



Elena de Vicente Aguilar 4th June 2025





About EMUASA



Aguas de Murcia was established in 1989 as a joint venture between the Murcia City Council (51%) and HIDROGEA (49%) to ensure the efficient management of the integrated water cycle.

The company serves **462,979 inhabitants** across the urban area, the huerta (traditional agricultural zone), and 55 peripheral districts, covering a total of **890** km².

(1) Water abstraction and treatment, (2) Distribution, (3) Maintenance of the sewer network, (4) Discharge control, (5) Wastewater treatment at **16** Wastewater Treatment Plants (WWTPs) and its return to the environment.





Research, Development and Innovation at EMUASA



R&D as a driver of sustainable environmental solutions

Our Team: Specialized, multidisciplinary professionals

Public Authorities Universities Technology Centers Companies







EMUASA's Experience in LIFE Projects

merlin

LIFE MERLIN (2024-2028): Maximization of Biogas Production at the Murcia Este WWTP

warrior LIFE WARRIOR (2022-2026): Water Reuse, Adaptation, Regulation, and Agriculture in Nueva Sucina WWTP.

LIFE CONQUER (2020-2024): Nitrate Recovery and Salt Removal from Groundwater for Urban Irrigation and Brine Valorization



LIFE NIRVANA (2019-2023): Innovative In Situ Bioremediation of **Nitrate Contaminated Aquifers**



LIFE ENRICH (2017–2021): Recovery of Nitrogen and Phosphorus from Wastewater for Agricultural Valorization as Fertilizer





EMUASA's Wastewater Treatment in 2024

Depuration Department – 2024 Summary	
16 Treatment Facilities	12 WRP
	4 WWTP
Treated Water (Hm³/year)	42,95
Direct Reuse (m³/year)	699.524
Processed Pollution (PE – population equivalent)	553.029
Sludge Production t/year (wet weight)	32.637







Nueva Sucina WWTP/WRP

- Design capacity: 1.000 m³/day
- Average flow rate: 600 m³/day
- Population Equivalent: 3.050 PE
- Treatment stages:
 - <u>Pretreatment:</u> Screening, Grit and Grease Removal
 - o Primary Treatment: Primary Settling
 - o <u>Secondary Treatment:</u>
 - Carousel-Type Biological Reactor
 - Secondary Settling
 - o <u>Tertiary Treatment:</u>
 - Coagulation-Flocculation
 - Lamella Settling
 - Sand Filtration
 - Disinfection by Chlorination







Nueva Sucina WWTP/WRP

- No discharge into natural water bodies
- Destination of reclaimed water:
 - o Class A.C: Agricultural irrigation
 - o Class O.B: Golf course irrigation
 - WARRIOR Project Objective:
 Class A.A reclaimed water



Situation up to 2023 → **Royal Decree 1620/2007**June 2023 → Entry into force of **EU Regulation 741/2020**October 2024 → **Royal Decree 1085/2024**



Reclaimed Water for Irrigation Purposes

LIFE WARRIOR (LIFE21-ENV-ES-WARRIOR-101074367)

Budget

- Total Amount: 1.954.879 €

- EU Contribution: 1.172.927 € (60%)

Duration: Oct 2022 – Mar 2026 (42 months)

Partners:















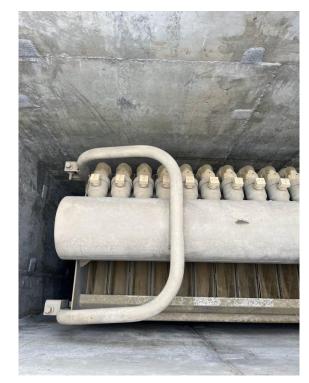






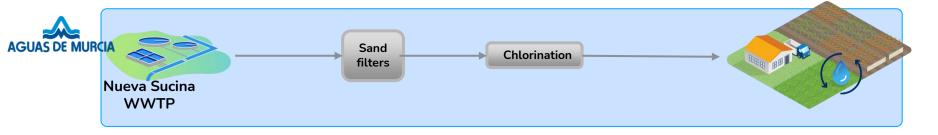












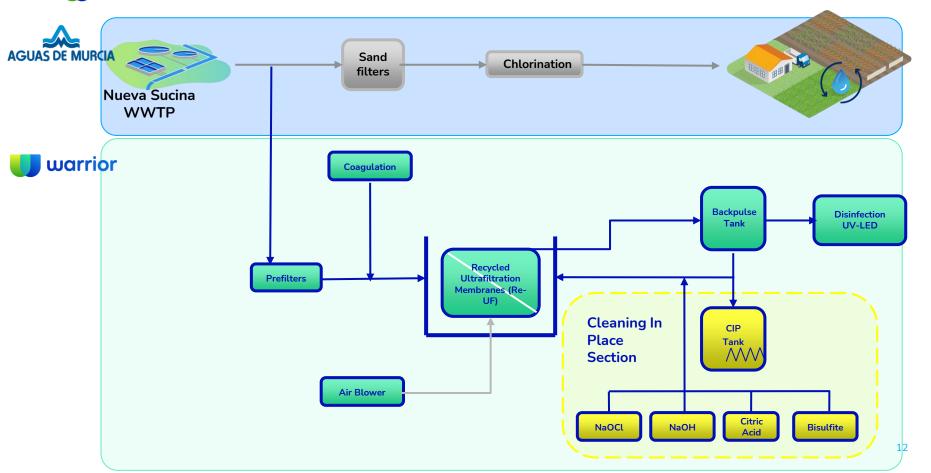






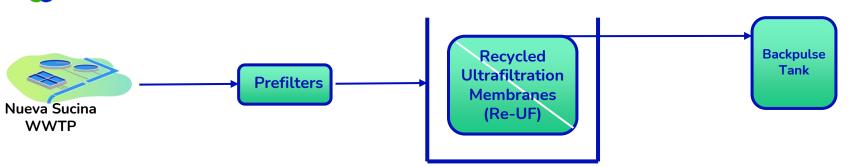








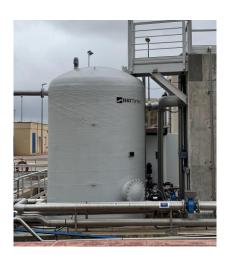






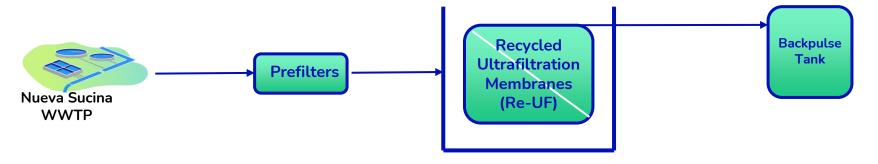


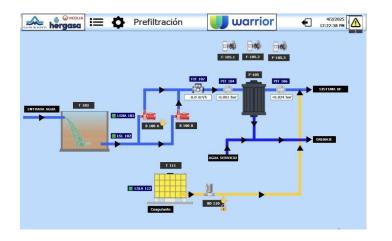


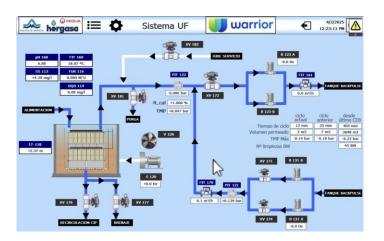






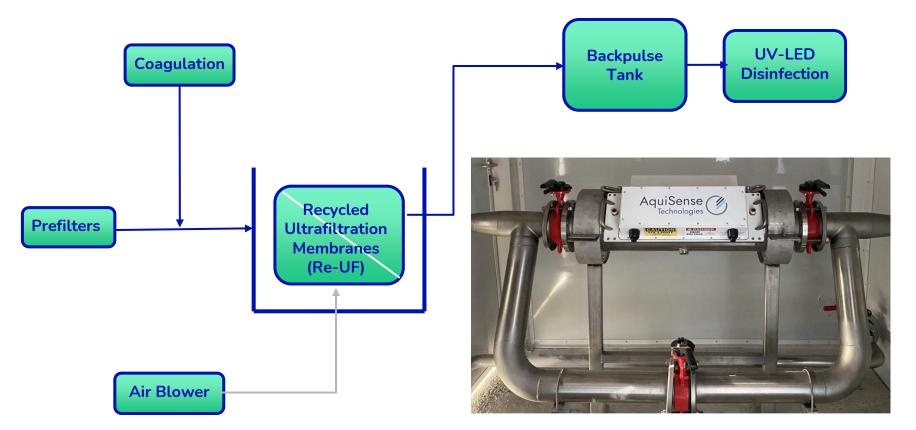






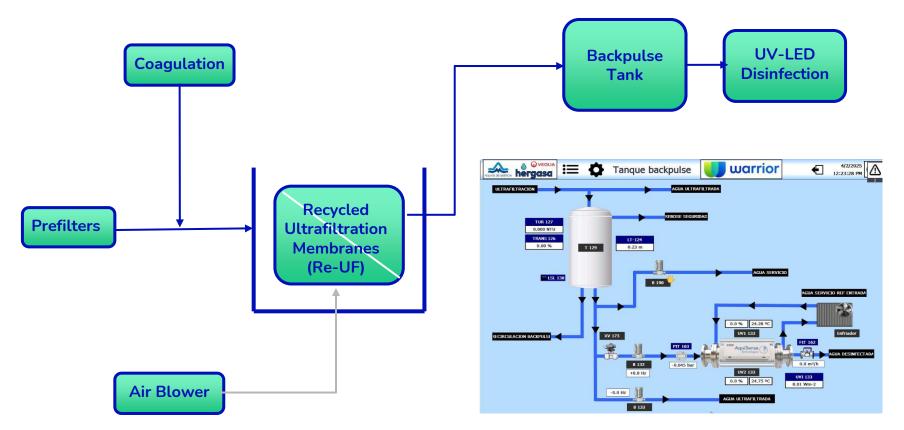








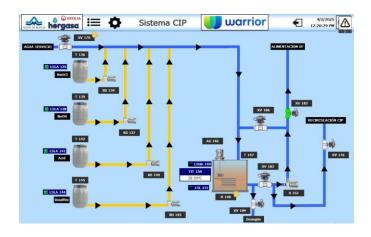


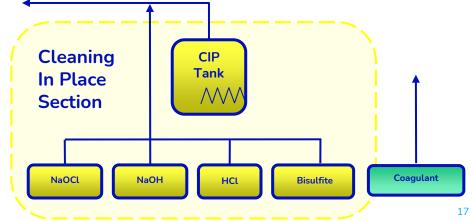






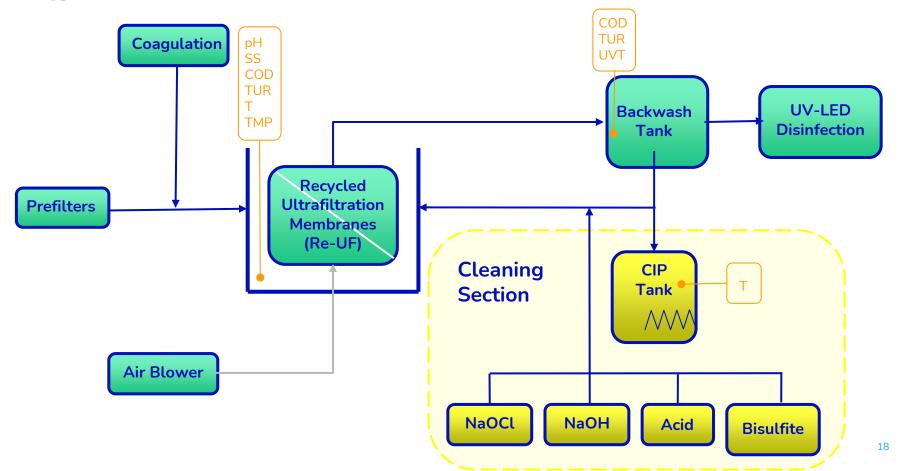
















Eva Mena Gil, Innovation Manager eva.mena@emuasa.es

THANKS!



Alicia Gadea Gadea, Head of Wastewater Treatment alicia.gadea@emuasa.es



Elena de Vicente Aguilar, Technical Specialist in Innovation elena.devicente@emuasa.es

