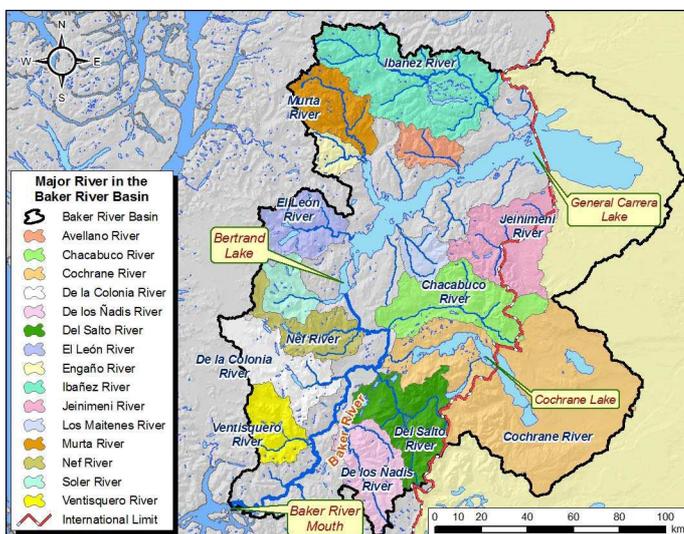


### THE BAKER BASIN

The Baker river basin is located between latitude 45°50' S and 47°55' S, on the Eastern slope of the Patagonia n Andes (Southern South-America). It occupies a total surface area of approximately 26.726 km<sup>2</sup>. Of these, slightly less than 6.000 km<sup>2</sup> (22%) are located in Argentina's Province of Santa Cruz, while the remaining part is located in Chile's Aysén Region. It is the second biggest basin in Chile in terms of surface area, and the most important in terms of mean annual discharge (approx. 1.100 m<sup>3</sup>/s according to DGA). It also contains Chile's biggest lake, Lake General Carrera (1.848 km<sup>2</sup>; called Lake Buenos Aires in Argentina), which at the same time is the second biggest permanent lake in South-America, after Lake Titicaca. The Baker River itself, which originates from Lake Bertrand, an extension of Lake General Carrera, flows into the Pacific Ocean after running south-westwards for approximately 170 km. The climate in the basin gradually changes in a longitudinal direction, from an altitudinal polar climate at the higher elevations in the west (which correspond to the extensive Patagonian Northern Ice Field) to a cold steppe climate in the east, while a milder microclimate exists locally around Lake General Carrera. Annual precipitation varies from approx. 2000 mm/year in the west to approx. 600 mm/year in the east.



Traditional economic activities in the area are based on the important agricultural potential (mainly livestock) and on the abundance of (native) forest resources. In this sense, one of the most notable historical impacts of human activity has been deforestation and the consequent erosion of large areas under use for livestock breeding. The basin also has a considerable mining potential, which, until present, only has been partially developed due to a critical lack of infrastructure (roads, energy).

### TWINLATIN PROJECT

The Latin American and Caribbean region is highly heterogeneous in terms of climate zones, hydro-ecology, socio-political systems etc. Numerous problems in relation to water quality and water availability arise. Flooding occurs frequently and erosion and pollution pressures have also become major problems. Management strategies, legal framework and stakeholder involvement needs to be improved. Activities and research tasks will be conducted within several fields of IWRM; hydrology, modelling of pollution flow, impact assessment, socio-economic impacts, climate change effects, scenario analysis and action efficiency.

The project addresses the goals of the EU Water for Life, and builds on the methods and guidelines developed for the EU WFD.

Significant contributions of the TWINLATIN project, aimed at filling knowledge gaps and providing the basis for the establishment of an integrated water resources management plan, are:

- Hydrodynamic modelling of the Baker River System
- Effects of global change on the regional climate
- Erosion-sedimentation risk assessment as a tool for land use planning
- Integrated water resources management plan balancing national and private benefits from planned hydropower

(ADDITIONAL INFO ON [HTTP://TWINLATIN.IVL.SE/INDEX.HTML](http://TWINLATIN.IVL.SE/INDEX.HTML))

### ABOUT TWIN2GO

*Twin2Go reviews, consolidates, and synthesises research on adaptive and integrated water resources management in basins around the world. The aim is to draw insights relevant to policy and research on issues around adaptive water governance in the context of climate change, and to make them transferable to other basins. Twin2Go further promotes sharing of research results with practitioners and high level decision makers through effective dialogue.*