

Raw wastewater treatment by constructed wetlands in Al Azraq, Jordan

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On behalf of:
Swiss Agency for Development and Cooperation (SDC)

Consultant:
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Short description:
Two-stage wastewater treatment plant for a town and a refugee camp in the Governorate of Zarqa

Population equivalent:
8358 PE
Daily loading rate:
515 m³/d

Project status:
Inception Phase: November 2017 – June 2018
Planning completed: November 2019
Implementation Phase: 2020 –2021

Pre-treatment:

- 2 tanker discharge stations
- 2 automatic screens (40 mm)

Stage A reed beds:

- Syphon: V= 30 m³, Q= 140 l/s
- 10 basins á 1.000 m²

Stage B reed beds:

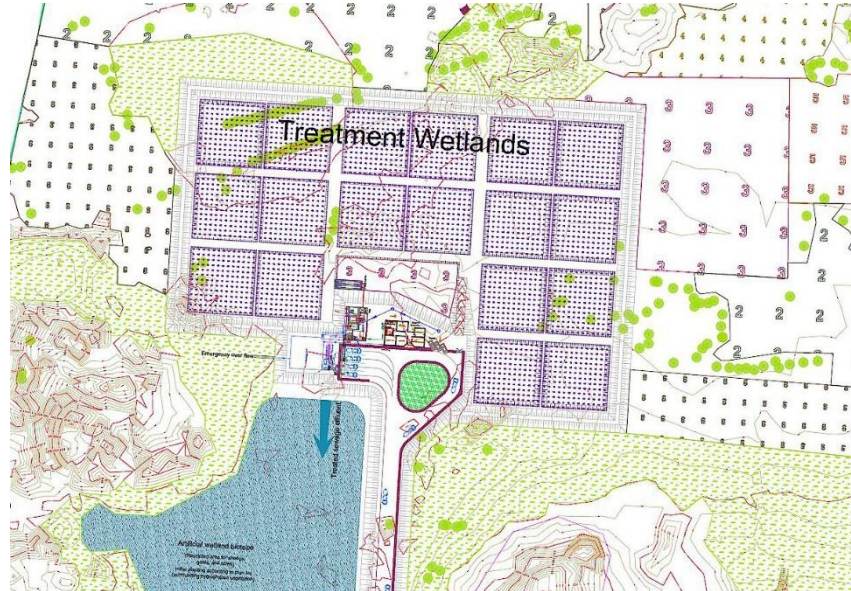
- Pump station: V= 40 m³, Q = 32 l/s
- 8 basins á 1.000 m²

Total reed planted soil filter area: 1,8 ha

Total allocated area: 3,8 ha

Effluent discharge for reuse

- Total sewage effluent pump station:
Q = 25 l/s
- Total sewage effluent storage tank:
1.000 m³
- 2 tanker filling stations for water reuse (landscaping)



Step A reed beds with integrated sewage sludge treatment:



Step B reed beds for polishing:

