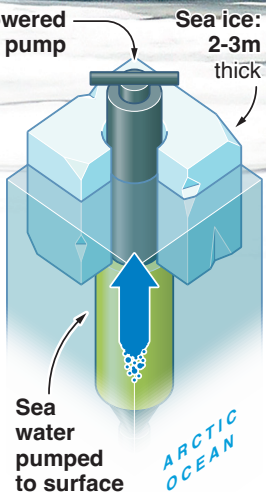
Plan to refreeze Arctic sea ice

A team of scientists has successfully refrozen thinning Arctic ice by pumping seawater onto the surface ice shelf, adding half a metre of thickness

SHRINKING ARCTIC SEA ICE

Minimum extent (*Sep*)

■ 1979 □ 2022

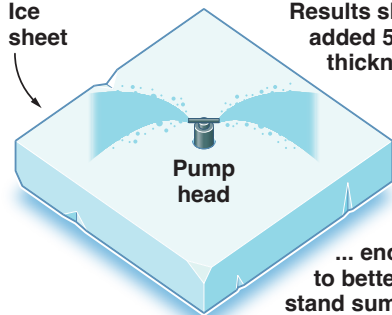


Cambridge Bay, Canada:
Experiment site

JAN-MAY 2024

1) Pump sprays sea water over wide area of **surface ice** for 10 days

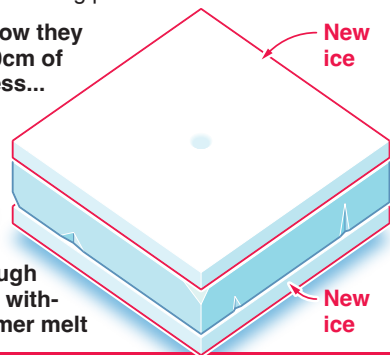
Ice sheet



Results show they added 50cm of thickness...

... enough to better withstand summer melt

2) Flooded water freezes over rest of winter, accelerating natural freezing process **under ice**



Study suggests installing pumps across 10% of Arctic could reverse present trends of ice loss but would require 10 million pumps powered by wind turbines or hydrogen fuel cells

Note: Diagrams not to scale and exaggerated for clarity

Sources: New Scientist, The Times, Real Ice, NSIDC

Picture: Getty Images

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