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The Alaskan village set to disappear underwater in a decade

By Stephen Sackur HARDtalk



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US President Obama's promise to take bold measures to combat climate change has provoked strong domestic opposition, but Americans are now facing the impact of global warming in their own country.

Almost no one in America has heard of the Alaskan village of Kivalina. It clings to a narrow spit of sand on the edge of the Bering Sea, far too small to feature on maps of Alaska, never mind the United States.

Which is perhaps just as well, because within a decade Kivalina is likely to be underwater. Gone, forever. Remembered - if at all - as the birthplace of America's first climate change refugees.

Four hundred indigenous Inuit people currently live in Kivalina's collection of single-storey

cabins. Their livelihoods depend on hunting and fishing.

The sea has sustained them for countless generations but in the last two decades the dramatic retreat of the Arctic ice has left them desperately vulnerable to coastal erosion. No longer does thick ice protect their shoreline from the destructive power of autumn and winter storms. Kivalina's spit of sand has been dramatically narrowed.



The US Army Corps of Engineers built a defensive wall along the beach in 2008, but it was never more than a stop-gap measure.

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“Start Quote

If we're still here in 10 years time we either wait for the flood and die, or just walk away and go someplace else”

Colleen Swan, Kivalina council leader

A ferocious storm two years ago forced residents into an emergency evacuation. Now the engineers predict Kivalina will be uninhabitable by 2025.

Kivalina's story is not unique. Temperature records show the Arctic region of Alaska is warming twice as fast as the rest of the United States.

Retreating ice, slowly rising sea levels and increased coastal erosion have left three Inuit settlements facing imminent destruction, and at least eight more at serious risk.

The problem comes with a significant price tag. The US Government believes it could cost up to \$400m (£265m) to relocate Kivalina's inhabitants to higher ground - building a road, houses, and a school does not come cheap in such an inaccessible place. And there is no sign the money will be forthcoming from public funds.



Kivalina council leader, Colleen Swan, says Alaska's indigenous tribes are paying the price for a problem they did nothing to create.

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Find out more



- The first part of **HARDtalk's** report from Alaska, presented by Stephen Sackur (pictured) can be seen on BBC News Channel at 04:30 BST on 30 July 2013, and on BBC World News at 03:30 GMT
- **HARDtalk** is broadcast on BBC Two on Tuesdays and Thursdays at 10.35 BST, on the BBC News Channel, Monday to Friday at 00:30 and 04:30 BST and on BBC World News, Monday to Thursday at 03.30, 08.30, 14.30 and 20.30 GMT
- [Or watch on BBC iPlayer](#)

"If we're still here in 10 years time we either wait for the flood and die, or just walk away and go someplace else.

"The US government imposed this Western lifestyle on us, gave us their burdens and now they expect us to pick everything up and move it ourselves. What kind of government does that?"

North of Kivalina there are no roads, just the vast expanse of Alaska's Arctic tundra. And at the most northerly tip of US territory lies the town of Barrow - much closer to the North Pole than

to Washington DC. America's very own climate change frontline.

Barrow's residents are predominantly from the Inupiat tribe - they hunt bowhead whale and seal. But this year has been fraught with problems.

The sea ice started to melt and break up as early as March. Then it refroze, but it was so thin and unstable the whale and seal hunters were unable to pull their boats across it. Their hunting season was ruined.



For the first time in decades not a single bowhead whale was caught from Barrow. One of the town's most experienced whaling captains, Herman Ahsoak, says the ice used to be 3m (9ft) thick in winter, now it is little more than a metre.

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“Start Quote

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Kate Moriarty, Alaska Oil and Gas Federation

"We have to adapt to what's coming, if we're gonna keep eating and surviving off the sea, but no whale this year means it will be a long cold winter," he says.

Barrow is known as the Arctic's "science city". In summer it hosts dozens of international researchers monitoring the shrinking of the Arctic ice and - no less important - the rapid thawing of the tundra's permafrost layer.

But it is the anecdotes that are as striking as the columns of data. I join a team of scientists taking samples of the ice off Barrow Point.

We motor across the offshore ice on all terrain vehicles, but we are not alone. "You'll be escorted by armed bear guards," my local guide, Brower Frantz, says before we set out.

"The ice is too thin for the polar bears to hunt on so they're stuck onshore searching for food. You don't want to be on your own when you meet a hungry bear," he adds.



A journey over the disappearing ice to see the scientists in action

Alaska's role in the climate story is about cause as well as effect. As America's Arctic territory warms it continues to be a vital source of the carbon-based fossil fuels seen by most scientists as a key driver of climate change.

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“Start Quote

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Alaska's North Slope is the US's biggest oil field and the Trans Alaska pipeline is a key feature of America's drive for energy security. As production from the existing field tails off there is enormous pressure to tap untouched Alaskan reserves.

Shell has launched an ambitious bid to begin offshore Arctic drilling despite a chorus of disapproval from environmental groups. Concerns intensified when a rig ran aground off the

Alaskan coast at the beginning of this year. Operations are currently suspended, but the prize is too valuable to ignore.

Kate Moriarty, executive director of the Alaska Oil and Gas Federation, believes Alaska possesses 50 billion as-yet untapped barrels of oil.

"The reality is the Arctic is going to be developed," she says. "And who do we want in the lead? I say we want it to be the United States because the reality is the world demand for oil and gas is not going to go away."



Pressure is mounting to open up Alaska's untouched oil resources. When President Obama pledged to redouble his efforts to [reduce America's carbon emissions](#) last month, his words met with little more than a shrug in Alaska.

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More Alaska lives



The small remote community of Wales sits on the westernmost tip of the US, on the Seward Peninsula of Alaska, overlooking the Bering Sea. Photographer Ed Gold spent a number of

weeks living with and documenting the small Inupiaq community

- [In pictures: The other Wales](#)

The state owes its existence to oil. Revenues from the oil industry make up more than 90% of the state budget. Oil money means no income tax and an annual handout to every Alaskan resident.

And when it comes to balancing two conflicting pressures - a rapidly changing climate on the one hand, the demand to expand the state's carbon-fuelled economy on the other - there is little doubt where the priority lies.

The deputy commissioner of Alaska's Department of Natural Resources, Ed Fogels, makes no apology for Alaska's strategy. "When everyone pounces on Alaska and says 'oh, the climate is changing, the Arctic is changing, things are out of control', we say wait a minute. We've been developing our natural resources for 50 years now. Things are going quite well thank you."

Within a generation the Arctic ocean may be ice free during the summer. The rate of warming in the far north is unmatched anywhere else on the planet.

In terms of resource exploitation, shipping access and human settlement Alaska is likely to become a more attractive proposition. Scientists call that a positive feedback effect. For Alaskans on the climate change frontline - and for our planet - it may not be positive at all.