GWN Community: Tamar Regional Council

Name of project: Constructed Wetlands, Ein Gedi EcoPark

Environmental & Educational Benefits:
- Constructed wetlands make up a system of artificial marshes designed to mimic the natural water purification processes that take place in natural wetlands. A reciprocal relationship is created between the plants and the microorganisms, allowing for both the biological breakdown of the waste and the thriving of the flora.
- Learning about ecological building practices help youth understand how to cater to the everyday needs of communities while minimizing negative environmental impacts and creating and sustaining mutually beneficial relationships with all elements of the local ecology.

Date of Construction: 2008


Materials: plastic sheet, wire net, concrete, pipes, pumps, filters, stones of various sizes.

Description:
- Wetland plants, typically reeds, act as natural filters of different pollutants in wastewater. Their roots create channels in the substrate, through which oxygen penetrates into the solid waste.
- The plants develop thick root systems and a large surface area on which a rich population of microorganisms can grow. These microorganisms break down the organic pollutants in the wastewater and use them as an energy source.

Pictures: