



## ORIGINAL NEED

Considered the naturalistic value of the area and the role of scientific-didactic pole that the Center for Environmental Education of the Municipality of Grosseto play not only in the municipal area, the realization of an “experimental” natural depuration plant comes in a context of great cultural relevance, determined by the historic-environmental characteristics of the Regional Park of Maremma and by the didactic activities and events that take place in the Center (Festambiente).



View of the FWS stage

### LOCATION

Municipality of Grosseto  
Province of Grosseto  
Tuscany  
Italy

### COMMITTANT

Municipality of Grosseto

### WASTEWATER TYPOLOGY

Stormwaters

### PLANT TYPOLOGY

SFS-h + FWS

### AREA (M2)

total 315 (60+255)

### COST

Around € 56.000

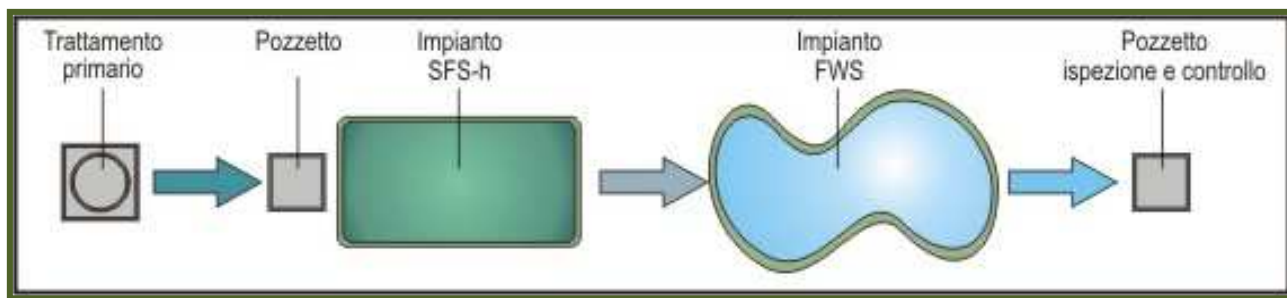
### YEAR OF REALIZATION

2001

## DESCRIPTION

The project, therefore, aims to extend the character of environmental “laboratory” of the Center, giving to it the possibility to stand as “provincial” centre for the development of natural depuration themes. For this, it will be realized a didactic path to show the solution implemented, that not for case reproduce two of the most typologies used at the international level: horizontal subsurface flow and free water systems.





Scheme of the plant

Purification system will treat part of the stormwater collected by impervious surfaces of the Center, like squares and roofs. Treated rainwater will be able to be reused for WC flushes or irrigation.

The multi-stage system has a total useful area of 315 m<sup>2</sup>. The plant is composed by:

- Horizontal subsurface flow basin with an area of 60 m<sup>2</sup>;
- Free water surface basin with an area of 255 m<sup>2</sup> .
- Well service.

## VEGETAL TYPOLOGY

Free water system, designed to recreate many different micro-habitats, has allowed to put different vegetal species; so, we reconstructed a typical aquatic environment with species that time ago populated the area of Maremma.



**The plant has a very low environmental impact and can be used without dangers by visitors.**

