

Living Lab Ningbo, China



Establishing protocols and procedures for environmental compensation

Local environmental compensation processes





NBS Fact Sheet - Local environmental compensation processes

NBS 7 Establishing protocols and procedures for environmental compensation

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NBS description

This activity is based on the PPP (Public-Private Partnership) project of Moon Lake Water Ecological Comprehensive Improvement Project. PPP means that in the field of public services, the government adopts a competitive approach to select social capital with investment, operation and management capabilities. The two parties conclude a contract based on the principle of equal negotiation, and the social capital provides public services. The government pays compensation to the social capital based on the results of public services.

The main content of this activity is to evaluate the comprehensive management results of Moon Lake, that is: collecting meteorological, hydrological, chemical and ecological data to monitor the environment of Moon Lake (mainly water environment). If the water quality meets the III level standard, the government will pay all costs of the project implementation.

Target groups (beneficiaries)

- Residents living around Moon Lake Park
- Inhabitants people visiting the park
- Tourists (national and international)

Main responsible partner

The Institute of Urban Environment, Chinese Academy of Sciences (IUE-CAS)

ProGIreg partners involved

Forestry Bureau of Ningbo City (FBNC)

Other stakeholders involved

- Tianhe Aquatic Ecosystem Engineering Co., Ltd.
- Haishu District Government
- Ningbo University

Total budget

Total cost amounts to 50,000 €

Timeframe

Start June 2019 ⊢ (water environment data collection)

End of 2021 (Comprehensive evaluation)

Contact

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This project has received funding from the European Union's Horizon 2020 innovation action programme under grant agreement no. 776528.

PRE-IMPLEMENTATION PLANNING ACTIVITIES

Management of public green

It is usually led by the government and cooperates with landscaping companies to build and maintain public green infrastructure in the city. The government, the Institute of Urban Environment, Chinese Academy of Sciences, and Tianhe Aquatic Ecosystem Engineering Co., Ltd jointly signed the PPP Project Contract of Moon Lake Water Ecological Environment Comprehensive Treatment Project. Tianhe Aquatic Ecosystem Engineering Co., Ltd used dredging and planting aquatic plants to improve the lake's environment. The Institute of Urban Environment, Chinese Academy of Sciences (IUE-CAS) water quality monitoring agency is responsible for measuring environmental compensation.

Aims & goals

Key goal of implementing this NBS within the EU funded proGIreg project is to take the water quality test results as the main standard for the treatment of Moon Lake water environment engineering project. Once water quality requirements are reached, the project implementation can obtain a certain amount of project compensation funds. Otherwise, the project will be reformed until the water quality standards are met.

MANAGEMENT STRUCTURE AND RESPONSIBILITIES

Main partner

The Institute of Urban Environment, Chinese Academy of Sciences (IUE-CAS):

 Organization and coordination of activities, as well as testing of collected water samples.

Other partners

- Tianhe Aquatic Ecosystem Engineering Co., Ltd:Water samples collection.
- Haishu District Government: Provide advice and financial support.

TOOLS/SOLUTIONS

Water quality and assessment

1. Water quality test of Moon Lake (once a week);

2. Whether the water quality assessment results meet the requirements determines the amount of compensation.

CASE STUDY

Ecological compensation

Transverse ecological compensation for the upper and lower reaches of Ningbo watershed.

RESULTS AND OUTLOOK

Link to other proGIreg NBS

NBS2 - Soil regeneration in Ningbo

The removal of the Moon Lake bottom silt should have been the main part of the NBS new soil regeneration. But NBS 2 had to be cancelled because

the bottom silt proved unsuitable for onshore reuse due to high levels of heavy metals. However, the silt removal work was completed and the silt removal greatly reduced the endogenous pollution of the Moon Lake, thus greatly improving its water quality. The measure provides the necessary basic conditions for implementing the ecological environment compensation.

NBS3 - Planting Aquatic Plants

This was done along the shore of Moon Lake in Ningbo. Key function is to provide an overall environmental quality of the Moon Lake while in

particular improving the water quality.

Next steps

Ningbo's weekly water quality monitoring for assessing the ecological compensation is completed.

Next steps include the promotion of the Moon Lake of Ningbo case to other regions.

Notes/critical issues/barriers

In general, the ecological environment compensation procedure of Moon Lake has been progressing smoothly, and the technical barriers encountered mainly include the instability of longterm water quality monitoring due to weather reasons; In addition, the unstable water quality is also partly due to exogenous pollution problems. For the exogenous pollution issues more funds are needed to deal with it.

3





Fact Sheet



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Partners



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