

SITE Specifications

The previous studies conducted by the Water and Sanitation Technical Department of the City of Paris between 2011 and 2014 defined a comprehensive project for storing effluents in the Bugeaud storm overflow (SO), followed by their treatment using a reed bed filter, before discharging the treated effluents into the hydrographic network of the Bois de Boulogne and then into the Seine. The location for the reed bed filter was determined in 2014 in consultation with the Architects of the Buildings of France (ABF) and the Site Inspector.

Characteristics of our project

The site developments for the storage and treatment of effluents from the Bugeaud storm overflow (DO) include the following:

- The installation of an underground valve and pumping structure on the Bugeaud DO, located on Avenue Mahatma Gandhi, slightly before the Porte de Madrid, designed to allow the storage of effluents and their transfer to the reed bed filter.
- The installation of a reed bed filter on a lawn along the Saint-James river, downstream from the Route de l'Étoile.
- The resizing of the outlet structure for the Saint-James pond and the installation of an underground structure to intercept overflow from the Neuilly pond and the Saint-James pond into the Bugeaud DO, downstream of the future underground valve and pumping structure.

As with the entire Bois de Boulogne, the project area is classified as a "natural or forest area" in the Local Urban Plan (PLU) of the City of Paris and is also a designated protected wooded area.

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Schéma montrant le parcours des eaux du périphérique parisien jusqu'au filtre anti-pollution puis leur rejet dans la Seine.

The Underground Valve and Pumping Structure in the Bugeaud Storm Overflow (DO)

This structure is located at an existing manhole of the Bugeaud DO on Avenue Mahatma Gandhi, partly under the roadway and partly beneath the roadside shoulder. It enables the storage of effluents (maximum storage volume in the DO: 3,550 m³) and their transfer to the reed bed filter (flow rate of 40 L/s) via a pumping network.

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Station de stockage des effluents DO Bugeaud

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The Reed Bed Filter

The filter is located on a lawn, bordered to the south by the Route de l'Étoile, to the east by the Allée des Bouleaux, and to the west by the Saint-James River. The filter development includes:

- A vertical-flow reed bed filter, supplied at the surface by the pumping network from the Bugeaud DO.
- An underground outlet structure that collects the filtered water and allows its gravity discharge into the Saint-James River via an underground pipe.
- Landscaping around the filter area.

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Reed bed filters

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Aerial view of the project area centered on the filter boundaries

