

Lower San Pedro River and Queen Creek Project

Location	Lower San Pedro River and Superior, Pinal County, Arizona, USA
Rio Tinto company	Resolution Copper Company (RCC)
Partner organisations	Audubon Arizona, The Nature Conservancy, US Forest Service, Bureau of Land Management, Boyce Thompson Arboretum, University of Arizona, Arizona Game and Fish Department, Town of Superior, Salt River Project
Key people	Tice Supplee (Audubon Arizona); Jennifer Russo (RCC)
Habitats	Sonoran Desert Biome, with riparian cottonwood and <i>mesquite bosque</i> , and upland chaparral
Birds	Bell's Vireo, South-western Willow Flycatcher, Gray Hawk, Black Hawk, Zone-tailed Hawk
Outcomes	Lower San Pedro River nominated and accepted as an IBA; baseline studies established within Lower San Pedro IBA and Queen Creek watershed; environmental education programmes developed and implemented.



Arizona upland chaparral at Resolution Copper Company

A two-year programme (2006–2007) undertook the development of a bird conservation strategy for the Lower San Pedro River and the Queen Creek watershed, and saw the nomination and acceptance of state IBA status for both the Lower San Pedro River and Boyce Thompson Arboretum. It assisted in the provision of detailed biodiversity assessments of the land exchange parcel on the Lower San Pedro River for Resolution Copper Company and with the establishment of baseline data for the mine's operational biodiversity action planning. It also developed and implemented various environmental education programmes for schools in the local community and organised an annual birdwatching event at a key site.

Project background and history

Resolution Copper Company (a Rio Tinto business unit) is seeking to develop an underground copper mine near Superior, about 50 miles east of Phoenix in the Sonoran Desert Biome of south-eastern Arizona. In order to gain management access to US Forest Service land overlying the ore body, the company proposed a land exchange package, whereby it purchased a number of lands parcels of high conservation value within the wider area and offered these to federal government to manage (for biodiversity conservation) in perpetuity. Audubon Arizona, together with other key stakeholders with interests in the area (such as The Nature Conservancy), has supported the principle of such a land exchange, subject to ongoing conservation management being secured for such key land parcels in the future. The land exchange package is currently being considered by the US Congress but to date has not yet gone to mark-up in the House or Senate.

One such parcel of land lies along the Lower San Pedro River and has some of the most extensive mesquite bosque riparian habitat in the US. The San Pedro River serves as a corridor between the 'Sky Islands' of the Madrean Archipelago in northern Sonora and southern Arizona in the south and Arizona's Central Highlands to the north. The river is not only a major corridor between varied habitat types and ecoregions, it also represents a ribbon of water and riparian vegetation in an otherwise arid environment. The river thus exhibits a remarkably high biodiversity, both in resident and migratory species.

The Queen Creek watershed, in the more immediate vicinity of the proposed mine development, also has significant ornithological value. Baseline studies have established that at least one site within the watershed, Boyce Thompson Arboretum, merits state IBA status. This facility also plays a major role in the promotion of birdwatching and bird conservation to the local community of Superior and to the wider public. Baseline studies also place the mining company in a clearer position with respect to its objectives for biodiversity impact avoidance, mitigation and habitat rehabilitation, should the operation proceed in the future.



The Lower San Pedro River was recognised as an IBA

Project details

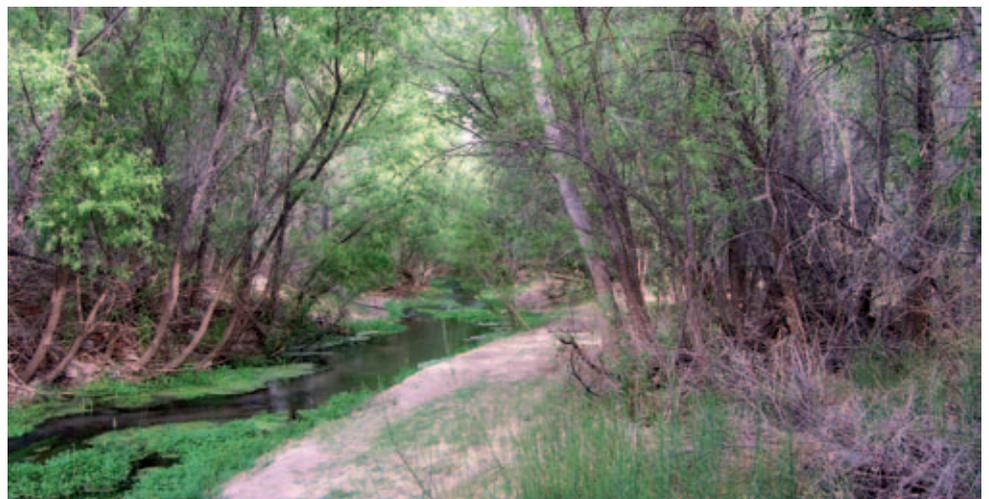
Thanks to the project, the Lower San Pedro River, from “The Narrows” north to the confluence with the Gila River, has been surveyed, nominated and recognised as a state IBA. During 2006–2007, existing and newly collected data were compiled and submitted to the Arizona IBA Science Committee, in support of the IBA nomination of the Lower San Pedro River, and the nomination was accepted. Data are currently being entered into the National Audubon Society’s IBA database in support of a global IBA designation for Bell’s Vireo (Near Threatened).

The project has also undertaken bird monitoring and established research needs for species of continental importance and species that are the “responsibility” of partners in the Southwest Avifaunal Biome. To establish an effective baseline dataset for the mine, the partners have worked with Westland Resources, environmental consultants to Resolution Copper, in establishing 50 bird survey points within and adjacent to the proposed mine. Winter data were collected in 2007–2008, and avian populations monitoring has been initiated as a component of baseline studies at the Resolution Copper mine site.

The partnership seeks to develop a model conservation strategy that demonstrates cooperative management strategies between biodiversity stakeholders and Resolution Copper. Such a strategy would document the conservation outcomes of management actions as mining operations proceed.

For the Lower San Pedro River, a partnership with the Salt River Project, The Nature Conservancy, the Bureau of Reclamation and the Copper Corridor economic development committee is being used to formulate conservation strategies for the site. Integration of Pinal County open space planning has been facilitated. The San Pedro River Working Table has met three times informally since May 2007, and as a major land owner in the San Manuel area and of eight miles of river corridor, BHP-Billiton (a joint venture partner with Resolution Copper) has been an active participant. A vision statement among the partners is nearly finalised.

Finally, the project has aimed to promote the case for maintaining a healthy ecosystem within the Queen Creek watershed through sponsorship of local nature festivals and development of materials for local schools. Various successful vehicles have been used, such as the annual Rio Tinto Birdwatch Event held on International Migratory Bird Day at the Boyce Thompson Arboretum. In May 2007, this included a dedication event for this state IBA, involving many local dignitaries. Additional effective programmes have included bird banding at the arboretum, designed for schoolchildren, in partnership with the Tonto National Forest, with a view to establishing a bird-banding station. Various interpretive materials for education and outreach are being developed and published within the partnership, and secondary school science curricula in Arizona have been boosted with key lessons in bird observation and identification of bird sounds.



The Lower San Pedro River near Dudleyville Crossing