GUAM PAGO WATERSHED CONSERVATION

Maria Lynn Cruz, Laura F. Biggs¹

The purpose of this research is to explore water science methodologies in determining the source of sedimentation in the Guam Pago Watershed. Watersheds provide drinking water, an agricultural water source, and forms of recreation. However, from years of soil erosion and several factors occurring inland, the mouth of Pago River has widened allowing a larger amount of sediment and nutrient rich water onto a greater area of coral. With the use of water science equipment such as the Manta turbidity logger and rain gauges, initial monitoring will focus on narrowing down the causes of sedimentation. In order to distinguish inland factors from coastal factors, loggers will be launched at an upstream point where the Sigua and Lonfit rivers converge, and at a point near the opening of Pago Bay. As a relatively small island, research and education are key in achieving and maintaining a sustainable environment. In order to encourage an action for improvement or mitigation to target behaviors within the target audience, this study is intended to increase scientific and community understanding of the effects of land usage on Pago Bay.

¹Maria Lynn Cruz, Student, University of Guam Sea Grant, Mangilao, GU 96923 Laura F. Biggs, Assistant Professor, Outreach and Education Services, University of Guam, Mangilao, GU 96923

Citation for proceedings: Stringer, Christina E.; Krauss, Ken W.; Latimer, James S., eds. 2016. Headwaters to estuaries: advances in watershed science and management—Proceedings of the Fifth Interagency Conference on Research in the Watersheds. March 2-5, 2015, North Charleston, South Carolina. e-Gen. Tech. Rep. SRS-211. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 302 p.