Coastal marine ecosystems are prone to impacts of nearby land-based human activities, such as pollution, logging, and agriculture. I studied how different types of disturbances may impact coral reef communities in Makira Island, Solomon Islands. Sea urchin, sea star, and coral abundances across three sites facing different types of anthropogenic pollution were compared. I found a significant difference in sea urchin abundance across sites, with the highest abundances found at the site adjacent to a village. I also found a significant difference in coral cover between the disturbed village and logging sites, and the pristine forest site. Findings suggest that population growth of key organisms in a near-shore coral reef ecosystem is affected differently by distinct anthropogenic disturbances. This implies an important connection between terrestrial and marine communities, highlighting the need to consider the different types of anthropogenic pollution when designing programs to conserve marine ecosystems.