

Building with Nature

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Building with Nature

Welcome to the Building with Nature Design Guideline

Building with Nature (BwN) shows how to utilize natural processes and provide opportunities for nature while realising hydraulic infrastructure. [Design guidelines](#) on how to make this happen in practice are available for everyone to use. These guidelines are based on the projects carried out in the Building with Nature innovation programme. The work in the programme is carried out by the [EcoShape consortium](#), that consists of private parties, government organisations and research institutes.

All general information on the BwN programme can be found on the EcoShape website: www.ecoshape.nl



The Building with Nature mindset challenges project developers and designers to think differently, act differently and interact differently. The underlying theme of any BwN-design is that ecosystem services are used and opportunities for nature development are provided while developing hydraulic engineering infrastructure. The lessons learned in experimental projects that have been realized, have been collected in Building with Nature Design Guideline.

Target user groups of this Guideline

The Building with Nature Design Guidelines offer practical information and tools for developers and users of hydraulic engineering projects on ways to use ecosystem services and provide opportunities for nature. The guidelines are targeted at two groups of readers:

- **Individuals responsible for the development, design, realization and operation of hydraulic engineering projects**, including project owners/proponents, ecologists, engineers, consultants, water-related infrastructure contractors, etc.
- **Individuals or organizations that can potentially influence the criteria applicable to a project and can challenge the first group**, including national and local authorities, policy makers, politicians, administrators, standards institutes, NGOs, financiers, etc.

Guideline

The guideline contains a general chapter that introduces the Building with Nature philosophy, the Building with Nature principles and the five general design steps that are involved:

1. Understand the system (including ecosystem services, values and interests).
2. Identify realistic alternatives that use and/or provide ecosystem



services.

3. Evaluate the qualities of each alternative and preselect an integral solution.
4. Fine-tune the selected solution (practical restrictions and the governance context).
5. Prepare the solution for implementation in the next project phase.

The natural environment perspective

In any project, a good starting point to look for Building with Nature opportunities is the natural environment or ecosystem in which the project is to be embedded. The guidelines currently describe five environments: sandy shores, estuaries, tropical coastal seas, shallow shelf seas and delta lakes.

Users entering the guidelines via this route should first consider which of these environments most closely resembles the one in which they are working. Each environment is unique, with its own characteristics, related ecosystem services and associated opportunities.

The project perspective

Each phase of a project represents an important trigger for considering Building with Nature opportunities. The guidelines provide specific advice for each of the following project phases: initiation, planning and design, construction, and operation and maintenance.

Users entering the guidelines via this route should first consider the phase of the project realization process they have reached. Each phase follows the same design steps, although the characteristics of these steps may vary from phase to phase.

The governance perspective

The governance context, i.e. the complex set of legislation, regulations, decision-making processes, etc., is a third perspective from which Building with Nature opportunities may be developed. The triggers and obstacles ensuing from this context will need due consideration if those opportunities are to be realized in practice.

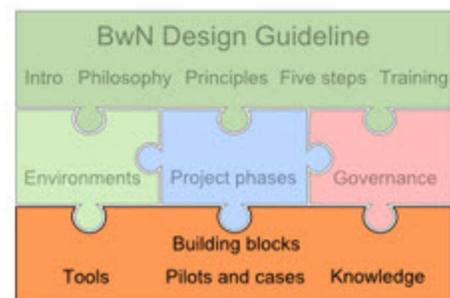
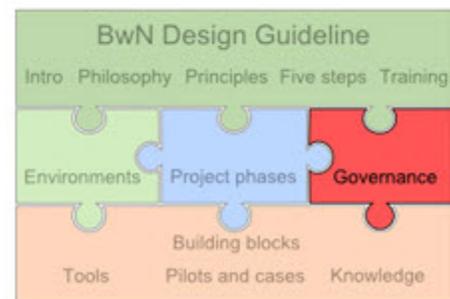
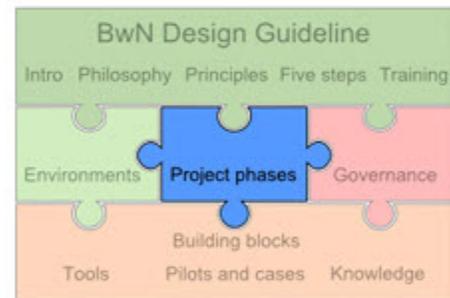
The guidelines at present offer information and advice on the following aspects of governance: networks, regulatory contexts, knowledge contexts and realization frameworks.e Governance perspective

Knowledge Base

The Building with Nature knowledge base, consists of a wide range of building blocks, tools, example cases and knowledge pages. The building blocks enable designers to make first-order quantifications of typical elements of a larger overall design. The tools include methods, concepts and strategies that can be used in the different project phases and design steps. Together, the example cases form a portfolio of Building with Nature solutions as they have been implemented in projects. The knowledge pages contain more information on the various topics and issues that have been addressed during the program.

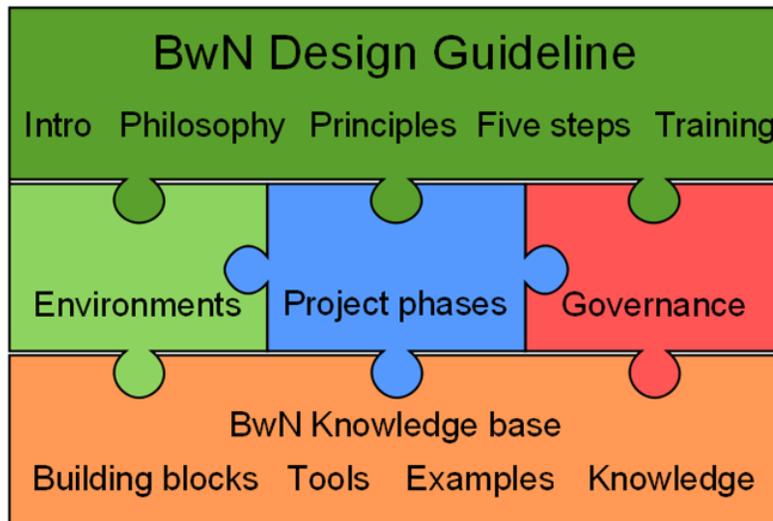
Future development

The Building with Nature Design Guideline has deliberately been developed in the wiki environment you are viewing now. Controlled by an editorial board the Guideline is supposed to be developed further in the future, via lessons learned from new projects, or when



additional knowledge becomes available.

To learn how you can contribute to the Guideline, or if you have any other questions about Building with Nature, please [contact us](#).



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BwN Workplace

BwN Editor list

The BwN Editors can edit this wiki space. The Bwn Users can add and develop new BwN Guidelines (e.g Building Block, a Tool or a Case-study) in the subspace "Building with Nature 2 - Guideline development workplace"

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