

Southern Guam Watershed



Southern Guam Watershed Description

Guam is the largest and southernmost island in the Mariana Islands chain. It is approximately 30 miles long and nine miles wide with a population of approximately 168,000 people. The Southern Guam Watershed covers approximately 67,840 acres. Unlike northern Guam's relatively flat limestone plateau, the Southern Guam Watershed (a grouping of many small watersheds and drainages) is characterized by mountainous uplands that are volcanic in origin. Associated plant communities of Southern Guam's grasslands, ravine forests, and coastal areas provide habitat to the endangered *Gallinula chloropus guami* (Mariana common moorhen), *Aerodramus bartschi* (Mariana swiftlet), *Eretmochelys imbricata* (hawksbill turtle) and threatened *Pteropus mariannus mariannus* (Mariana fruit bat) and *Chelonia mydas* (green sea turtle). Barrier and fringing reefs occur around the area. Mount Lamlam, the highest point on the island, at 407 meters or 1335 feet, is located in the watershed.

Surface drainage is accommodated by the numerous rivers that dissect the mountainous uplands in this watershed area. This area receives between 98 and 118 inches of rainfall per year. Two surface water resources are located in the watershed, the Guam Waterworks Authority, Ugum River Water Treatment Plant and the United States Navy owned Fena Reservoir. Volcanic rock forms the foundation of the island and is exposed over about 35 percent of the island's surface, predominantly in southern Guam. Soils are related to vegetation communities. The southern volcanic half of the island is vegetated with a mix of grassland and patchy forest.

Land uses and cover in the Southern Guam Watershed as taken from Guam 2002 Census of Agriculture, September 2004, includes irrigated cropland (415 acres), non-irrigated cropland (11 acres), and pasture or grazing land (90 acres). There are an estimated 793 farm acres.

Approximately 185 small poultry, hog, cattle and goat operations are located throughout the watershed.

Average field size in the Southern Guam Watershed is eight acres. Production on small parcels is rotated to allow year round production of local and cultural crops including beans, cucumber, watermelon, cantaloupe, eggplant, tomatoes, bananas, bittermelon, mango, citrus, kangkong, hot pepper, bell pepper, guava, sweet potato, yams, cassava, and taro.