

# WATER

## Key Facts about the Project's use & management of water

Savannah understands the critical importance of water availability and quality. Therefore, the Barroso Lithium Project has been designed to reduce the potential for possible impacts on water quality so that impacts can be predicted, managed and reduced in order to safeguard the local population and the environment.

Savannah has designed the project to be an example of sustainability and innovation in order to eliminate or minimise impacts on the environment and local communities. One of the priority concerns in the design of the project is the efficient use of all resources and to maintain and preserve existing natural resources in the Boticas region.

### 1. Will the Project use water from the Covas River?

There will be no water abstraction from the Covas River.

Sufficient water for the operation can be captured from the Project's footprint, from the mining areas (priority sources) and surface sources, and stored on site to supply the operation.

Water flowing towards the Project from outside its footprint will be diverted around the Project via a series of water diversion channels and back into the Covas River.

### 2. What is the expected water use and consumption for the Project?

- ▶ Almost 80% of the Project's water requirement is for the processing plant, where the spodumene lithium will be recovered.
- ▶ A water recovery and treatment system will be designed for the processing plant to ensure that 85% of the water used is recycled.
- ▶ About 17% of the water will be applied onto roads and around mobile equipment during material movement and handling for dust suppression.
- ▶ 3% of the water will be required for the facility buildings, for consumption by the employees.

### 3. Will the Project impact water availability in the region?

The Project is designed to be self-sustaining and to minimise the potential impact on availability of water for the communities.

The project is expected to use 0.6% of the water from the Covas River catchment area, which will not affect the biological flow of the river.



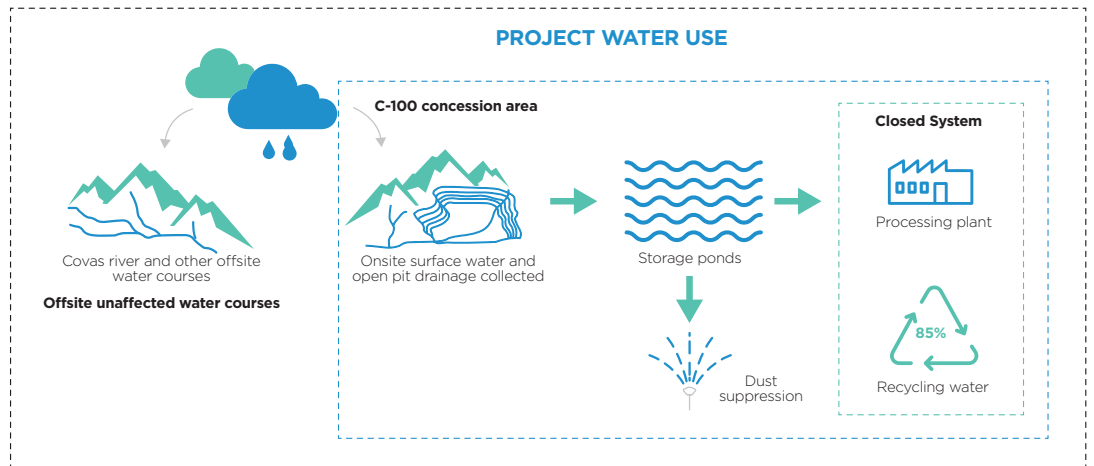
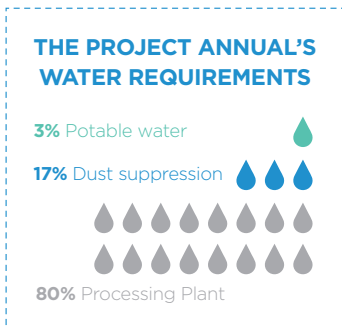
Project startup requirement  
**510,000m<sup>3</sup>/year**



Water used in the processing plant will be recycled  
**85%**



Additional water demand reduced by recycling to  
**240,000m<sup>3</sup>/year**



## 4. Will some watercourses be changed?

Yes. Water lines, which overlap future mining areas will be diverted and impacted. As part of the environmental and landscape rehabilitation of the area, the affected watercourses will be re-established.

Project modeling shows that within one year of the operation closing groundwater levels will return to original pre-project levels.

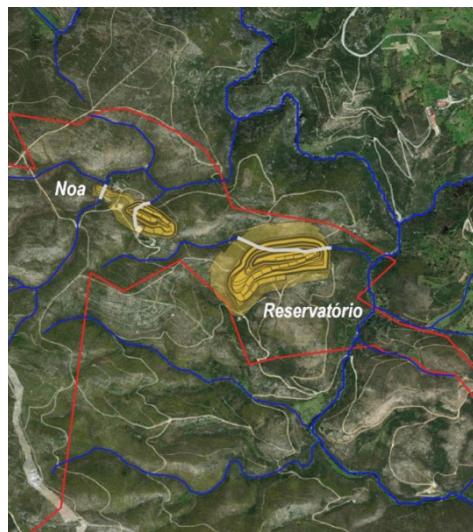
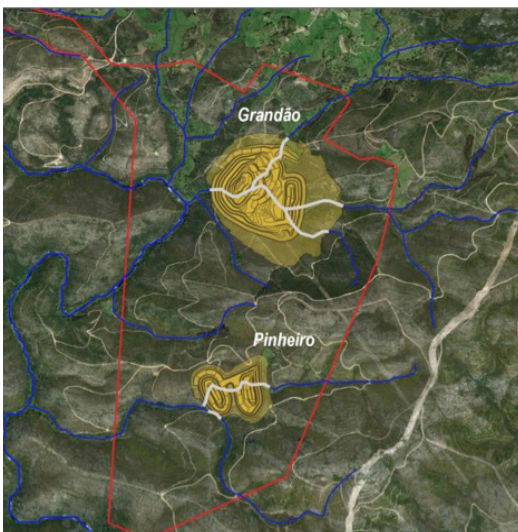
## 5. Will the Barroso Lithium Project affect water quality in the region?

▶ The Project will operate as a closed system, and the water treatment and sediment removal systems will ensure water quality on and off site is maintained.

▶ The main reagents used in the Project are biodegradable, which means that there is no risk of contamination to the environment. The process plant will use organic-based reagents, such as oleic acid (contained in olive oil), as a key reagent for collecting the spodumene mineral, which contains lithium. Other reagents, such as those used in swimming pools and drinking water cleaning plants, will also be used.

▶ During unusually high rainfall events, it may be necessary to release water from the water storage reservoirs into natural streams. All released water will be cleaned in the treatment systems and will meet all legal requirements.

THE MAPS SHOW THAT MOST WATERCOURSES (IN BLUE) WILL NOT BE AFFECTED BY THE PROJECT. THOSE THAT WILL BE AFFECTED (IN WHITE) WILL BE LATER RESTORED.



## 6. How will water quality be monitored?

▶ There will be two main observation points, one upstream and one downstream of the operations. Data monitored will include electrical conductivity, pH, turbidity and dissolved oxygen. This will allow corrective actions to be taken in real time if necessary.

▶ The results of the water samples collected will be made available to the public via the Project's smart phone app and on display boards at Information Centers and other locations throughout the local area.

▶ Other water lines that cross the entire Project will also be sampled, as will water collected in the onsite storage facilities.

▶ Groundwater monitoring is completed using piezometers strategically installed across the Project area.

## 7. What commitments is Savannah making to remedy water related issues if they occur?

If water availability or groundwater levels are shown to be impacted by the Project, Savannah will provide alternative water sources or replace lost water. Water reservoirs on site have also been slightly oversized to ensure that there is sufficient water available should this occur.



If you would like more information or have any questions or comments, please visit or contact the Barroso Lithium Project Information Centres

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