

# SIDI EL BARRAK DAM

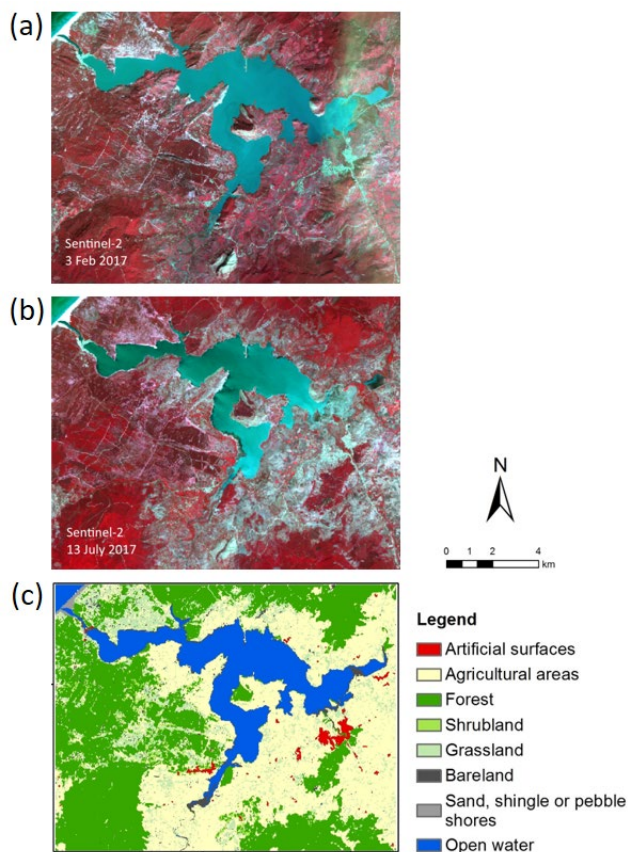
## SPOTLIGHT

**“Reservoirs are not necessarily without ecological value. For example, the Sidi El Barrak Dam, which stores irrigation water and provides a supply of potable water to the city of Tunis but supports the threatened Eurasian otter.”**

| Simon Dadson et al., 2013 <sup>[1]</sup> |

## WETLAND HABITAT MAPPING PRODUCTS

### Status Mapping | 2017



**Description:** Two Sentinel-2 satellite images acquired on 3<sup>rd</sup> February 2017(a), and 13<sup>th</sup> July 2017(b), rendered as false-color composite images. The combination of these two Sentinel-2 images was employed to represent the images of wet and dry seasons for mapping the status of land cover/use in and around the Sidi El Barrak Dam in 2017 (c).

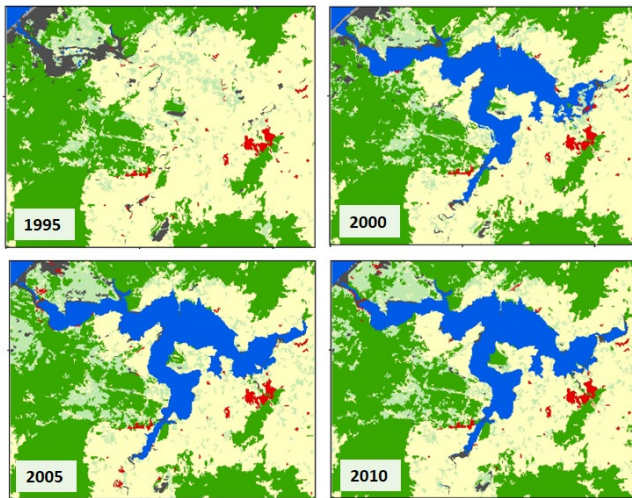
## FAST FACTS

- The Sidi El Barrak Dam (fr. Barrage de Sidi El Barrak) is an embankment dam centred 18 km northeast of Tabarak and 2 km from the Mediterranean Sea on the Oued Zouara River in the Beja Governorate, Tunisia.
- The dam was constructed between 1994 and 2000, and the entire project was completed in 2002.
- The height of the dam is 29 m and covers a surface area of 2,734 ha with a total capacity of nearly 264 million cubic metres. The total area of the watershed is about 89,600 ha.
- The Sidi el Barrak Dam is one of the most important dams and reservoirs in Tunisia for its use for irrigation, supply of potable water to the Tunis and Sfax areas and the Sahel, and amelioration of the quality of water of the Medjerda Cap Bon canal.
- The site, adjacent to the Mediterranean coast in the northwest, is rich in fish species, including the vulnerable common carp, and mammals like the near-threatened otter among others.
- The wetland produces over 100 tons of fish per year for commercial purposes, especially the Mediterranean sea bass and the zander.
- The site is characterized by natural and artificial forests rich in both timber and non-timber forest products, and provides a source of livelihood for most of the local population who carry out agricultural practices as well as fishing around the area.
- The Sidi el Barrak Dam was designated as a Ramsar Site in 2012 <sup>[2]</sup>.



**Description:** Location of the Sidi El Barrak Dam in Tunisia.

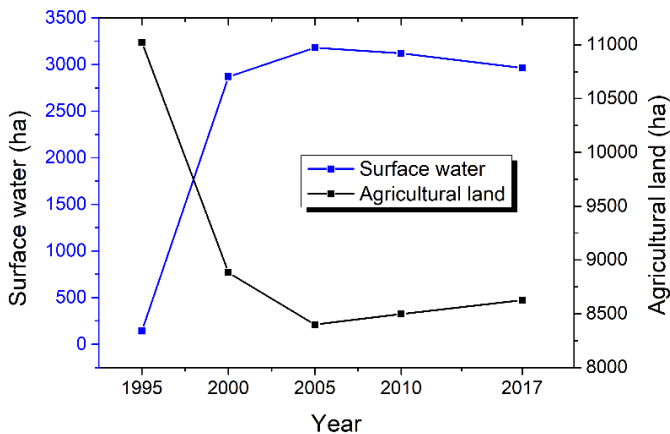
## Historical Mapping | 1995 – 2010



### Legend



**Description:** Historical maps of land cover/use in and around the Sidi El Barrak Dam derived from Landsat imagery acquired between 1995 and 2010.



**Description:** The surface water in and around the Sidi El Barrak Dam has been dramatically increased from 142 ha in 1995 to 3,180 ha in 2005. After that, the area of the surface water has remained relatively constant (with a slightly decreasing tendency) over the last 10 year. By contrast, the agricultural land in and around the Sidi El Barrak Dam has been sharply decreased from 11,023 ha in 1995 to 8,399 ha in 2005. However, the agricultural land has been gradually increased since 2005.



**Description:** Camping at the Barrage Sidi El Barrak. The area in and around the Sidi El Barrak Dam has become an ideal place for recreation and outdoor activities, such as camping and hiking. In addition to providing high-quality drinking water for the surrounding towns and cities, the reservoir is also used for fish farming, which has therefore become an important industry in the region. The reservoir produces over 100 tons of fish per year for commercial purposes, especially the Mediterranean sea bass and the zander.



Credit: Dick Klees

**Description:** Mammals like the near-threatened Eurasian Otter (*Lutra lutra*) also present here. The otter is common and widespread in northern Tunisia and the Sidi El Barrak Dam represents an important habitat for the species.

## References

- [1] Dadson, S., Acreman, M. and Harding, R. (2013) Water security, global change and land-atmosphere. *Philosophical Transactions A*. 371: 20120412.
- [2] Barrage de Sidi El Barrak. Ramsar Sites Information Service. <https://rsis.ramsar.org/rsi/2017>

## Acknowledgement and Authors

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