

Revisiting the Hydrology of Chau Hiix: New Geoarchaeological Investigations Focused on Prehistoric Water Management Features around this Maya site in Belize

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The Maya archaeological site of Chau Hiix is located along the western shore of Western Lagoon in the Crooked Tree Wildlife Sanctuary (CTWS). This extensive inland wetland system is a protected area in Belize and recognized as a Wetland of International Importance. The unique and complicated hydrology of the lagoon is still influenced today by ancient modifications created by the ancient Maya and their predecessors, who managed their landscapes for fish trapping and other land use strategies. Chau Hiix was first reported on by archaeologist Dr. Anne Pyburn in 1989, and her team conducted much research around the archaeological site as well as in the adjacent wetlands. Pyburn's investigations revealed a large earthen berm-like feature at the southern end of the lagoon which she identified as a dam in 2003. Since 2019, the Belize River East Archaeology (BREA) Project and the Northern Belize Archaic Adaptive Strategies (NBAAS) Project have both conducted numerous excavations within the CTWS to better understand the hydrology, paleoecology, and human management of the system. In the summer of 2024, our team relocated the hypothesized Maya dam, and conducted an excavation to better understand its function and construction dates. Our ongoing investigations of this water management feature, as well as other wetland modifications, provide new evidence focused on wetland engineering efforts made by past societies within the region.