

Water management plan

The Sacy Marsh hydraulic functions were deeply modified in the last decades. Several ponds and canals were dug for diverse reasons (watercress beds, peat extraction, hunting...). Traditional activities such as grazing, mowing or producing water cress are now finished. That leads to a lack of marsh's maintenance. All those works and the lack of global vision threaten the marsh's health. Nowadays, maintenance is done by private owners or renters (mainly hunters). Natura 2000 contracts or other financing ways are also used to help maintaining the fen.

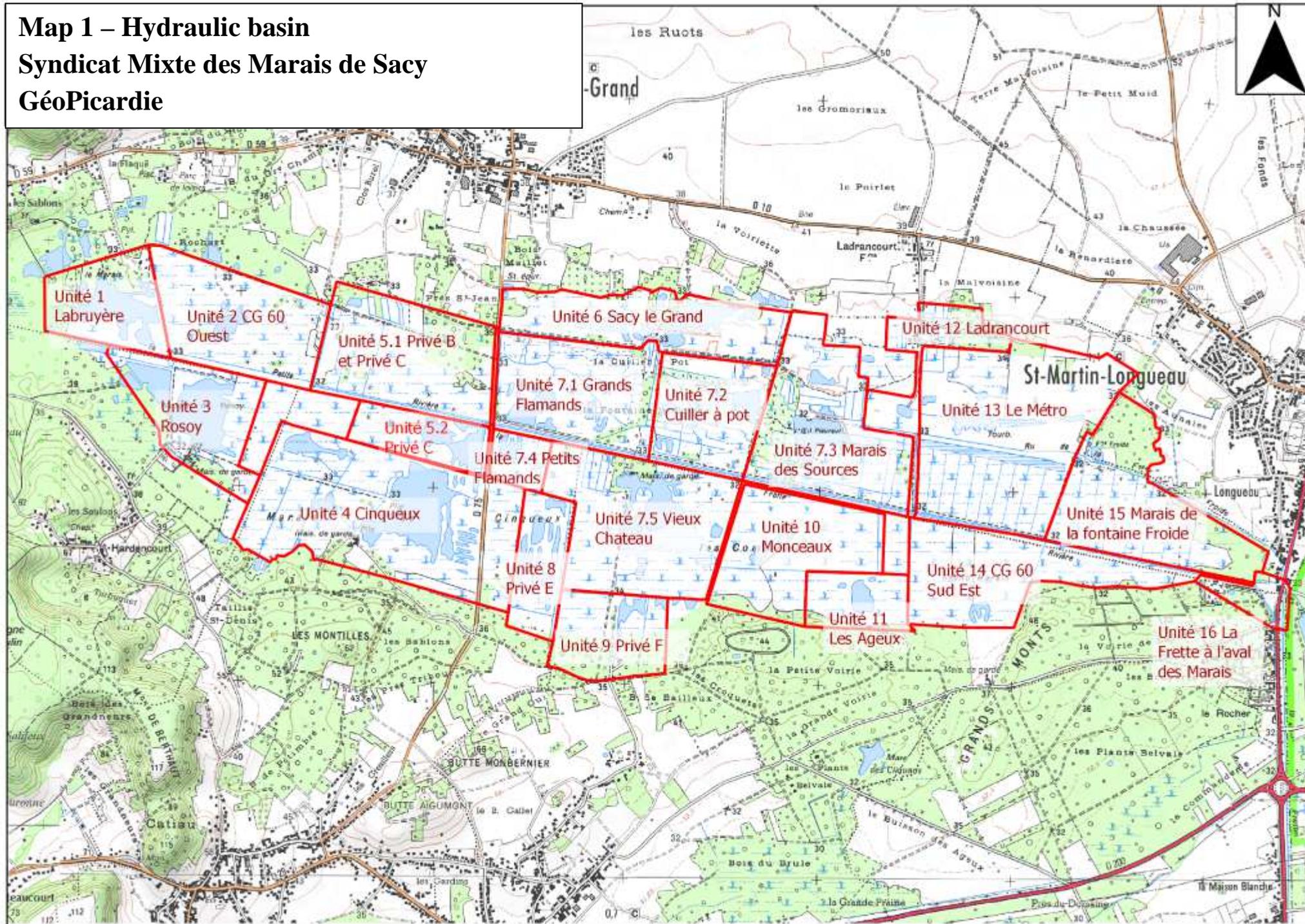
Nowadays, artificial canals accelerate the water flow; indeed it is easier for the water to go out of the marsh. Sacy Marsh can be divided in hydraulic basin (canals, ponds...), each basin has one outflow (map 1) connected with the main river (Frette). Therefore, the global water level of the marsh decreases. For example, the marsh outflow has a difference of 1 to 8 comparing winter (1200 m³/h) and summer (140 m³/h) flow. It shows the impact of drainage on the marsh. In fact, wetlands should naturally store water during winter time and slowly release it during summer. Moreover, the drainage network allow also the groundwater to get easily out of the marsh (springs, artesian wells), lowering the piezometric level of the aquifers.

The Syndicat Mixte des Marais de Sacy reacted and is preparing a water management plan against those effects. Most of the works of this plan have the same goal: to maintain the water level as high as the land owners acceptance in order to "rewet" the fen. To achieve it, connections must be closed between the main river (Frette) and the hydraulic basins (small dams, closing canal...). If a dam is built, water levels (maximum, minimum) will be determined on the staff gauge according to the habitats and the owner's acceptance.

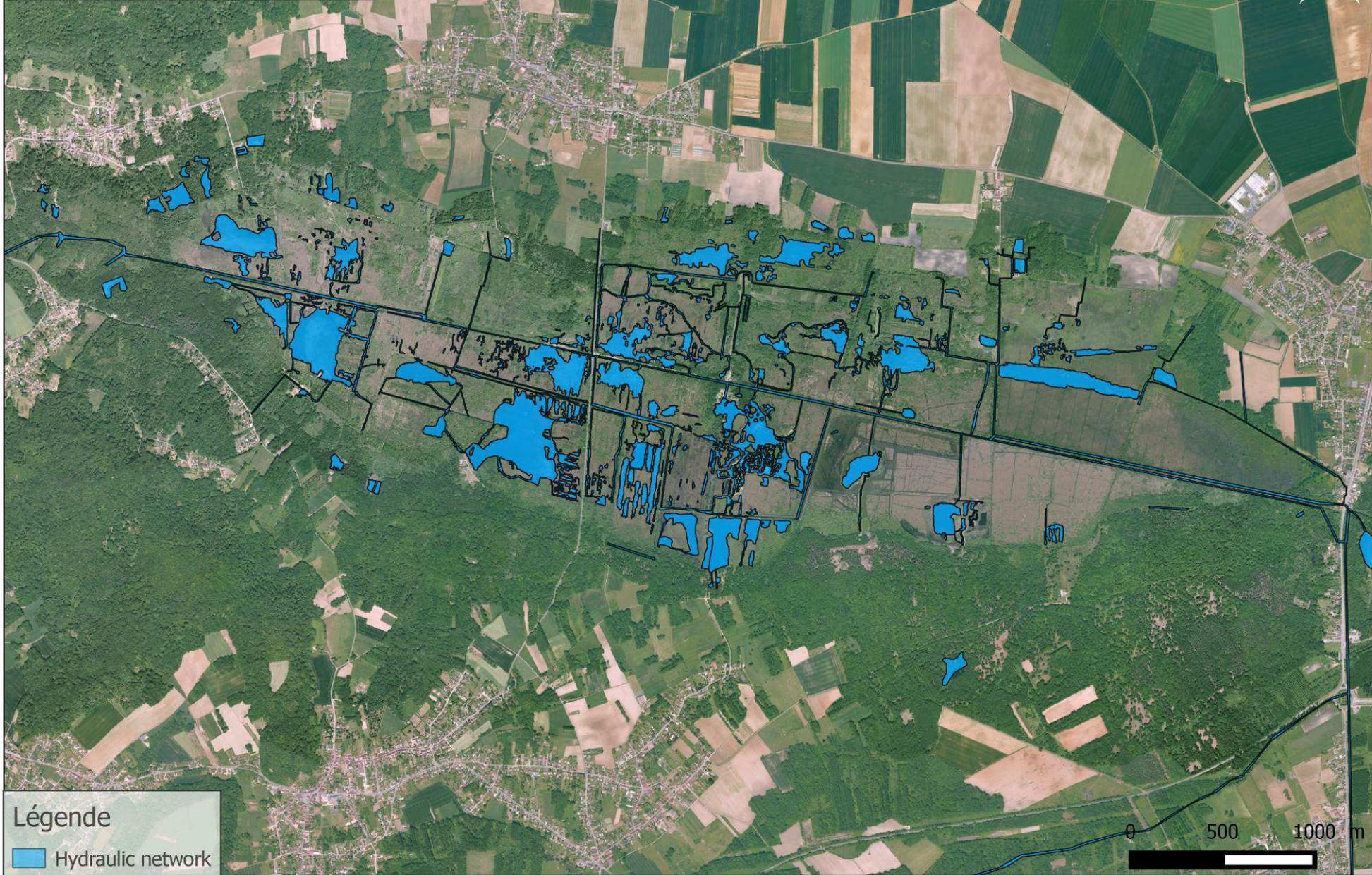
Maintaining high water level will lead to:

- Keep the soil saturated with water to avoid peat mineralization (link with climate change) and to restrain trees colonization,
- Lower the Marsh outflow in order to keep a high piezometric level and flatten the outflow curve during the year,
- Preserve wet habitat and slow their disappearance due to tree colonization or soil dry up.

Map 1 – Hydraulic basin
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Sacy Marsh Hydraulic network
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Map 2



Légende

 Hydraulic network