

Potential of Urban Wetland as a Target of Habitat Restoration and Management

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To restore the coastal habitat, surrounding dynamic coastal ecosystem (wetland system) also needs to be restored. Nevertheless, coastal wetlands are decreasing in alarming rate. It is unable to reverse the tendency unless changing fundamental causes such as uncontrolled economical development, excess use of resources, and lack of public interest. Nevertheless, it should not be a choice of "this or that." One way to implement breakthrough measures can be the restoration of wetlands in urban area using sound ecological engineering to incorporate the restoration and the development. Now, Japan is trying to implement such an "urban wetland" solution by both top-down and bottom-up approach.

The top-down approach: The Tokyo bay renaissance promotion conference has enacted a mid-term action plan (ten years since 2003). The plan put a target as "restore the beautiful coastal environment for enabling pleasant use and sustaining biodiversity as a wealth of capital." The restoration of coastal wetland as a habitat is one of a prioritized action in the plan. The urban wetlands to be restored or managed have been listed up as "appeal points." The appeal point is monitoring point for assessing the achievement of the target. These structures of the target setting to assessing the plan enable to facilitate an adaptive management for the urban wetland implementation. These kinds of action plans have been set not only Tokyo Bay but also Osaka, Ise-mikawa, and Hiroshima Bays as a part of the national bay renaissance project.

For example, the "Shibaura-island's habitat creation project" has been implemented as a collaborative practice with local governments, researcher, and NPO to make an urban wetland for entertaining local residences in Tokyo Bay. The project has been supported by estuarine system research surrounding environment and structural consideration to sustain the suitable habitat quality. In Osaka Bay, the other practice has been ongoing. That is a collaborative research project at constructed wetland in the appeal point if Osaka Bay renaissance project. The targets of the research were habitat structural design in detail, and material selection for the rich biodiversity in the habitat. Both urban wetlands have given good practice of adaptive management.



23-27 November • Manila, Philippines

The bottom-up approach: Under these circumstances, situation understanding, target setting, research and development, and systemizing have been discussed and implemented for coastal habitat restoration by different sectors and organizations.

For example, a new terrace type wetland constructed by a governmental construction office in Yokohama. A public participate monitoring and maintenance practice is ongoing. An urban wetland park was planned by private development sector in Yokohama MM21. A NPO have designed management plan for the urban park with local residences, and organized a series of participatory classes. In Odaiba Marine Park in Tokyo, constructed by Tokyo metropolitan government, a primary school is operating environmental education program incorporate with a consortium of parents, NPO, government, and local fishermen. These wetland restorations have given chance to various sectors for participation.