## Project Update: January 2024

To characterise the social-ecological system of Todos Santos and San Martin Islands, we identified the species and users that depend on the marine resources inside the island's buffer areas. Three types of fishing-related activities take place on both islands: commercial fishing for benthic species, determined by polygons; commercial scale- fishing, and sport fishing.

To identify the users of each island, I requested information to the Fisheries Department of the State of Baja California (SEPESCA acronym in Spanish), and the National Commission of Aquaculture and Fisheries (CONAPESCA, acronym in Spanish) through the transparency portal. This, along with the information obtained from informal talks with fishers during prospective fieldwork, helped delineate the users of the islands under study. For benthic species, fishing polygon coordinates were obtained to create maps using GIS. Sport fishing information was sourced from the SEPESCA website. Regarding commercial scale fishing, the database information was cross-referenced with the data obtained from meetings with fishers and government officials.

Additionally, our work group has established relationships with both fishing and conservation agencies. Meetings and informal interviews have been conducted with representatives from SEPESCA, CONAPESCA, the National Institute of Fisheries and Aquaculture (INAPESCA, acronym in Spanish), and the National Commission of Natural Protected Areas (CONANP, acronym in Spanish). Furthermore, we collaborated with the LENFEST Ocean Program project to organise a workshop with local fishers, aimed to identify climate refugia in the Pacific islands marine protected areas (MPAs). We also participated on the sea urchin and cucumber management plan meeting, organised by INAPESCA, where fishers and research institutions shared project objectives and alternative solutions that might contribute to improve the management of benthic resources at the islands (Figure 1). We spoke to the Islands Ecology and Conservation Group (GECI, acronym in Spanish), involved in the reserve creation. From these meetings we acknowledge that all the organisations have expressed interest in the project and are willing to participate in the workshops and subsequent stages.

We have conducted the first survey and interviewed fishers from El Molino Viejo, San Quintin and Camalu about their fishing activities at San Martin Island, and fishers from Punta Banda, Ensenada, and El Sauzal about their activities in Todos Santos Island (Figures 2, 3 and 4). This information was gathered to obtain their knowledge about the Biosphere Reserve, their islands, and the Fisheries Refuge Zones (FRZ). The interviews included questions about their organisational system, permits, the species they fish, how they perceive the state of the ecosystem, and their knowledge about the biosphere reserve and fishing refuge zones.

Currently, we are organising the workshop with the users identified for each island. The San Martin workshop is scheduled for the end of January 2024 and the Todos Santos workshop is planned for mid-February 2024. For the workshop, we are developing material and we have designed infographics with FRZ information (Figure 5).



Figure 1: Attendees at the INAPESCA meeting on the sea urchin and sea cucumber management plan.

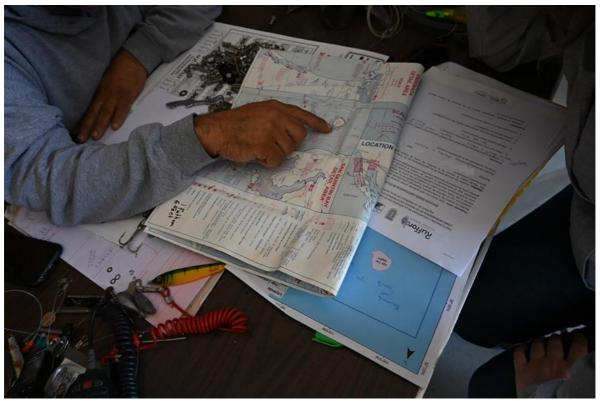


Figure 2: Interviews with fishers from San Martin Island in El Molino Viejo



Figure 3. Interviews with fishers from San Martin Island.



Figure 4. Interview with fisher from Todos Santos Island at the Ensenada marina.



Figure 5. FRZ and San Martin and Todos Santos Islands infographic.