

LEVERS FOR SUCCESS

- **Concertation:** all local stakeholders were involved (municipalities, associations, residents...). Communication documents were distributed at the site and public meetings were organised.
- **Funding:** very limited costs, associated with fishing to safeguard fish stocks and analysis of the water bodies.
- **Institutional and political support:** the action was driven by elected officials and the Seine-Normandy Water Agency and the department, who are in favour of the project and finance the monitoring of actions (and the actions themselves when an expense is incurred).

RECOMMENDATIONS

- Work even more on the ecosystem gains in order to reuse the products of mowing with local permaculture associations.
- Continue the work on the management plans so as to favour multiple habitats in the reopened areas.

FOR FURTHER INFORMATION

- The elimination of water bodies was promoted in the framework of departmental water days' forums organized by the agency. They were shown as an example in the framework of the Ecological Engineering days organised by the French Biodiversity Agency.
- <https://www.dailymotion.com/video/x5q133o>
- https://www.arb-idf.fr/fileadmin/DataStorageKit/ARB/Articles/Articles-PDF/4_thomas_joly_siavb_30052017.pdf

PROJECT LEADER

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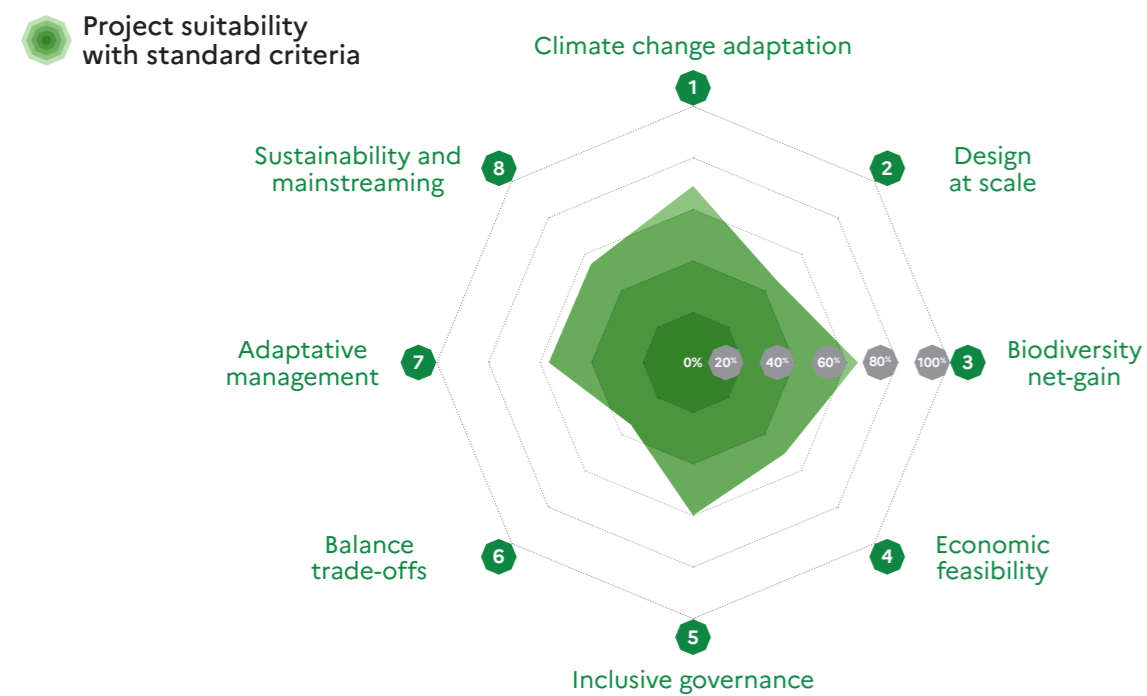
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ASSESSMENT ACCORDING TO THE IUCN GLOBAL STANDARD FOR NATURE BASED SOLUTIONS



REMOVAL OF THE PERMANENT WATER BODIES ON THE BIEVRE

2015 - 2017



IDENTITY CARD

GEOGRAPHICAL SITUATION

Ile de France, municipalities of Bièvres, Igny, Massy, Jouy en Josas

TARGET ADAPTATION ISSUE(S)

Flooding

HABITAT(S) CONCERNED

Continental wetlands and aquatic habitats

TYPE(S) OF NBAS

Restoration of ecosystems

PROJECT LEADER(S) AND ASSOCIATED PARTNER(S)

Bievre Valley's Intermunicipal Syndicate for Sanitation de la Vallée de la Bièvre (SIAVB)

FUNDERS AND BUDGET

SIAVB (100 %)

Budget total:
less than 20 000 € inc. VAT

REGULATORY CONTEXT OF THE PROJECT

GEMAPI





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PROJECT OBJECTIVES

- For adapting to climate change
Improve floodwater retention capacities.
- For biodiversity
Encourage biodiversity in the river.

CONTEXT AND ISSUES

Throughout its history the Bièvre, a small urban river in the Paris region, has been constrained by systems of mills, tanneries and bleacheries, and more recently compartmentalisation for flood protection, with the setting up of permanent water bodies. Indeed, the area is prone to floods, some of which have been significant, notably in 1973 and 1982. On 18 km of the Bièvre and 15 km of its tributaries 15 principal storage water bodies were therefore set up. However, these water bodies blocked the transfer of fish and sediments, increased the phenomenon of eutrophication of the river and in the end reduced the flood protection potential.

ACTIONS IMPLEMENTED

The project consisted in removing the permanent water bodies, thus "rewilding" the river, letting it re-establish its lateral wetlands and increasing the water retention capacities of structures to reduce the risk of flooding. The action of removing each overflow structure was all that was needed to satisfy these objectives, at very low cost. After physical draining of the water body, nature did the work on its own! In less than a year the fauna and flora had returned.

The current aim is to implement this type of action throughout the area. The SIAVB is contacting private owners of structures in order to continue the action elsewhere in the area to increase the surface area of wetlands and therefore the biological resources of the Bièvre Valley.

GOVERNANCE ADOPTED

Public and informative meetings were organised, enabling the opinions of users and local people to be heard. The project was also presented to the Syndicate Board, the Local Water Commission and the mayors of the municipalities concerned.

SCHEDULE

PROJECT LIFESPAN

2015	Removal of the bottom valve of the Abbaye aux Bois and downstream Vilgénis water body
2016	Removal of the bottom valve of the Bas Près and Damoiseaux water body
2017	Removal of the bottom valve of the upstream Vilgénis water body
2023/2024	Removal of the bottom valve of the HEC and Tuileries water bodies



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BENEFITS AND CONTRIBUTION OF THE PROJECT



BENEFITS REGARDING TARGET ADAPTATION ISSUES

- Floods: approximately 30 % increase in the volume of water stored (thus reducing the hazard for local populations). For the 7 water bodies eliminated, this volume represents a gain of about 80 000 m³ of water storage in the event of high waters. in 2016 and 2018, when the Paris region was affected by floodwaters, no flooding occurred in the watershed of the Bièvre.

BENEFITS FOR BIODIVERSITY

- Ecosystems and ecological continuity: increase by up to 600 % of the surface area of proven and functional wetlands in the sector where the works were carried out, i.e., 5 ha.
- Species: appearance of heritage species in the area of action right from year n+1 (Tall Yellow Sweetclover, Oak-leaved Goosefoot, Orange Featherleg, Scarce Chaser...)



OTHER BENEFITS PRODUCED

- Reduction of pollution: improved physicochemical quality of the river.



MONITORING INDICATORS

Adapting to climate change

- River discharges: measured constantly by means of remote management on the whole length of the Bièvre although not currently precisely monitored.

Biodiversity

- Monitoring of biodiversity is carried out one year after the works for all structures, then 5 years later. For the status of the river, monitoring is performed annually.

Other

- Good river status: measurement of parameters of good river status: biological, chemical, physicochemical