



U216 Environment - Lake Baikal

Balancing the risks

V/O

So, what are the local environmental risks facing the lake during this transitional period in the Russian economy?

One concern is water pollution from the fishing fleets that are still the principal industry for the relatively poor communities around the edge of the lake. The principal catch is omul, a delicacy prized throughout Russia. For many local people it's both a source of food and the only source of income.

But poaching is on the increase, bringing with it the risk of overfishing. Illegal logging is also hard to police. It depletes the forests and adds to erosion. In remote communities, antiquated sewage treatment threatens the pure waters of the lake. There's also the ever-present natural risk of invasion by species from other ecosystems.

Grachev

Actually this is the most dangerous thing for any ecosystem. If an alien species comes it changes all the ecosystem. It becomes absolutely different and it is a very great danger.

V/O

Like any ecosystem, Lake Baikal has the capability to adapt and respond to alien species.

These are natural processes and generally they occur over a relatively long time scale. At worst, they can cause complete extinction of endemic species.

Grachev

When we speak about Lake Baikal, we have to speak, we have to have in our mind the geological timescale. There were hundreds and thousands of complete extinctions on Lake Baikal, tremendous climate change, yes? So if we speak about changes of, of Lake Baikal, we have to compare it with our lifetime.

V/O

And in our lifetime, the major threat to the lake may not be from local events but from global warming.

Lubov

Firstly there is the increase in the water's temperature. Either this is global warming or it's a fluctuating process which is clearly currently going through a peak.

V/O

The rising water temperatures have caused measurable changes to the lake's ecosystem.

Lubov

These changes that I, as a scientist, have personally seen, such changes as the increase of primary production, an increase in the amount of algae, several changes in the dominant species, I link for the time being with climatic changes.

But global warming is an international problem, which, realistically, can only be tackled through international co-operation.

These risks to Lake Baikal must be set against the economic risks facing Russia, and Siberia in particular.

The priority now is to tackle poverty through the economic regeneration of the region.

Developing international trade brings rising demands for Siberian timber, oil and other resources from the growing populations in countries to the East.

One consequence has been the construction of the new Baikal-Amur railway line, which is having a damaging impact on the Northern edge of Lake Baikal.

Around the southern end of the lake, new pipelines to China may bring economic benefits, but at the risk of oil leaking into the environment.

As a world heritage site, the area has a growing attraction as a tourist and destination.

In the mountains on the eastern side of the lake, ski runs are beginning to make a contribution to the local economy.