

Alpine Space

About DiMark

Alpine lakes are facing anthropogenic challenges led by touristic pressures and eutrophication, worsening over time with climate change. Frequent cyanobacterial and algal blooms caused by eutrophication make waters unsuitable for drinking, recreation, and industry. Blooms are accompanied by decreased biodiversity and oxygen depletion, posing a risk to the water ecosystem; cyanotoxins in blooms pose also a health risk.

The challenges mentioned above can be addressed using novel satellite-based solutions and improved cooperation between academia and decision-makers.

Project Goals and Outputs

The project aims to establish DiMark Transnational Network to improve freshwater management, using novel ecosystem-based approaches for climate change adaptation and disaster risk prevention.

The project will develop three key outputs::

1.) **An online visualization tool** with maps of the Alpine area for inspecting and comparing the water state, based on important freshwater markers,

2.) A model for cyano-risk, enabling sustainable lake management while minimizing health risk.

3.) **Transnational DiMark Network**, bringing together water managers, decision-makers, and experts from six countries. The network will provide Transnational strategy on using satellite-based tools for freshwater management

OFFICIAL KICKOFF MEETING

September 12, 2024

DiMark project was officially launched at the **National Institute of Biology (NIB)**, with **11 partners** from **6 countries**. The meeting, attended by **30 representatives** from **10 public institutions** focused on communication strategies, financial management, and the objectives of the project.

Short overview of activities

FEATURED AT CLUSTER EAU SEMINAR

November 7, 2024

DiMark was featured alongside the **ALGA Interreg project** at the **Cluster Eau Seminar**, organized in partnership with the European Space Agency. The seminar focused on satellite technologies for sustainable water management, offering a platform to highlight DiMark's role in addressing climaterelated water risks in the Alpine region.

PARTICIPATION AT THE EUSALP ANNUAL FORUM **DiMark**

Co-funded by the European Union

November 14, 2024

The DiMark team participated in the **9th Annual Forum of the EU Strategy for the Alpine Region (EUSALP)**, hosted by the Slovenian Presidency in **Brdo pri Kranju, Slovenia**. The forum's panel on "**Climate Resilient Water Management in the Alpine Region**" provided insights into adapting and mitigating risks through collaborative, innovative approaches.

DEVELOPMENT OF THE 1D HYDROLOGICAL MODEL

<u>November 19, 2024</u>

Partner from Switzerland (EAWAG) has developed a 1D hydrological model for DiMark key lakes. This tool allows for the prediction of lake temperatures for up to five days at various depths and provides historical temperature trends for specific periods. This model supports multiple stakeholders (local communities, visitors, environmental scientists and lake managers) for predicting and monitoring cyanobacterial and algal blooms, helping with proactive water management.

Current Data Collection and Parameter selection

We are currently focusing on collecting and managing key data, a critical step for the project's success.

Your participation as an observer is essential, and we would love to collaborate to refine this process, making sure the data we gather will be accurate and impactful in addressing water management challenges.

We are happy that you will be a part of DiMark Network! Please let us know if you do not wish to be included in DiMark network

We look forward to working together to tackle these important challenges!

DiMark Team