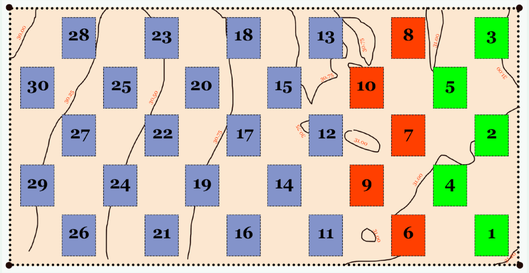
USAID Environmental Restoration of the Aral Sea Activity

At the request of the Government of Kazakhstan, the U.S. Agency for International Development (USAID) has launched the Environmental Restoration of the Aral Sea, a three-year activity to support regional transboundary cooperation for water and the environment and enhance resilience to climate change for vulnerable populations and ecosystems.

The primary objective of the Activity is to improve the soil condition and vegetation in a portion of the dry seabed by planting thirty 5-hectare plots of black saxaul to help mitigate the impact of destructive sand and salt storms in the region, and, in the process, take a potential big first step toward reviving the ecosystem of the Aral Sea.



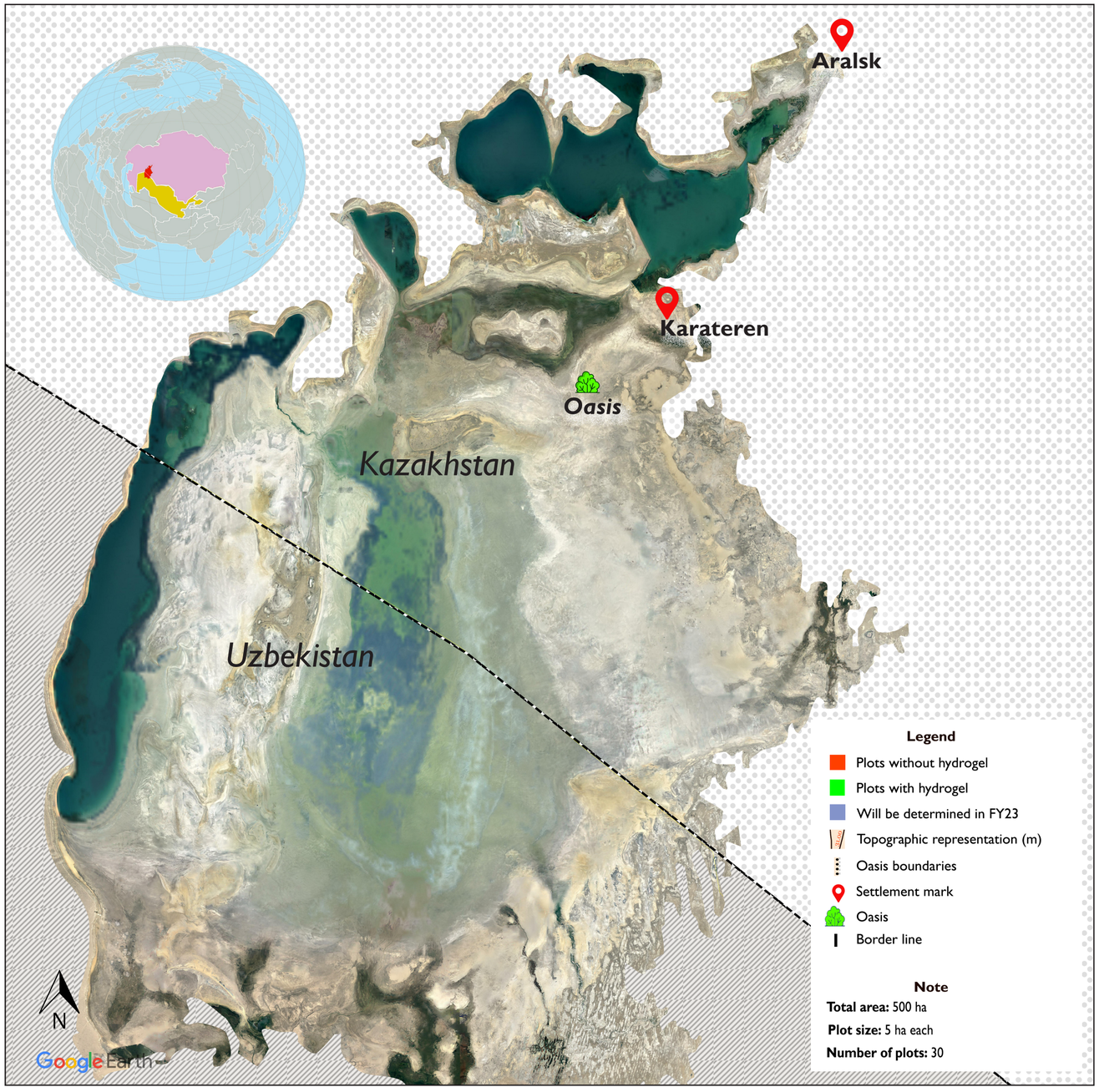
The USAID Regional Water and Vulnerable Environment Activity (WAVE) is implementing the Environmental Restoration of the Aral Sea Activity with assistance from the Executive Directorate of the International Fund for Saving the Aral Sea (ED IFAS) in the Republic of Kazakhstan, and in close partnership with the Ministry of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan. The Activity will implement proven methods that enhance sustainability and provide options for scaling up the intervention in other regions of the Aral Sea.

ARAL SEA

Once the world's fourth-largest lake, the Aral Sea has suffered 60 years of failed transboundary water resource management in Central Asia. Soviet leadership demanded heavy extraction of water from the Syr Darya and the Amu Darya rivers to irrigate vast areas of rice, wheat and cotton, leading to eventual desertification and devastation of local ecosystems. Now only one-tenth its original size, the Aral Sea's dried lake bottom contributes heavily to annual sand and dust storms that negatively impact human and animal health within a radius of several hundred kilometers.

WHY BLACK SAXAUL?

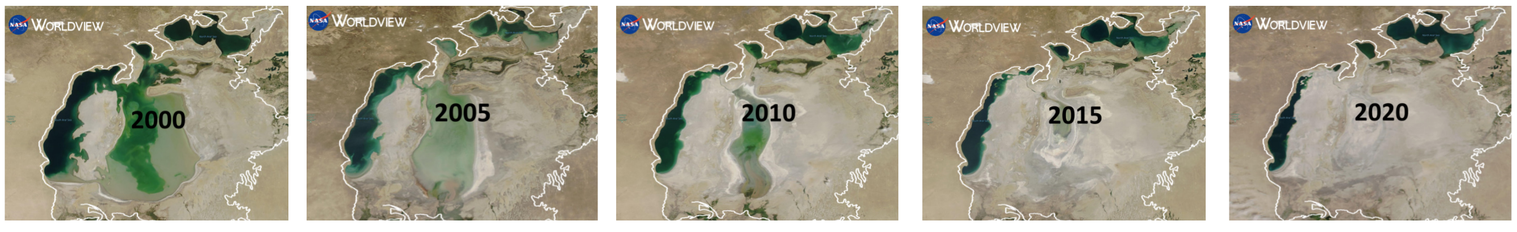
Saxaul grows in the lowlands of Central Asia and occurs incidentally in the western parts of Kyrgyzstan and Tajikistan. Black saxaul, specifically, is a hardy shrub and powerful edificator, meaning it creates a habitat in the places it grows, providing shade and cover for other plants and animals. For this reason, black saxaul is widely used in the desert regions of Central Asia to create pasture protection belts and makes it a compelling choice for testing and demonstration in this Activity.



A recently-transplanted black saxaul shrub. Rising more than six meters when fully grown, black saxaul provides important shade and cover for other plants and animals.

Oasis plots are prepared for black saxaul planting. These individual plots are five hectares each. Some plots will be treated with fencing and hydrogel to test different conditions for optimal growth.

The black saxaul are watered four times during vegetative season (June to September). The initial watering was done by hand but the Activity is preparing a well for future waterings.



NOTE:
The map contours represent the Aral Sea boundaries in 1960. These boundaries are approximate and should not be used for research or other purposes.

Source: https://earthobservatory.nasa.gov/world-of-change/AralSea

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