

## CIRAN WP2 Case Study Selection Series

## Mine of Barruecopardo, Spain

It is an active Tungsten ore mining area in the Salamanca region, escavated as open pit. The mine has two periods of operation, the first between 1902 and 1982 and the second is ongoing and started in 2019 by Saloro SLU mine. The mining area is interacting with a Special Protection Area for Birds and the Natura 2000 sites together cover an area of more than 22 million hectares, the largest single site in Europe.

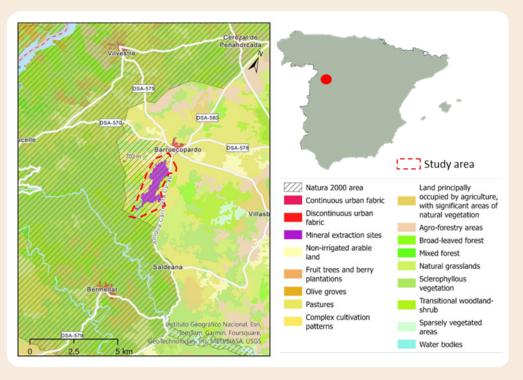


Fig. 1 Overall geographical localization, Barruecopardo. Corine Land data cover classification 2018 + Natura 2000 map (EEA) and study activity area

In Spain mining permits, as defined by the Spanish Mining Law 22/1973, 21 July, are administered at regional level. Spain has 17 autonomous regions and regional ministry responsible for mining matters is the competent jurisdiction. The permitting procedure consists of a multi-authorisation system, the application passing through both the regional Mining Authority and regional body for the Environment (Medio Ambiente) multiple times before its eventual approval. The regional mining authority has overall responsibility for steering the consultation process. The National Mining Authority (Ministry of Industry) and the National Environmental Authority (Ministry of Environment) are the responsible authorities when the mining permit issuance has implications for a protected area. In such instances, permitting decisions happen at a national level.



The area where the project is located has been dedicated mainly to mining and agricultural activities. It was an area impacted by historical mining activity but some animal species (birds, amphibians, and mammals) found it as favorable ecosystem. The project is not considered to entail significant effects on the maintenance and conservation of the habitats of community interest present in the area if activity is performed according to the conditions set in the permit.



The local communities did not oppose the mine due in part to Barruecopardo's cultural history of mining past and in part because of the prospect of new sources of employment. The NGO SEO/BirdLife opposed the project because in their opinion it would have significant adverse impact for protected bird species such as the Black Stork or the common vulture. Political party IU-Equo criticized the urgency for reopening the mine having concerns on the environmental and health impacts, expertise of the mining company, regency of the actions and low costs of the extracted minerals.



Prevention measures include protection of fauna, vegetation, water, prevention of fires, adoption of measures to avoid deterioration of soil's physical and biological characteristics, habitat management and awareness of cultural heritage aspects. Measures for reduction of impacts included carry out activities in periods not impacting nidification, improvement of habitat creating ponds and incrementing rabbits' population, construction of bat shelters, protection of existing forest and reforestation using native trees or shrub species, monitoring of protected species (Black Stork, Egyptian Vulture, Peregrine Falcon, and Bonelli's Eagle). Activities also included remediation of historical polluted mine site while closure remediation plan for the ongoing operation is in place and include remodeling of tailings, revegetation, construction of natural reservoir, dismantlement of infrastructure.

The resource recovery methods of the new phase of operations will take advantage of the old mine workings to minimise environmental impact from the new ones.

The project team conducted formal regulatory consultation and informal stakeholder engagement procedures as required by law. There were regular meetings at Barruecopardo Town Hall with the authorities of Barruecopardo itself and the neighboring communities. Benefits to community included rental and/or purchase of municipal and private land, contribution of annual taxes, hiring employees from the community with consequent economic stimulus to the area, collaboration with the Town Hall and the local school in the organization of community events.

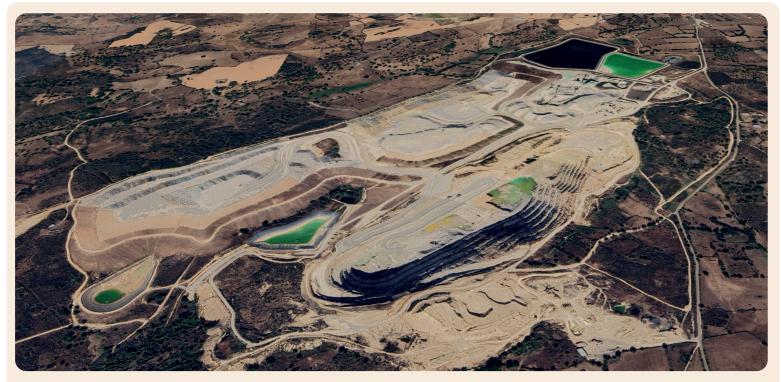


Fig. 2 View of the mine

The new mine is in a region that already has more than 400 extractive activities (Mireu, 2021) and to some extent the historical operation of the mine has caused environmental impacts which would be remediated by the new operations. The operation consequently passed the permitting procedures, received an operating licence and is operational. Appropriate risk mitigation measures were put in place and there is independent evidence that the mine has brought social and economic benefits to the local community.

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Grant Agreement No. 101091483 of the European Union's Horizon Europe research and innovation programme. Available online https://ciranproject.eu/results/ ©2025 CIRAN Project. Designed by LPRC.

























