

SOUTHERN GUAM
SOIL AND WATER
CONSERVATION DISTRICT

2018 ANNUAL REPORT

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SOUTHERN GUAM
SOIL & WATER
CONSERVATION DISTRICT



WHO WE ARE & WHAT WE DO



The Southern Guam Soil and Water Conservation District (SGSWCD) along with the Northern Guam Soil and Water Conservation District (NGSWCD) are Government of Guam bodies established to work in partnership with the University of Guam, and in cooperation with all government of Guam entities overseeing local and federal programs that promote the use of conservation, development and the use of soil and water resources on Guam in order to control and prevent soil erosion and flooding, and to improve agriculture water management.

The Guam SWCDs are operated by a Board of Director who serves as elected officials by local farmers, farmland owners, or land occupiers to fulfill duties set forth by Title 5 of the Guam Code Annotated Chapter 71.

Together the Guam Soil and Water Conservation Districts strive to be Guam's leading conservation organization for the protection of Guam's natural resources through locally led stewardship and best management practices. The Boards further create and advise on policies for the protection of the island's natural resources; educates the community and policy makers on the value of natural resources and the impact of human made activity has on our island's environment and ecosystem; and promotes good stewardship through community outreach and education.



2016-2019

GOALS & OBJECTIVES

Mission: "To promote, sustain and support the conservation of Guam's soil and water resources; be good stewards of our environment; build community, and instill sustainability."

Vision: Promoting stewardship through the conservation of our soil, water, and natural resources for our island.

GOALS

- Steward & Develop Guam's Agricultural Industry and Conservation Reserves
- Actively Engage & Build Relationships with the various Island Communities
- Develop Team Capacity and Organizational Culture
- Strengthen Organizational Systems and Structures

OBJECTIVES

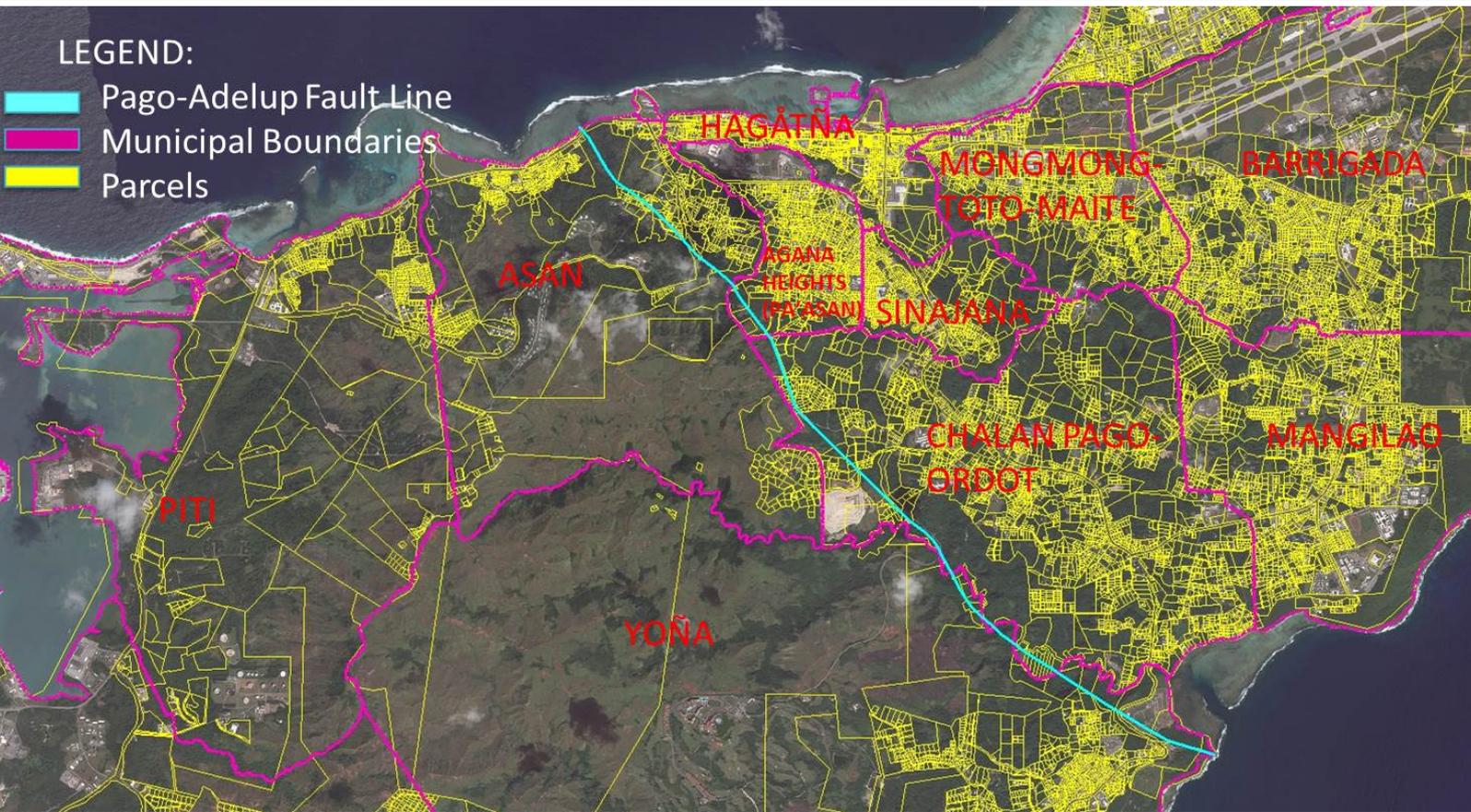
OBJECTIVE 1: Identify, Inventory, & Facilitate Management of Conservation Areas & Agricultural Zones.

OBJECTIVE 2: Invasive Species Management & Control

OBJECTIVE 3: Support & Facilitate Education & Outreach

OBJECTIVE 4: Strengthen Organizational Systems and Develop Team Capacity

OBJECTIVE 5: Build Board and staff capacity to better function and serve as an organizational unit in with the local and federal sectors of government systems.



THE SOUTHERN DISTRICT

"Southern Soil and Water Conservation District, or Southern District, means the area organized pursuant to this Act as that area covering the southern area of Guam—the “entire” area designated as Southern Guam by the Water and Environmental Research Institute of the Western Pacific (WERI), University of Guam, as published in the 2007 Geologic Map and Sections of Guam, Mariana Islands, as amended, with the Adelup-Pago fault extending across the narrow waist of the island and forms the structural boundary between the northern and southern parts of the island" P.L. 31-125:2

2016-2019 SGSWCD DISTRICT DIRECTORS

- Benny Chargualaf, **Chairman**
- Angelita Mendiola, **Vice Chair**
- Carol Tayama, District Director
- Michael Aguon, District Director
- Brian Leon Guerrero, District Director

SGSWCD DISTRICT STAFF

Erica Pangelinan, District Manager
 Linda Reyes, Outreach Specialist
 Audrey Meno, Program Support Assistant

GSWCD DISTRICT PARTNERS

- University of Guam (UOG)
- UOG Center for Island Sustainability (CIS)
- UOG Sea Grant
- Northern Guam Soil and Water Conservation District (NGSWCD)
- Guam Department of Agriculture (DoAG)
- USDA Natural Resources Conservation Services (NRCS)
- USDA APHIS Wildlife Services
- Chamoru Land Trust Commission (CLTC)
- Guam Bureau of Statistics and Plans (BSP)
- National Oceanic and Atmospheric Administration (NOAA)

This year's

PROGRAM PERFORMANCE

OBJECTIVE 1: Identify, Inventory, & Facilitate Management of Conservation Areas & Agricultural Zones

UGUM Watershed Restoration

The SGSWCD entered into a service agreement with UOG Sea Grant to support the study and restoration of Guam's UGUM watershed. UGUM watershed is a significant water source located in the southern district. Over the years, activities such as wildfires, wild pigs, off roading, and other human activity have greatly contributed to soil erosion and sediment run-off. Sediment run-off and soil erosion has ultimately lead to impaired water quality and the destruction of Guam's coral reefs. The GROW initiative focuses on researching innovative tools to reduce sediment run-off. The Southern District committed \$27,500.00 to purchase aircraft machinery, which will be used to disperse seeds in critical planting areas hard-to-reach.

The SGSWCD looks forward to the positive results and findings of the two-year long study in hopes of finding a new solutions that would help combat the soil erosion issues affecting the southern villages.

SGSWCD continues to raise awareness of the impacts soil erosion has on our island and promote best management practices available to help mitigate sediment run-off.



Map of Guam: Photo credit to the University of Guam Water and Environmental Research Institute of the Western Pacific.

Chalan Layong Tree Planting & Maintenance



In 2015, the Guam Environmental Protection Agency; Guam Department of Agriculture; USDA Natural Resource Conservation Service; the Southern Guam Soil and Water Conservation District; and the Inarajan Mayors Office coordinated a tree planting in Chalan Layon of Inarajan. The site was identified as a critical planting area that would help reduce sediment run-off from the UGUM Watershed. Maintenance of the tree planting site has become neglected due to lack of man-power and a cohesive adopt a tree program. Vice Chairwoman Angelita Mendiola recruited the Department of Corrections parolee services to begin the maintenance effort. The UOG Serenity Lions Club also joined in the efforts to keep the tree planting area maintained. The committee works to explore different options to continue maintenance efforts through a community based “adopt a tree” program.



*Honorable Mayor Doris Flores Lujan (center).
Photo credit: www.inarajan.com.*



Guam Department of Agriculture's Forest Stewardship Coordinator Belmina Soliva explaining the different native species planted in Chalan Layong during the tree flagging effort.



Guam Environmental Protection Agency's Margaret Aguilar chopping down invasive weeds that are overtaking the native species in Chalan Layong.

OBJECTIVE 2

Invasive Species Management & Control

Guam Feral Swine Program

The SGSWCD entered into a working agreement with the USDA APHIS Wildlife Services (WS) to control and manage feral swine populations through the use of coral traps. Feral swine causes erosion issues, carry diseases, and are dangerous when encountered. The pilot program proves to be successful and in great demand by public land owners. According the Guam Invasive Species Council Management Plan, feral swine is included as one of the top priorities for invasive species management. The demand for the traps are growing and the need to have a permeant feral swine program is apparent. During FY2018, the SGSWCD increased the local match to \$20,000.00. A total of 604 pigs have been removed in FY 2018. As the SGSWCD struggles with receiving its mandated allocations, the Districts proposes the Guam Invasive Species Council take the lead as the local entity to partner with USDA APHIS WS to eradicate and control feral swine population on a much larger scale for the island of Guam.

604

**FERAL PIGS
REMOVED IN FY 2018**



FERAL SWINE DISEASES FOUND ON GUAM

(1) Leptospirosis; transmission through urine and animals bodily fluids; can last for weeks in contaminated soil outside the animal's body. Bacteria usually contracted by humans through drinking contaminated water. Contact with bacteria through breaks in skin, and mucus membranes in eyes/nose/mouth. Can cause kidney/liver damage, meningitis, in people. <https://www.cdc.gov/leptospirosis/infection/index.html>

(2) Brucellosis (SB); bacteria found in reproductive tract of swine, fetus, other body fluids, milk and poses high risk to unprotected hunters or anyone handling swine. <https://www.cdc.gov/brucellosis/transmission/index.html>

(3) Pseudorabies virus (PRV); the virus is passed directly via nose to nose contact and indirectly via contact with urine or feces. The virus can live for up to two weeks in the environment. Pseudorabies is a fatal disease in dogs and cats. Dogs used for hunting feral swine are particularly at risk for contracting and dying from pseudorabies. Symptoms are similar to rabies including excessive salivation, scratching that can lead to self-mutilation, and a lack of coordination or paralysis, but animals infected with pseudorabies will not display an aggressive behavior as do rabid animals (Thiry et al. 2013). There is no vaccine to prevent pseudorabies in cats or dogs. <http://edis.ifas.ufl.edu/uw388>

(4) Japanese Encephalitis (JeV); JeV is a virus distributed by mosquitoes and vertebrate hosts, mainly pigs and wading birds. Humans can be infected when bitten by an infected mosquito. A small percentage of people infected with JeV develop inflammation of the brain (encephalitis). About 1 in 4 cases are fatal. There is no specific treatment for JeV. <https://www.cdc.gov/japaneseencephalitis/>

See also: 1. Toxoplasmosis and 2. Salmonella.

Information provided by the
USDA APHIS Wildlife Services

OBJECTIVE 3: Support & Facilitate Education and Outreach

2018 Guam Soil and Water Educators Symposium

The Guam Soil and Water Conservation Districts hosted another successful Educators Symposium on July 26, 27, 28, and 31, 2018 at the University of Guam. This year's theme focused on "Guam: Our Water, Our Home".

The annual event is dedicated to teaching Guam's educators about the importance of soil and water conservation. Every year, the Guam SWCDs collaborate with the Guam Department of Education to recruit teachers who are interested in incorporating conservation in their classrooms using STEM methodologies. The symposium includes class lectures and a field-day designed to meet the requirements of the PIP for the option of earning 2.0 graduate credits from the University of Guam. This year thirty-six participants successfully completed the symposium. The Districts work to engage previous symposium participants to showcase their conservation curriculum used in their classrooms. Sponsors of the event include Bank of Guam, Coast 360, Guam Visitors Bureau, and Main Street Delicatessen. The Northern and Southern Guam SWCDs continue to work together to promote good stewardship of our island's resources through education and outreach.



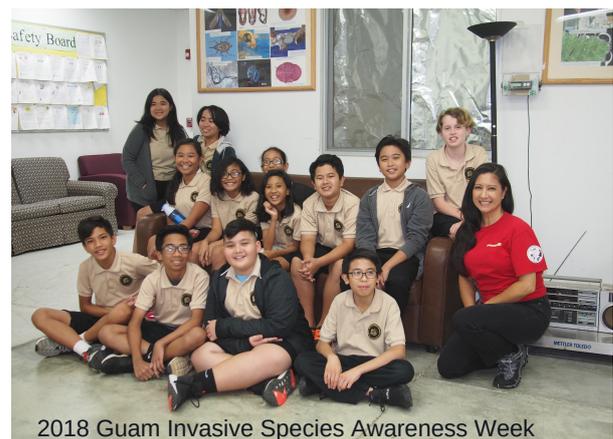
6th Annual Educator's Symposium



2018 Center for Island Sustainability Conference



2018 KIKA Camp Session 2 at the COTAL forest



2018 Guam Invasive Species Awareness Week



2018 Stewardship Week and Proclamation Signing

In 1955, the National Association of Conservation Districts began a national program to encourage Americans to focus on stewardship. Stewardship Week is officially celebrated from the last Sunday in April to the first Sunday in May. To kick off the 2018 Stewardship Week, the Northern and Southern Guam Soil and Water Conservation Districts held a Proclamation Signing on Wednesday, April 25, 2018 at the Ricardo J. Bordallo Governor's Complex. The official signing recognizing Stewardship Week (April 29-May 06, 2018) took place under the breezy canopy of the Daok trees. Stewardship Week is one of the world's largest conservation-related observances. Stewardship Week helps to remind us all of the power each person has to conserve natural resources and improve the world. When everyone works together with their local conservation district, that power continuously grows.

Community and Partner Outreach Efforts

The SGSWCD continues to collaborate and support partner programs in an effort to promote the conservation of Guam's precious natural resources through good stewardship and best management practices.

SGSWCD Sponsored Events

- 2017 Pig Hunting Derby
- 2018 Center for Island Sustainability Conference
- Bureau of Statistics and Plans GCMP Kika Clear Water Camp
- 2018 International Coastal Clean-up
- NOAA Tree Planting

UOG CNAS Collaborative Workshops

- 2017 Pig Hunting Derby
- 2018 Center for Island Sustainability Conference
- Bureau of Statistics and Plans GCMP Kika Clear Water Camp
- 2018 International Coastal Clean-up
- NOAA Tree Planting

Community Outreach Events

- 2017 Arbor Day
- Trick or Trees
- 2017 Pork In the Park
- Guam Invasive Species Awareness Week
- UOG Charter Day
- Kids Freshwater Fishing Derby
- Valley of the Latte River Festival
- GCMP Kika Clearwater Session 1 and 2

OBJECTIVE 4: Strengthen Organizational Systems and Develop Team Capacity

National Association Conservation District (NACD) Membership



2018 NACD Annual Conference
in Jacksonville, Tennessee. Pictured Left to right: NGSWCD
Chairman Ronald Laguana; USDA NRCS PIA Director Travis
Thomason; and SGSWCD Director Carol Tayama

The SGSWCD's appointed NACD representative, District Director Carol Tayama, attended the 2018 NACD Annual Meeting (Jacksonville, Tennessee) and the Pacific Joint Region Meeting (Kennewick, Washington). Guam's representation during committee meetings and conference is crucial to ensure Guam's input is included as NACD lobbies congress for programs needed to best serve the region's farmers and natural resource concerns.

NACD Technical Assistance Grant SGSWCD acquired their first grant this FY2018. The grant allows SGSWCD to hire two (2) part-time employees to service the USDA Natural Resources Conservation Services. Employees provide program support to NRCS help alleviate administrative duties, which allows planners to get more field time and conservation on the ground.

NRCS Conservation Bootcamp Training (CBCT)



Pictured: Successful participants of the 2018 Conservation
Bootcamp Training during the September Session



Pictured: SGSWCD employee Erica Pangelinan during a field day
with NRCS Guam Field Office at Manhita Farms.

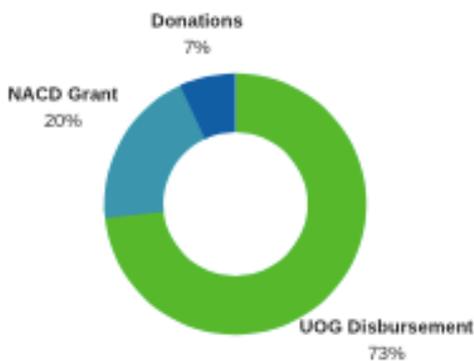
Aspiring Conservationist and SGSWCD employee, Erica Pangelinan, attended the National Conservation Employee Development Center's Conservation Boot Camp Training. The training consisted of an intense three week program teaching NRCS employees and affiliates the 9-step conservation planning process, planning policy, and planning procedure and guidelines according to the National Planning Policy Handbook. The NACD sponsored Ms. Pangelinan's attendance. With this new found professional development, SGSWCD can assist NRCS in developing conservation plans for farmers and district cooperators. Pangelinan is the first ever SWCD affiliate in the Marianas to attend the CBCT.

a year's overview

FINANCIAL HIGHLIGHTS

Fiscal Performance: Income

According to Guam Public Law 34-42 Chapter II Section 7, the amount of \$149,384.00 is to be disbursed through UOG and divided amongst the two (2) Guam Soil and Water Conservation Districts for FY2018. The SGSWCD received \$64,935.86 and was shorted \$9,756.14.



Fiscal Year 2018 Income

\$85,935.86

- UOG Disbursements**
\$64,935.86
- NACD Grant Funding**
\$15,000
- Symposium Donation**
\$6,000.00

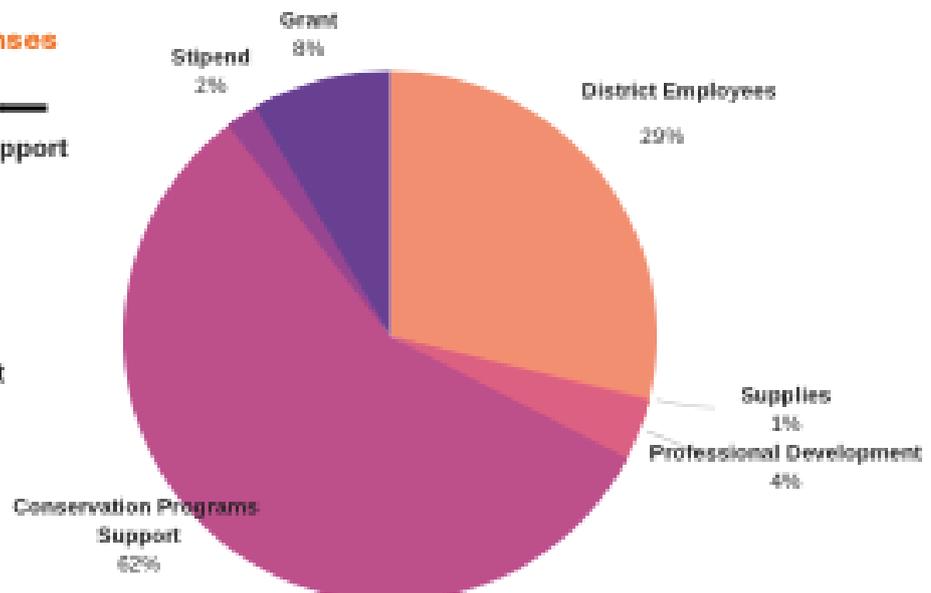
Fiscal Performance: Expenses

More than half of the SGSWCD's budget was dedicated to the support of conservation programs and district staff. The SGSWCD invested majority of its funding into the UGUM Watershed restoration project and the Feral Swine Pilot Program.

Fiscal Year 2018 Expenses

\$138,199.75

- Conservation Program Support**
\$78,800.58
- District Employees**
\$39,712.99
- Grant Employees**
\$11,665.85
- Professional Development**
\$5,120.33
- Director Stipends:**
\$2,700.00
- Supplies**
\$200.00





LOOKING AHEAD

The Guam SWCDs play a vital role within Guam's natural resources community by serving as the voice of their district cooperators; promoting the protection of Guam's soil and water resources through conservation and best management practices; and encouraging good stewardship through outreach and education. However, the island's economic challenges continues to affect the value of Guam SWCD services. Issues concerning untimely release of mandated District allocations; restricted administrative and technical capacity; and disconnected partnerships make it difficult for the SGSWCD to fully effectuate their mandates and powers vested by its authority. The Board looks forward to reexamining its strategic plans to better service its farmers, ranchers, partners, and affiliates. Additionally, the SGSWCD team is exploring different funding opportunities to increase district value and build staff capacity. Moreover, The SGSWCD Board has shifted priority objectives to increase conservation plans on agricultural lands; increase feral swine management on farm lands; engage public awareness of soil and water conservation and best management through outreach; and strengthen existing partnerships.

2019

STRATEGIC OBJECTIVES

- **OBJECTIVE 1:** Host Stakeholder Session and generate updated strategic plan for term 2020-2023.
- **OBJECTIVE 2:** Assist USDA NRCS to increase conservation plans and EQIP awards on Guam.
- **OBJECTIVE 3:** Support & Facilitate Education & Outreach to district cooperators.
- **OBJECTIVE 4:** Acquire funding to maintain, inventory conservation areas and/or reserves.
- **OBJECTIVE 5:** Strengthen Organizational Systems and Develop Team Capacity

Partner Directory

- USDA Animal and Plant Health Inspection (APHIS) Guam Wildlife Services | Tel: 671.635.4400
- Bureau of Statistics and Plans (Guam Coastal Management Program) | Tel: 671.475.9672
- CHamorro Land Trust Commission
Tel: 671.649.5263
- Department of Agriculture
Tel: 671.735.3942
- Farm Service Agency (FSA)
Tel: 671.300.8552
- Guam Environmental Protection Agency | Tel: 671.300.4751
- Håya Foundation | Tel: 671.727.7717
- National Oceanic Atmospheric Administration (NOAA) | Tel: 671.300.8586
- USDA Natural Resources Conservation Service | Tel: 671.300.8591
- UOG Center for Island Sustainability | Tel: 671.734..0478
- UOG College of Natural and Applied Sciences | Tel: 671.735.2050
- UOG Sea Grant | Tel: 671.735.2142

REMINDING OUR PEOPLE

Conservation Matters
24/7

SOUTHERN GUAM SOIL AND WATER CONSERVATION DISTRICT