PRNC-183. A PUTO) AICO NUCALAK CENT PUNTA HIGUERO ENVIRONMENTAL STUDIES SUPPLEMENTARY REPORT MAY 1, 1975 Prepared for the Puerto Rico Water Resources Authority By the Staff of Puerto Rico Nuclear Center of the University of Puerto Rico OPERATED BY UNIVERSITY OF PUERTO RICO UNDER CONTRACT --- Page Break--- PUNTA HIGUERO ENVIRONMENTAL STUDIES by James D. Parrish ---Page Break--- SUPPLEMENTARY REPORT ON FISHES AND FISHING AT PUNTA HIGUERO AND THE SURROUNDING AREA A limited number of collections were made during this study in the very shallow waters near shore. A substantial volume of information is also available regarding fishes in deeper waters and slightly more distant areas. These data appear in published and unpublished sources (Erdman (1961, 1963), FAO (1962), Juhl (1972)). Erdman (1963) is a data compilation made from A.B. Cochran's collections, for the most part, on total landings in the Aguadilla area! These data present catch by common name, number of fish caught, and weight. The bulk of the catch was landed at "Crashboat" beach, north of Aguadilla, and some landings may have been made at the beach of the town of Aguadilla. In general, there is a heavier fishing effort northwestward from "Crashboat" beach and Aguadilla than toward Punta Higuero, and most of the fishing is done over a mile from shore. The Erdman (1963) data are primarily useful in that they give an extended historical record of the fishing activity in the general area. More recent statistics on commercial fish landings at nearby ports appear in Juhl (1972). FAO (1962) relates exploratory fishing efforts for tuna and tuna live bait west and south of Aguadilla. Three of the stations were located within about a mile of Punta Higuero (see Figure 1). Others were somewhat farther away. The stations were within 1 or 2 miles of shore but some were much closer. Erdman (1961) lists species and numbers of specimens collected during the bait fishing. Table 1 is based on this list with estimates of locations corresponding to the FAO (1962) stations.

Juhl (1972) summarizes exploratory fishing results for the Punta Higuero region based on sampling done from November 1970 to January 1971 and May to June 1972 by the Laboratorio Pesquero of the Department of Agriculture. The data are reported by locations, total weight of catch, and gear type. More complete information is available from the Department of Agriculture in the original data sheets. The locations of the collections are shown in Figure 2 as numbered squares, each 3.5 kilometers per side.

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N Punta Borinquen w e Crash Boat \$ Beach AGUADILLA BAY Aguadilla Rio Culebrinas Rio Culebra Punta Higuero % Rio Grande @ Fishing stations Rincon G Fig. 1 Balt survey fishing stations. - October 1961. From FAO (1962). as. 1 2

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REFERENCE AREA Fig. 2 Phase XVI Rincon. Exploratory and test fishing area showing a grid pattern covered. May 6, 1972 - June 30, 1972 (from Juhl (1972)). The relevant data extracted from these sheets for the region appear in Table 1. The data in Table 2 are derived from a total of 85 fish and 10 lobster trap sets in winter, 70 fish trap sets in summer, and 15 total gill net sets. All fish were originally reported by local Spanish common name. The most likely identifications of the species were later made from Erdman (1971) and other sources. Some errors may have occurred in

Identifications and the most doubtful cases have been noted in Table 2. In addition to the species reported, it is likely that some smaller and less commercially valuable species were caught but not reported. This crude information is the best available to date for the area. It represents a considerable effort in exploratory fishing. Among other fishery statistics in the Contribuciones Agropecuarias y Pesquerías series, numbers of fishermen and boats in various coastal ports are reported. There is no harbor within many miles of Punta Higuera, but most fishing vessels are small craft which can be beached at any convenient location when not at sea; therefore, the fishery statistics may not be entirely accurate or complete on the number of boats in the area. * Generously provided by Mr. Jon Cole of Laboratorio Pesquero. 7 --- Page Break--- ez siz Fos | See) ewe 4) sens «) eR a cere | woatoo} (Momma |" Stes a ocouez 7 so = us tad se zs excer aie a ea if cosocg | eet ana ios eon | wuss a wm be palate | zl t=) om. (2 ae) orn cores | ane sasuss (2) sae 20 ata Teer a ve pane wenn ceerpren Mey tenet csotigy eet eh etiane iy een fo eee ee at ek zew ---Page Break--- odvost Fue u/s womo | "item | ear =e oboe ote # Fe! us = 6 | eg ote | or cec-avz| oco¢ al aa uss 3 we wu aes sgt | sleet a ayer rome | reve | NTT FE setoq | a eye cor | one | maRRERS i é xs é] dl] a] # mys wee ae ae lm bm | a) ee |e ae (2 hu on coven ce | ens | art enous ---Page Break--- i # di-a ie ---Page Break--- bidalh ecu wR od aS us 8 € a Coa ogg] aig] as] ange wa} ome | Ost | See ca 2/9 ag £ sxagtt | career wun ote sotmae "en ez | ax [at [ot T en [ate exon & vane mee) oe | ---Page Break--- ae 2 Location (see Fig. 2) fw |e | m| om | cs =) ome ---Page Break--- tes foe Pas we [oe [um fom | | ao Gone) ssa = sepoms Bglish mane Sotentstte contsisne | sxtaonete j-t Parrotftene* | Lor --- Page Break--- Fig. 3. Portion of coast where census of fishing boats was made 2 October 1974. 16 --- Page Break--- REFERENCES: Bailey, R.M. 1970. A list of common and scientific n

Fishes from the United States and Canada. Amer. Soc. Spec. Pub. No. 6, 3rd ed. 150 pp. Erdman, D.S. 1961. Aguadilla night light collections, Sept.-Oct. 1961. Unpublished notes. 1963. Unpublished notes on Aguadilla commercial fish catch during 1955-1956. 1971. Common names of fishes in Puerto Rico. —Project F-4-i (unpublished). FAO. 1962. Report to the Government of Puerto Rico on the resource appraisal project for the possible expansion of local fisheries. FAO Fisheries EPTA Report No. 1482, based on the work of E.O. Oswald. Juhl, R. 1972. A report on exploratory fishing and gear tests in Puerto Rico from 1969-1972. Contribuciones Agropecuarias Vol. 4, No. 3. y Pesquer: —Page Break— —Page Break— NOTICE "This report was prepared as an account of

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