

Water reuse for agriculture in Occitanie : state of art, potential and action plan elaboration

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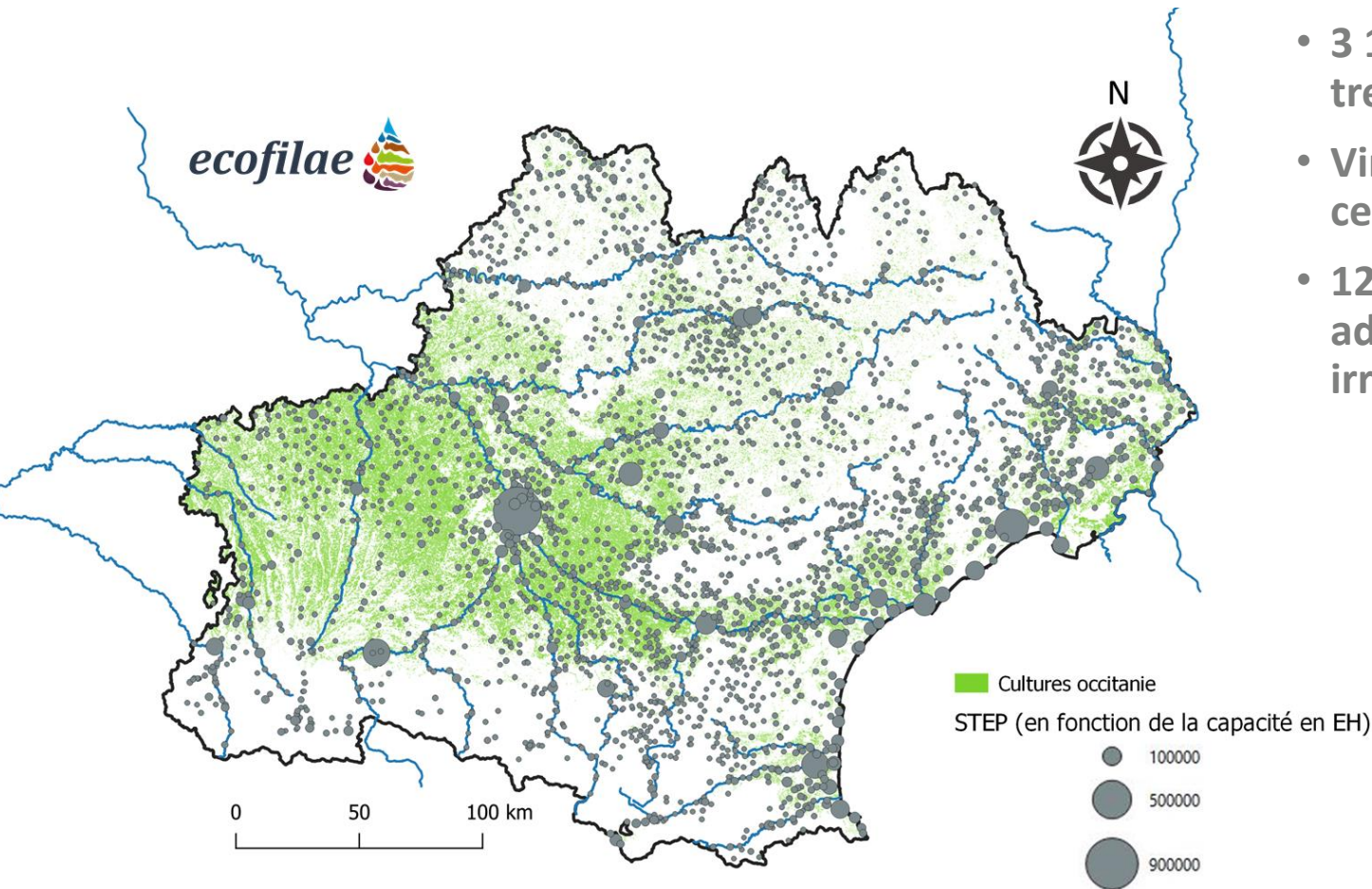


Network for effective knowledge transfer on safe and economic
wastewater reuse in agriculture in Europe - GA 818088

H2020

RUR-15-2018-2019-2020

Water reuse to face agricultural increasing water demand ?



- 3 124 WWTP = 350 Mm³ treated wastewater
- Vineyards and cereals/maize
- 125 Millions m³ additional for agriculture irrigation by 2050

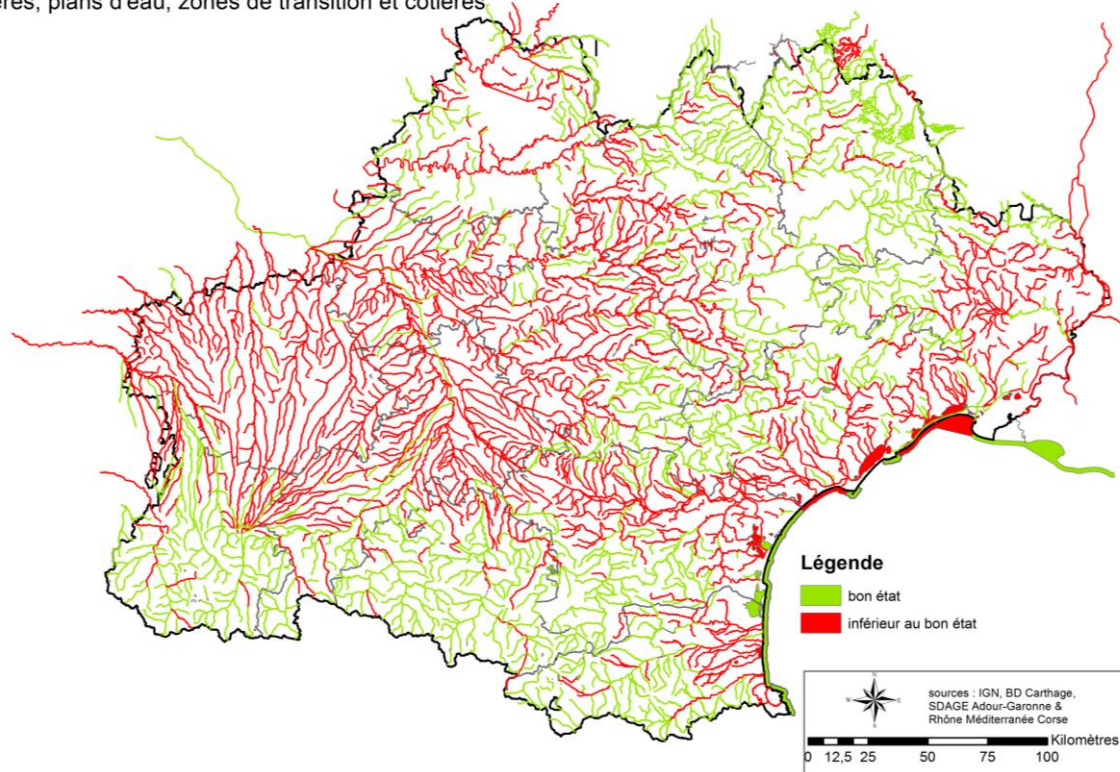
Sources : portail de l'assainissement communal / RPG 2017



Water reuse, a lever to face uprising water scarcity?

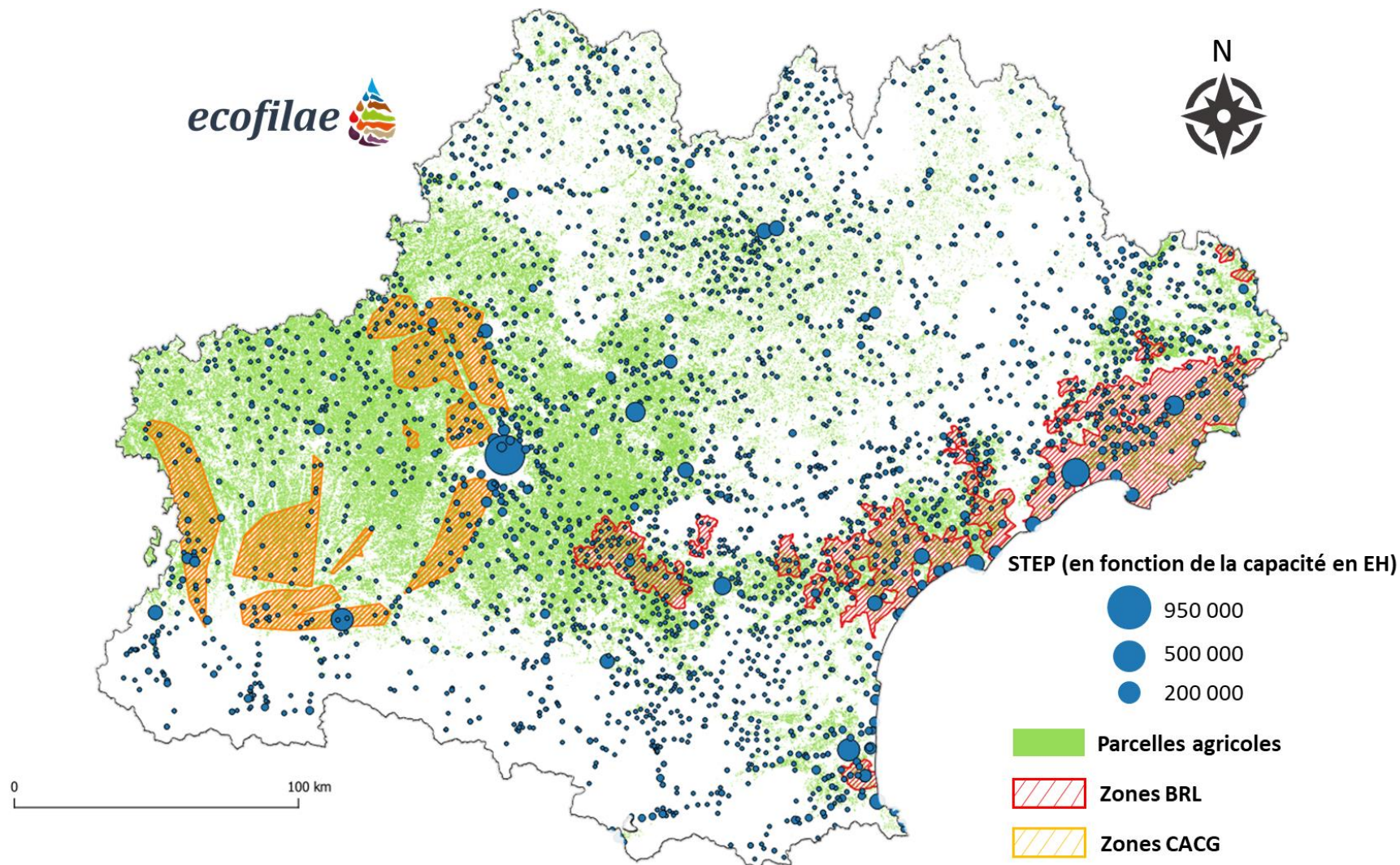
In some cases water reuse is in competition with river minimum flows...

Etat écologique des masses d'eau superficielles :
Rivières, plans d'eau, zones de transition et côtières

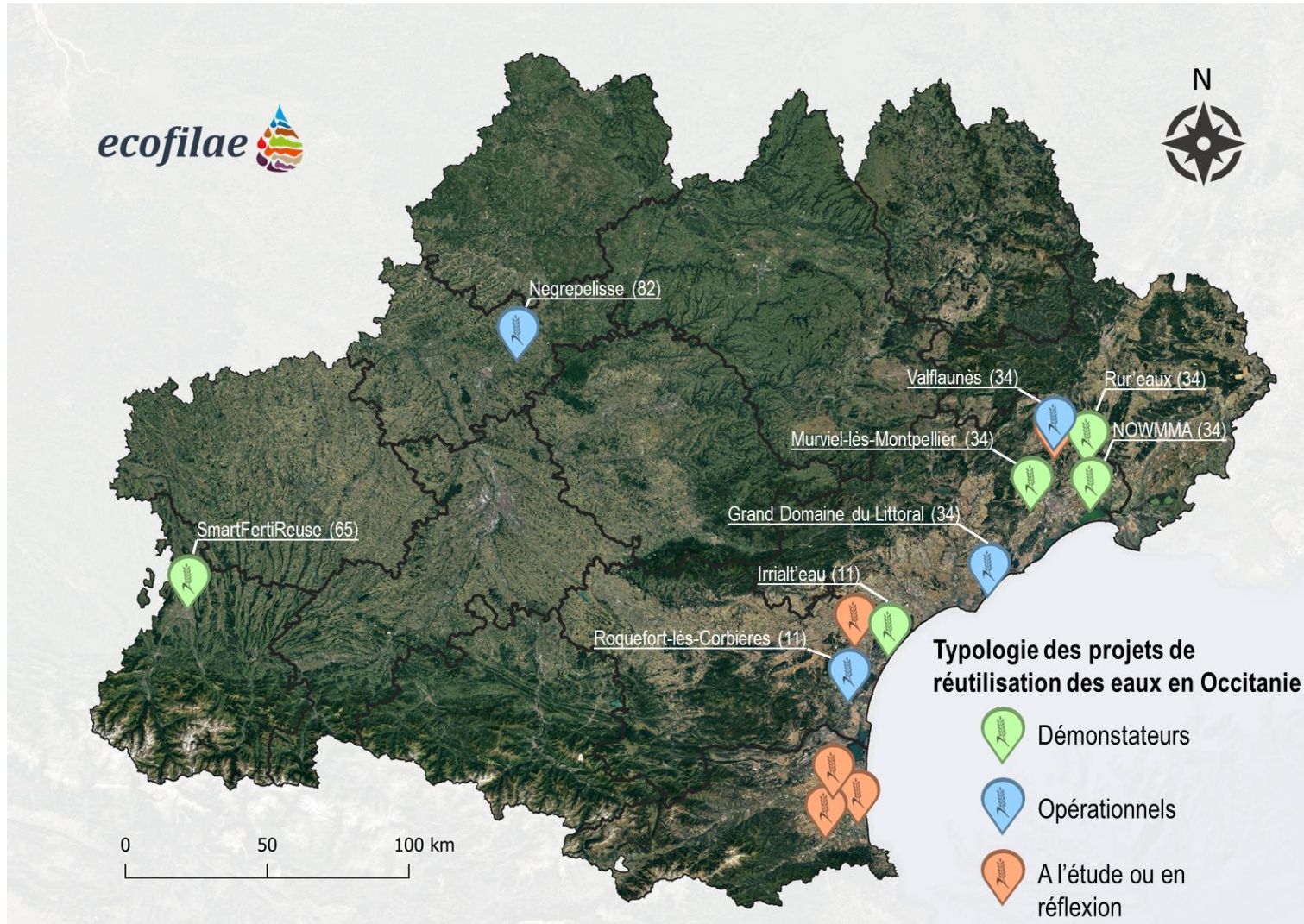


... but it also enables to limit impacts of treated wastewater discharges on river qualities

Other water artificial sources...



Many projects but... small scale or demonstrators



Non exhaustive list of water reuse projects in Occitanie region

SWOT synthesis

based on RWG and workshops discussions

Main strengths and opportunities :

1. WWTP: efficient, numerous with large volumes in the territory
2. Health aspects: with a mastery of the treatment and monitoring solutions implemented to ensure the safety of operators and consumers
3. Demand for water: growing and important in the territory and especially in the agricultural sector

Main weaknesses and threats :

4. Environment: Current water discharges from continental WWTP very often contribute to the recharge of natural resources
5. Financial: profitability and financial balance difficult to achieve for the stakeholders involved
6. Acceptability and perception: mainly with regards to health aspects, potentially exacerbated by the SARS-COV2 context

SWOT synthesis

based on RWG and workshops discussions

- Current **low and slow regional development of water reuse practices**
- A large part of the regional territory **already historically "adapted" to the water deficit**
- In some contexts, water reuse represents an interesting potential: **in coastal areas**

A regional action plan

based on RWG and workshops discussions



23 actions proposed (A1 à A23)

12 actions - PRIORITY 1

6 actions - PRIORITY 2

5 actions - PRIORITY

→ Action A1 «Launch a study to assess the opportunities at regional level (PRIORITY 1) »

→ 4 main organisms at the center of the topic / actions :

- Occitanie region (public entities)
- Agricultural chambers (region and department)
- Farmers federations
- Water agencies