



INNOVATIVE INTEGRATED & FLEXIBLE COMPACT TREATMENT PLANT FOR COMBINED SEWER **OVERFLOWS (CSOs)**

The integrated & flexible pilot plant is composed by:

- Dynamic rotating filtration unit for the removal of solids, provided by Salsnes (Norway);
- Rapid adsorption on granular activated carbon (GAC) into 4 filters mounted on a skid;
- Disinfection with UV lamps provided by Trojan UV (Canada).

TREATMENT PLANT OVERVIEW

The possibility to use the plant in different combinations due to its modularity.

SALSNES FILTER (90 µm mesh size)

- **TSS** removal: 31-45%
- Total COD removal: 30-39%

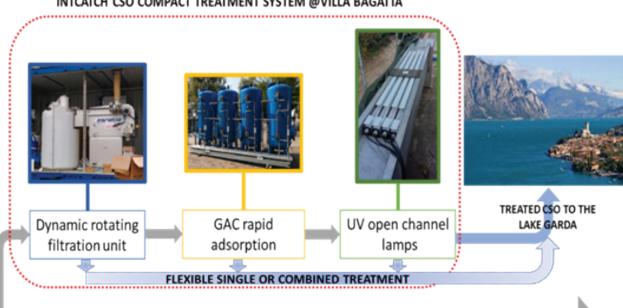
UV DISINFECTION

Around 99% of E. coli removal

RAPID GAC ADSORPTION

- **TSS** removal: 68-97%
- Total COD removal: 53-55%
- Soluble COD removal: 14-52%
- **TKN** removal: 28-57%
- **TP** removal: 9-29%
- Relevant heavy metals removal: 40-90%

INTCATCH CSO COMPACT TREATMENT SYSTEM @VILLA BAGATTA



FROM THE COMBINED SEWER SYSTEM

TO THE WASTEWATER TREATMENT PLANT

APPLICATIONS OF TOOL

- Coastal areas
- Sensitive areas



Scan this code for the pilot plant video presentation!

BENEFITS OF TOOL

- · Reduce nutrient contamination in the environment
- Reduce E. coli diffusion
- Compact and less-size treatment plant
- Modular treatment plant
- TRL 7 at the end of the Project

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INTCATCH



Development and application of Novel, Integrated Tools for monitoring and managing Catchments

INTCATCH will change the way current in which river and lake water monitoring is implemented. The project will accomplish this by developing efficient, user friendly water monitoring strategies and systems based on innovative techologies that will be able to provide real time datat for important parameters. The new business model will transform water governance by facilitating sustainable water quality management by community groups and NGOs using a decision support system and eco-innovative technologies. The INTCATCH systems will be implemented and validated in the urban London and rural Greta Ouse rivers in the UK and in Lake Garda (Italy) and will be demonstrated in Lake Yliki (Greece) and in River Tier (Spain).

INTCATCH Partners:



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