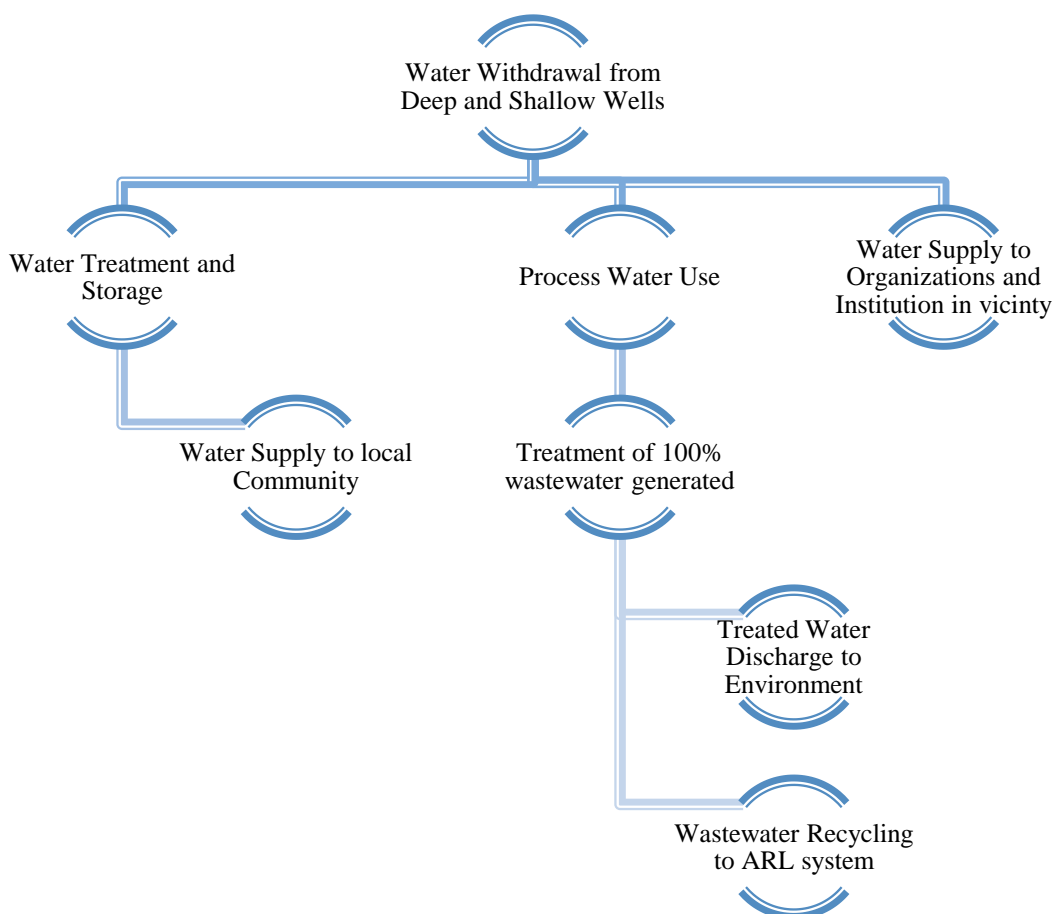


WATER MANAGEMENT

Keeping in view the fact that Water is scarce and getting scarcer every day. ARL interacts with water as a shared resource, i.e. uses water for its own needs and provides treated potable drinking water to neighboring community free of cost. ARL receives water from 11 shallow wells at Shahpur and Sohan areas and four deep tube wells at ARL own land at Morgah, Rawalpindi. ARL has three tube wells at Hummak (DHA-2) as well whose water is pumped to ARL via Sohan station.

Safe drinking water is essential to the basic human rights. ARL is providing safe drinking water to the local community of Morgah and Kotha Kalan. ARL is creating a positive impact in terms of clean drinking water provision to the local community. ARL is positively contributing to the “Clean water & Sanitation” Sustainable Development Goal by providing 27% of the extracted water for safe drinking purposes. Following is the water cycle which ARL is following for Sustainable water management.



ARL's Water Cycle

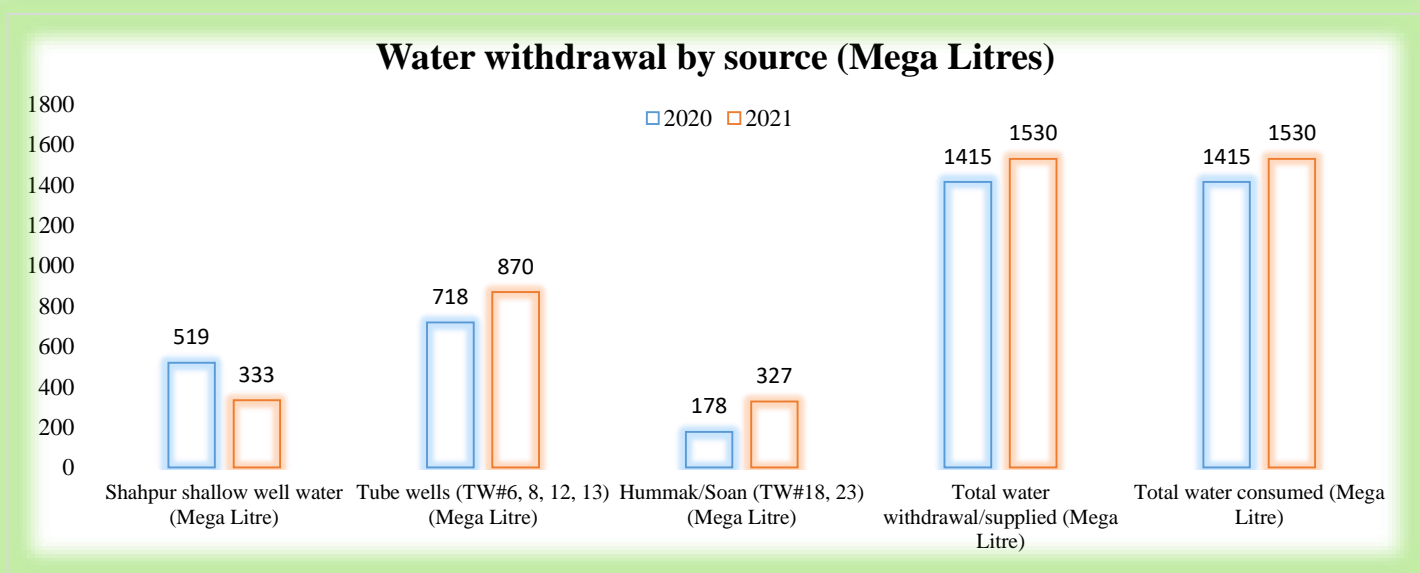
Sufficient supply of water to ARL, being a material aspect, is very critical for smooth refinery operations. ARL has a Risk Management and Strategic Plan Committee which discusses and decides the material aspects and their mitigation approach biannually.

In dry months (April-June), water supply from source (shallow wells/tube wells) is naturally reduced. As supply/demand gap widens, a fraction of treated effluent water from Effluent Treatment Plant (ETP) is recycled in process water, after testing from Laboratory.

Considering water as a highly important utility, ARL always sets corporate targets for consumption & availability of water. The company has taken a number of steps for water conservation, which resulted in meeting last year’s corporate target of water consumption. The company consumed 38,486 Gallons/per hour water against the corporate target of 40,000 Gallons/per hour during July-2020 to June-2021 and achieved a reduction of 3.8%. In addition to daily water supply, a good quantity of water is kept as emergency water bank to meet emergencies.

Water Withdrawal by Source

All the sources have TDS <1000 mg/L and no water withdrawal is made from areas with water stress



Waste Water Discharge

ARL uses water for a variety of purposes in the production process, and the water is partly polluted as a result. Therefore, the production wastewater is treated to reduce the pollutant to acceptable limits, prescribed by PEQS, before using and discharging into the River Sohan. Due to the better quality of effluent water, 31 Mega liters of water is recycled from ETP in year 2021 approximately 2% of total water consumption. All the discharges are within PEQS Limits and regularly reported to EPA-Punjab.

Wastewater in Mega liters in year 2021	
Total wastewater Treated at ETP	227
Total wastewater Discharged from ETP	196
Total treated water Recycled from ETP	31