CULTURE, KNOWLEDGE AND COMMUNITY: INTERNATIONAL MEETING OF LIBRARIES

Good practices workshop

1 Entity data

• Library name:

Several libraries of the XBM.

A cross-cutting project by the Library Services Management Office and the Environmental Services Management Office of Barcelona Provincial Council, in collaboration with the *Freshwater Ecology, Hydrology and Management* (FEHMlab) research group from the Department of Evolutionary Biology, Ecology, and Environmental Sciences at the University of Barcelona, the Habitats Association, and the Rivus Foundation.

• Full address:

Library Services Management Office C/Comte d'Urgell, 187. Recinte Escola Industrial, Edifici Annex al Vagó 08036 Barcelona

• Territorial sector, thematic area and population:

Barcelona Provinces Municipal Library Network (Xarxa de Biblioteques Municipals, hereinafter XBM)

• Name of the responsible person and position: Montserrat Alvarez Massó. Head of Library Cooperation. Library Services

Management Office

 Contact details of the person responsible: Email address, telephone number and website: Montserrat Alvarez Massó alvarezmm@diba.cat. Tel. 648685042 https://www.diba.cat/web/biblioteques/qui-som

2 Type of presentation

Oral presentation (mark with an X)
Digital presentation (mark with an X) X

3 Good practices project

• Title of the project

Llegim el riu ciència ciutadana a les conques dels rius Llobregat, Besòs i Tordera (Let's read the river: citizen science in the basins of the rivers Llobregat, Besòs, and Tordera)

• General description (300 words)

In September 2019, Barcelona Provincial Council expressed its commitment to the fight against climate change by approving the institutional declaration of a climate emergency. This commitment underlines the importance of promoting initiatives that combine the preservation of natural heritage with global environmental policies. In response, in 2020, the Library Services Management Office and the Environmental Services Management Office of the Provincial Council launched the citizen science project **Llegim el Riu**.

The **Llegim el Riu** project connects citizens with ecological research on rivers through spaces for social innovation created in municipal libraries. The aim is to foster knowledge of river ecosystems and promote citizen collaboration in their protection.

This project is coordinated with the citizen science tool RiuNet, developed by the FEHMlab research group from the Department of Evolutionary Biology, Ecology, and Environmental Sciences at the University of Barcelona. It is also supported by the Habitats Association and the Rivus Foundation.

Llegim el Riu complements other citizen science projects in the basins of the Llobregat, Besòs, and Tordera rivers, with the aim of enriching knowledge of these areas and encouraging active citizen involvement in their conservation. The results of this scientific and outreach process allow for the co-creation, with the participation of citizens, of public policy recommendations aimed at the management and conservation of the river heritage in these natural environments.

With the collaboration of Barcelona Provincial Council, the University of Barcelona, and the participating municipalities, **Llegim el Riu** has become a valuable tool for both scientific advancement and citizen awareness. The project fosters a culture of environmental responsibility and collaboration, while the reporting of results provides a solid foundation for future action.

Furthermore, the project strengthens the role of public libraries as laboratories for transformation and community engagement. They are true innovation communities that encourage the collective creation of knowledge and social cohesion, providing a space for the community to collaborate and innovate in seeking sustainable solutions to current challenges.

• Recipients

Let's read the river is aimed at all those interested in learning about rivers, including families and the general public who are users of the XBM in the municipalities surrounding the rivers Llobregat, Besòs, and Tordera.

• Location and coverage (neighbourhood, district, city, town, country)

The project was first implemented in the Llobregat basin at the end of 2021, and by 2024, it has expanded to include the Besòs and Tordera basins. To date, over 400 people from 30 municipalities have participated in the initiative, which has proposed 64 improvement actions, of which 30 have already been implemented.

The participating municipalities from the Llobregat basin are as follows: Abrera, Balsareny, El Papiol, Gironella, Igualada, L'Hospitalet de Llobregat, Manresa, Martorell, Navarcles, Pallejà, Puig-reig, Sant Boi de Llobregat, Sant Vicenç de Castellet, Santa Coloma de Cervelló, Vilanova del Camí, Cornellà de Llobregat, El Prat de Llobregat, Olesa de Montserrat, Rubí, Sant Feliu de Llobregat, Sant Fruitós de Bages, Sant Joan de Vilatorrada and Sant Pere de Riudebitlles.

As for the Besòs and Tordera basins, 12 more municipalities have joined the project in 2024: Barberà del Vallès, Bigues i Riells, Les Franqueses del Vallès, Malgrat de Mar, Martorelles, Montmeló, Montornès del Vallès, Sant Adrià de Besòs, Sant Celoni, Santa Coloma de Gramenet, Santa Eulàlia de Ronçana and Tordera.

More information. https://www.diba.cat/web/mediambient/llegim-el-riu

Activities and tasks

The main objective of the **Llegim el Riu** project is to promote citizen science regarding the rivers Llobregat, Besòs and Tordera and their tributaries, enhancing knowledge of these natural areas and encouraging active citizen participation in their protection.

Through this process, which encompasses both scientific research and outreach efforts, citizens participate in co-creating public policy recommendations to manage and preserve the river heritage of these environments. These practices take place in social innovation spaces within the libraries, promoting community participation in the sustainable management of rivers. To achieve this, efforts are made collaboratively and in coordination with municipal services and social agents.

In this working framework, participation in the **Llegim el riu** project has been opened to all municipalities in the catchment area of the aforementioned rivers: Llobregat, Besòs, and Tordera.

The project rollout begins with a virtual session aimed at the municipalities in the river catchment areas and the XBM, aimed at introducing the initiative and offering them the chance to participate. The implementation is carried out through a

collaboration agreement with the councils of the participating municipalities, enabling a gradual rollout of the programme.

To guarantee the success of the project, a collaborative "duo" is created, consisting of at least one library technician and one environmental technician from the municipality. This duo is essential, as it tailors the common working framework to local specificities. Its main role is to connect the curiosity of users with scientific research and to coordinate the logistics required for carrying out the scheduled activities. In this way, citizen participation is strengthened and evidence-based proposals for change are promoted, resulting in a positive impact on both the natural and social environments.

Activity 1: SCIENTIFIC AND OUTREACH PROCESS

The project begins with a series of outreach and training activities led by the library, targeting local agents, organisations, and facilities. Thanks to its expert staff, bibliographic resources, and available digital tools, the library facilitates knowledge acquisition and fosters connections among groups of individuals interested in addressing local challenges. This strengthens the connection with the territory and encourages the formation of a group of volunteers motivated to actively participate in the project.

Activity 2: FIELD TRIP

Once the local volunteer group has been established with the support of FEHMLab scientists, two field trips are planned, one in the spring and another in the autumn, focused on observing and studying the local river ecosystem to collect data. During this phase, the tasks for each team member are defined, and the necessary logistical and methodological aspects are addressed.

During the field trips, the RiuNet method is employed – an interactive educational tool that helps assess the hydrological and ecological condition of the river. With the help of UB scientists and the RiuNet application, participants analyse the ecological quality of the river and draw up a preliminary report. The FEHMLab team supervises and validates the observation methodology, reviews the data and writes the final report of results.

The reports produced during the project include:

- Data analysis: Collection and analysis of quantitative and qualitative data on water quality, biodiversity and overall health of the river ecosystems.
- Assessment of citizen participation: Study of citizen involvement in the research process, including the number of participants and the activities conducted.
- Identification of needs: Report on specific needs identified in the various ecosystems

Activity 3: PARTICIPATION AND CO-CREATION

Once the data has been validated and the specific results report for the studied area

has been prepared, the same group of volunteers, with the support of FEHMlab scientists and the Habitats Association, analyses the obtained results and proposes solutions for municipal environmental management.

In general, based on the results obtained, improvement proposals have been developed in the following areas:

- Improvement of water quality: Implementation of measures to reduce pollution, including awareness-raising campaigns and improvements in sanitation infrastructure.
- Conservation of biodiversity: Promotion of projects for habitat restoration and preservation of native species, riverine forests and others.
- Environmental education: Development of education and training programmes for citizens on the importance of the river and its conservation.
- Fostering citizen participation: Creation of new platforms and communication channels to engage the community more actively in monitoring and protecting their river ecosystem.

Throughout the process, the municipalities involved in the project receive support from the Provincial Council, which backs the various initiatives and provides resources to facilitate their participation. This allows them to implement activities focused on the knowledge and preservation of the river, including the loan of educational resources (such as the insect library) and the creation of cultural displays, among other initiatives.

• Resources (human, material, infrastructure, economic)

Human resources:

- Barcelona Provincial Council oversees the project, ensures inter-institutional coordination, and guarantees the collaborative and coordinated work of various municipal services and social agents from the participating municipalities. Finally, it provides administrative and financial support.
- Freshwater Ecology, Hydrology and Management (FEHMlab) research group from the Department of Evolutionary Biology, Ecology, and Environmental Sciences at the University of Barcelona; Design of the research plan and project methodology (activities, data collection protocols, criteria for evaluating water quality, and the ecological indicators to be studied), analysis of the data collected during the project, as well as identifying trends and issues that require attention; participation in the co-creation process to develop proposals for improving the management and conservation of river ecosystems;
- Habitats Asociación, facilitator of the co-creation process among local volunteers, researchers, and municipal technicians, promoting a

participatory approach in generating improvement proposals for the management and conservation of local river ecosystems.

- Library staff Libraries act as spaces for participation and interdisciplinary learning. They organise training and awareness-raising activities and promote public participation in research on river ecosystems. They also serve as access points for information and resources related to the project.
- **Municipal environmental technicians;** they facilitate citizen participation, provide logistical resources and coordinate with other municipal services. They also manage communication between the different local actors involved.
- **Rivus Foundation and local authorities** who are involved in the project to contribute their knowledge and experience.

Infrastructure:

- Library spaces: Set up for the volunteer group working sessions.
- **comunitatXBM**: Communication and work platform for staff participating in the project. Facilitates the exchange of experiences, information, and materials.

Materials:

- RiuNET app
- Exploration team for the field trip:
- **Training materials or guides:** Documentation and guides for identifying natural elements.
- **Reports on results and improvement proposals** based on the findings from each of the participating municipalities.

Publishing platforms:

- Web portal: Llegim el Riu To give visibility to the project, as well as reports on results and other related information and resources.
- Websites of the participating libraries: To inform users of the calendar of events, local results reports and other related information.

Dissemination and promotion:

- Shared graphic image
- **Communication campaign**: To attract participants, through library websites, social media, posters, and e-newsletters.

• **Promotional materials**: Posters, bookmarks and podcasts to promote the project in the community.

Budget:

- Fees for the research group and Habitats Association
- Production of materials and resources to support the field trip
- Design and production of promotional materials and educational resources.

 Scope (check 1 of the following 3)
 Sustainability Reading Democracy

• Insert QR code (with the website and links to videos or photos)

Barcelona Provincial Council https://www.diba.cat/web/mediambient/llegim-el-riu

Virtual Library Llegim el riu - Biblioteca Virtual (diba.cat)

Perquè Llegim el Riu? Serie

https://www.youtube.com/playlist?list=PLVXdk4m5U6DE6DRJ4cEIF4oSnF2lk4R0L

Link to the comunitatXBM podcast *Llegim el riu: Conèixer i protegir l'espai natural*

https://www.ivoox.com/llegim-riu-coneixer-i-protegir-l-espai-natural-audiosmp3 rf 128178638 1.html