



Internationale Organisation für naturnahe Badegewässer e.V.

## COMMON ESSENTIALS

By IOB 11th International Conference, Albufeira, 7.10.21

### Agreement of IOB members about Common Essentials in planning, building and maintaining Natural Swimming Ponds (NSP).

*NSP = natural swimming pool or natural swimming pond; different names for the same in a lot of countries like piscina biológica (Portuguese, Brazilian), piscina biològica, lago de baño (Spanish), biopiscina (Italian)...*

#### 1. Nature-based solutions

NSPs are **nature-based solutions**, engineered systems which use principles and processes known from nature.

#### 2. Circular economy

Intention is that all materials used in NSPs construction should fulfil the **requirements of Circular Economy**. The goal of this is to eliminate waste and the continual consumption of resources. Circular systems employ reuse, sharing, repair, refurbishment, remanufacturing and recycling to create a closed-loop system, minimising the use of resource inputs and the creation of waste, pollution and carbon emissions.

#### 3. Biological treatment

To clarify and purify water, NSPs are using **exclusively mechanical and biological processes** to reduce nutrients. Disinfection agents and other non-natural water treatment methods, like biocides and machinery which are implemented to kill life, are not allowed.

#### 4. Planning process

Every NSP is the result of a **professional planning process** based on a scientific approach and the state of the art. The resulting plan describes the water treatment process and predicts that there will be excellent recreational water quality. When the NSP is in operation, the planned water treatment process in operation will fulfil the water quality prediction and expectation.

#### 5. Information to customers

**Customers should be informed about all of the aspects of an NSP**, including maintenance, especially with respect to what is to be expected in terms of living water quality and the presence of wildlife.

## 6. Regulations

Existing applicable **building and construction regulations** must be followed. This applies as well to all **safety regulations** existing for swimming pools.

## 7. Internal configuration

An NSP is divided into a **bathing area** or areas, and a **treatment area** or areas. Treatment areas are not for entry by bathers.

## 8. Runoff water

**Surface water runoff** from the property surrounding the NSP shall not flow into the NSP.

## 9. Sealing

A NSP must be **sealed**, i.e., isolated from the ground under and around the NSP.

## 10. Inoffensive materials

**Materials** used in NSPs **should not pollute water and environment**. This includes as well limiting the introduction of phosphorous.

## 11. Native plants

**Autochthonous plants are preferred** for use in an NSP. Plants deemed to be invasive species where the NSP is located are forbidden. Plants used in an NSP should be cultivated for that purpose and not be harvested from nature.

## 12. Water composition

Any water used to fill or refill the NSP has to be analysed for its **physical-chemical composition** prior to usage.

## 13. Water testing

**Regular water testing** with respect to hygienic and physical-chemical water quality is required by health officials for public NSPs and as needed for private NSPs.

## 14. Indicator organisms

To assess water quality, the country-specific limit values are to be complied with. Otherwise, the **indicator organisms** recommended by the **World Health Organization (WHO)** for bathing water should be used.