AKROTIRI LAKE
Monitoring already undertaken on the lake

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WATER FRAMEWORK DIRECTIVE 2000/60/EC

NATURAL LAKES

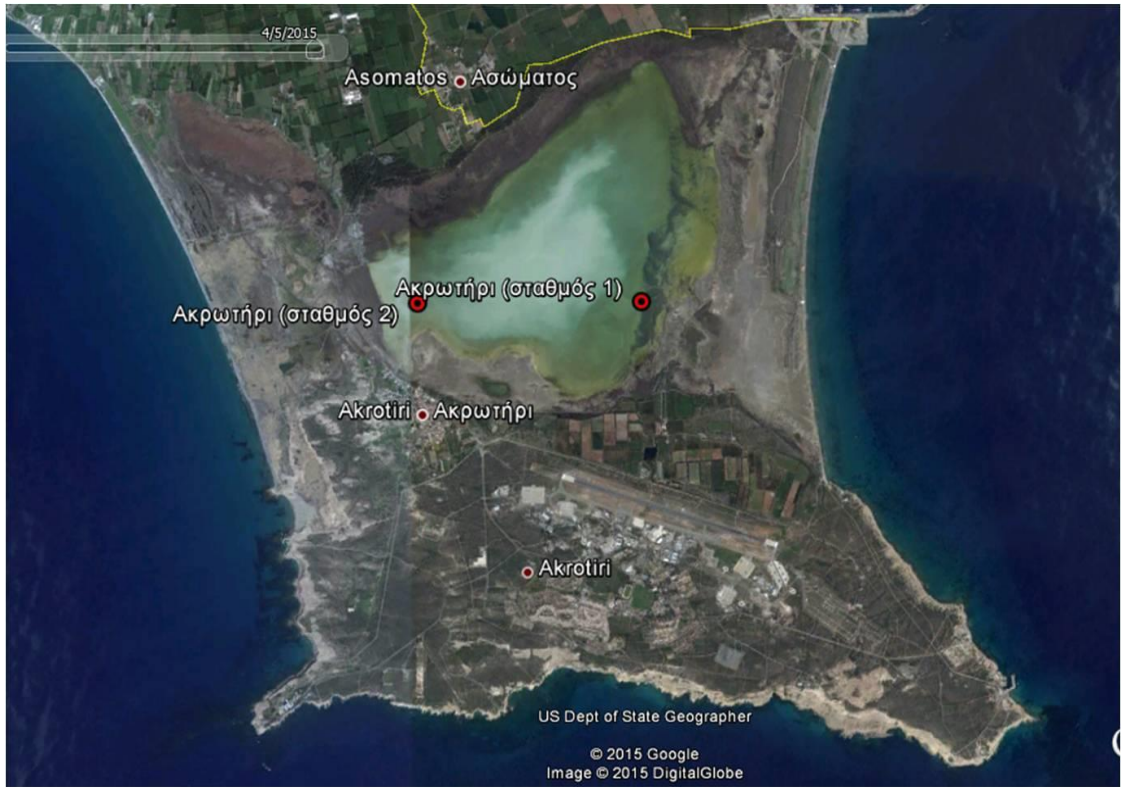
Monitoring programs in 7 Lakes, with 10 stations, since 2014

According to 2 WDD programs (YY06/2013 & YY 02/2016Δ), which aimed to **establish reference conditions** for the temporary salt lakes of Cyprus:

- 4 different types of lakes (salinity, hydrological regime, morphology)
- 2 of them are characterized as heavily modified
- **Phytoplankton** and **zooplankton** considered useful for assessment and are examined in the monitoring programs
- **Salinity** (and the **hydrological status** extension) shapes the communities of salt lakes primarily and then the availability of nutrients

Currently contract (YY01/2018) for sampling and analysis of zooplankton is ongoing.

Akrotiri lake



LB2 – "saline - hypersaline, coastal, without drainage, shallow, low altitude, temporary, semidry-dry area"

In Akrotiri lake:

• **physical and chemical parameters** (temperature, pH, DO, EC, turbidity) are measured *in situ*:

MONTHLY in 4 stations from 1988 to 2016 (by DFMR)

EVERY 3 WEEKS in 2 stations from 2017 until today in 2 stations (by WDD or by consultants)

AT IRREGULAR TIMES, in 4 stations, in 2019 in collaboration with Sovereign Base Areas (OUR aim: make it a regular program)

In WATER:

2 stations

- **nutrients, priority substances, chemical parameters, heavy metals etc.**
- **phytoplankton (species & chlorophyll a) & zooplankton** are examined for 5 years: in last 2 years **every 3 weeks**
- **2019:** qualitative samples of **macrophytes** are collected (if found)

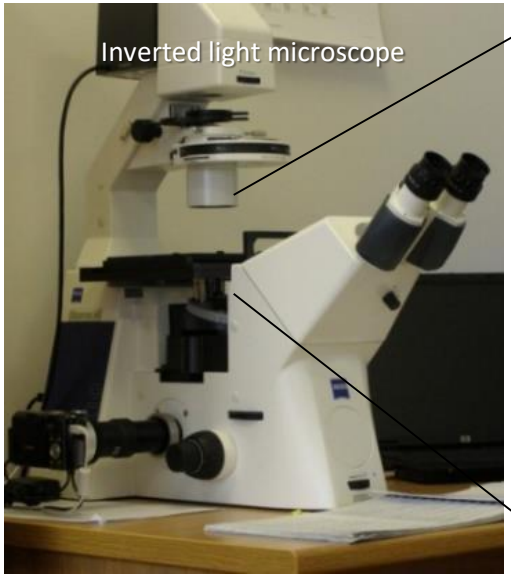
In SEDIMENT:

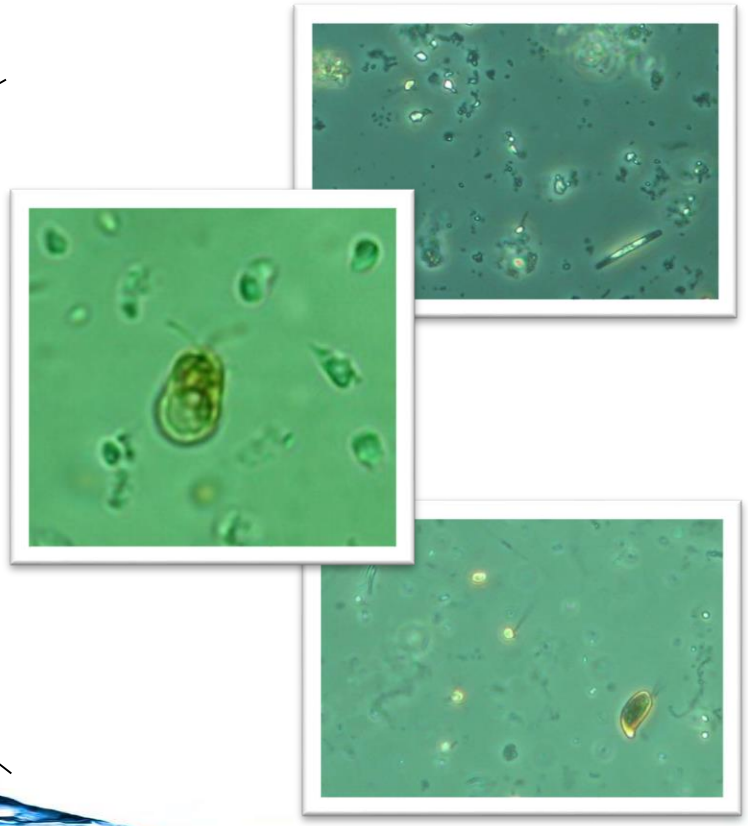
1 station

priority substances, chemical parameters, heavy metals etc.

Phytoplankton analysis:

- samples are analyzed in WDD Hydrobiology Lab or by other experts (consultants)
- Utermöhl inverted microscope method
- Species identification & enumeration, abundance and biomass determination
- Reference conditions were set and extra data is collected to set the other boundaries





Zooplankton analysis:

- Samples are analyzed by zooplankton experts (consultants of WDD, contract 01/2018)
- Species identification & enumeration using optical microscope
- Abundance and biomass determination, several zooplankton indices estimation
- Reference conditions were set and extra data is collected to set the other boundaries

Thank you for your attention

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