











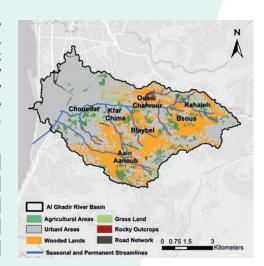
Al Ghadir River Basin Management Plan

- Snapshot

Al Ghadir River Basin Study Area

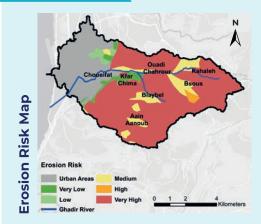
Al Ghadir River Basin, one of the smallest in Lebanon, is located in the southern region of Beirut shared between the Casa of Baabda and Aley. The basin extends from Dhour al-Abaddiye to the east of Beirut Airport and then to the sea on the west. The basin is mainly dominated by urban areas as it includes the airport and several industries with low abundance of agricultural areas, grasslands, and wooded lands. The river basin currently accommodates 309,455 people and the population is projected to reach 350,735 people, by the year 2035.

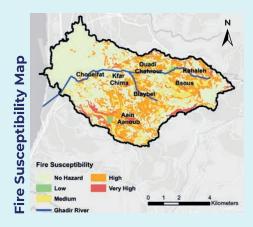
Area	40 km²
Average Annual Run-off	0.39 m³/s
Average Precipitation	728mm
Minimum Temperature	8.5 °C
Maximum Temperature	15 °C

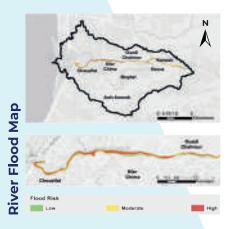


Q From Research

Hazards

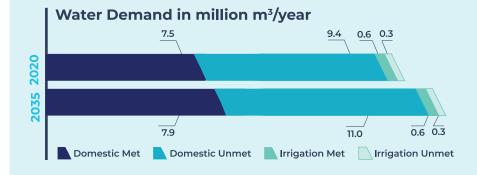






Demand Coverage

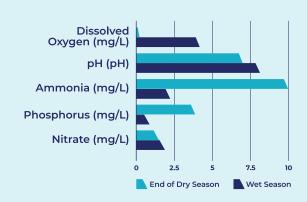
- Baseline Scenario & Future Projection



The graph illustrates the met and unmet water demand in million m³/year within Al Ghadir River Basin for the baseline scenario (2020) and business as usual scenario (2035) accounting for climate change and demographic projections, with no measures implemented.

Water Quality Results - Outlet

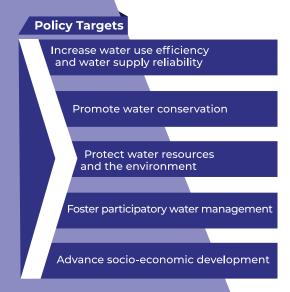




To Action

Program of Measures & Policy Targets





Recommendations

- Utilize the program of measures to design and implement projects in the urban, environmental, and industrial sectors, at the basin level.
- Improve the monitoring and data collection systems for water resources. This includes expanding the network of hydrometeorological stations and investing in advanced technologies for data collection.
- Support the development of wastewater collection networks and the rehabilitation and expansion of Ghadir treatment plant.
- Develop and implement a sustainable solid waste management system within Ghadir River Basin.
- Adopt and implement CDR study from 2014 on Ghadir flood control and protection solutions for the recurring flood events.
- Encourage local capacity building and foster collaboration and shared responsibility among stakeholders by facilitating meetings, platforms, and workshops.
- Establish a supervision body or assign focal points at the Ministry-level to supervise and monitor the implementation of the river basin management plan.

