PHILLIPS / LAKE CHAD /EVAPORATION /CLIMATE / MIGRATION / SECURITY (3/2/18)

INTRO: Roughly 30 million people from Nigeria, Niger, Cameroon and Chad depend on Lake Chad for their drinking water and their livelihoods. However, over the past four decades or so, Lake Chad has shrunk by up to 90 percent. VOA's Adam Phillips reports on this environmental disaster, its causes, and its human impact.

TEXT: Alex de Sherbinin is a senior researcher at the Earth Institute at Columbia University. He says climate change and human mismanagement are among the many reasons Lake Chad is drying up. He says temperatures in the area have gone up nearly two degrees Celsius since the 1960s.

# /// ACTUALITY DE SHERBININ ///

"That's a lot. Lake Chad being a closed basin, that temperature increase is going to evaporate the water faster than it comes in in terms of the rainfall levels. We've also seen some decreases in rainfall in that region. It's already basically an arid region. The semiarid region to the south basically includes Nigeria, Cameroon, (and) parts of Chad itself."

TEXT: Mismanagement has contributed to the lake's decline. Many new dams and reservoirs have been built on the tributaries that used to feed Lake Chad, trapping water needed for traditional fishing and farming.

The water's retreat has exposed islands that were once reachable only by boat, making them more vulnerable to attack by Boko Haram militants from northern Nigeria.

#### /// ACTUALITY DE SHERBININ ///

"There are raids that are occurring in those areas, people are being taken captive, and there has been substantial damage to the traditional communities that lived on the lake. So those factors have set the stage in part for the migration crisis that has ensued over the last ten years, roughly."

TEXT: The organization Climate Refugees, which studies the connection between climate change and security, says the Lake Chad crisis has displaced about 2.4 million people.

Executive director Amali Tower says many have fled Boko Haram over the past decade, as the Nigerian government has battled the Islamic militants.

# /// TOWER ACTUALITY ///

"A security response by the states involved in this conflict has been to push Boko Haram from the urban into the more rural hinterlands. This has not been considered by the sort of elite political center to be an important area.

# /// TOWER ACTUALITY ///

TEXT: But she says migration in the area began decades before Boko Haram became a threat.

### /// TOWER ACTUALITY ///

"As the lake started to dry up, both manmade and environmental reasons, they moved,

as they said, 'along the path of the lake,' so they could have access to water. As fishing started to erode... people started changing their careers to more trade. Or as agricultural land becomes less available, people have resorted to all kind of different means to survive, all dependent on the lake."

TEXT: Tower adds that the Lake Chad area has always been remote and marginalized. But it hasn't always been desperately poor.

/// TOWER ACTUALITY ///

"A lot of refugees and IDPs – internally displaced persons - speak for being so wealthy once upon a time. They had all the means, not just to survive, but to thrive, One leader in a refugee camp in Niger told me 'I was able to keep my child in school (before).' There is a lack of schools, so it's important that you are not constantly migrating and following the path of the water if you want to be able to educate your children. It's incredibly disruptive."

TEXT: Expert opinion is divided over whether the destruction of Lake Chad's ecosystems can be slowed or reversed. Alex de Cherbinin says a halt to the fossil fuel emissions that cause global warming would help enormously, but admits that would be a Herculean task that would take required sustained political will.

/// ACTUALITY de SHERBININ ///

"The other issue is whether you could allow more water to pass through the dams and irrigation schemes and kind of reengineer the systems, as has been done in some other

regions of the world, for instance, in the Senegal River valley, they created an artificial flood."

TEXT: Amali Tower says policymakers must realize the extent to which climate change, migration and security are connected. She also says that far more international aid is needed to help area residents obtain drought resistant seeds and other technologies so fields and fisheries can thrive once again. ((SIGNED))