

Territory of American Samoa Hazard Mitigation Plan

Acronyms

AET	Advanced Evaluation Team
ASC	American Samoa Cable, LLC
ASCC CNR	American Samoa Community College Community and Natural Resources
ASCMP	American Samoa Coastal Management Program
ASDRO	American Samoa Disaster Recovery Office
ASEDA	American Samoa Economic Development Authority
ASEF	American Samoa Economic Forecast
ASEPA	American Samoa Environmental Protection Agency
ASG	American Samoa Government
ASHC	American Samoa Hawaii Cable, LLC
ASHPO	American Samoa Historic Preservation Office
ASPA	American Samoa Power Authority
ASREC	American Samoa Renewable Energy Committee
ASTCA	American Samoa Telecommunications Authority
BCA	Benefit-Cost Analysis
BFE	Base Flood Elevations
BRIC	Building Resilient Infrastructure and Communities
CDBG	Community Development Block Grant
CDC	Centers for Disease Control and Prevention
CEDS	Comprehensive Economic Development Strategy
CERT	Community Emergency Response Team
CFR	Code of Federal Regulations
CFs	Critical Facilities
CHAMP	Coastal Hazard Assessment and Management Program
COO	Chief Operating Officer
COTS	Crown-of-thorns starfish
CPD	Community Planning and Development
CRAG	Coral Reef Advisory Group
CRS	Community Ratings System
CVI	Coastal Vulnerability Index
DBAS	Development Bank of American Samoa
DFIRM	Digital Flood Insurance Rate Map
DHS	American Samoa Department of Homeland Security
DHSS	Human and Social Services
DMWR	Department of Marine and Wildlife Resources
DOC	American Samoa Department of Commerce
DOE	Department of Education
DOH	Department of Health
DOJ	Department of Justice

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DOP	Department of Port Authority
DPA	Department of Port Administration
DPS	Department of Public Safety
DPW	Department of Public Works
DR	Disaster Declaration Number
DRC	Disaster Recovery Center
DRG	Digital Raster Graphics
EAS	Emergency Alert System
EMPG	Emergency Management Performance Grant
ENSO	El Niño/Southern Oscillation
EO	Executive Order
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIRMs	Flood Insurance Rate Maps
FMA	Flood Mitigation Assistance
GAR	Governor’s Authorized Representative
GDAC	Geospatial and Data Analysis Cell
GDP	Gross Domestic Product
GIS	Geographic Information System
GRD	Geologic Resources Division
GRE	Geologic Resources Evaluation
HAZMAT	Hazardous materials
HMC	Territorial Hazard Mitigation Council
HMEGP	Hazardous Materials Emergency Preparedness Grant Program
HMGP	Hazard Mitigation Grant Program
HUD	U.S. Department of Housing and Urban Development
I&M	Inventory and Monitoring Program
IBC	International Building Code
IPCC	Intergovernmental Panel on Climate Change
LTBI	Tuberculosis – latent TB infection
LTR	Long Term Recovery
LUPA	Land Use Permit Application
MMI	Modified Mercalli Intensity
MMR	Measles, Mumps, Rubella
MMRV	Measles, Mumps, Rubella, Varicella
MOU	Memorandum of Understanding
MRI	Magnetic Resonance Imaging

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MSL	Mean Sea Level
NCD	Non-Communicable Disease
NEG	National Emergency Grant
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NFIRA	National Flood Insurance Reform Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NPS	Non-Point Source
NRCS	Natural Resources Conservation Service (part of USDA)
NRID	Natural Resources Information Division
NTHMP	National Tsunami Hazard Mitigation Programs
NWR	NOAA Weather Radio
NWS	National Weather Service
ODAPM	Office of Disaster Assistance and Petroleum Management
OP	Office of Procurement
OTICIDE	Officer of Territorial and International Criminal Intelligence and Drug Enforcement
PA	Public Assistance
PDA	Preliminary Damage Assessment
PDC	Pacific Disaster Center
PDM	Pre-Disaster Mitigation
PGA	Peak horizontal ground acceleration
PNP	Private Non-Profit
PNRS	Project Notification and Review System
PPE	Personal protective equipment
PRI	Priority Risk Index
RFC	Repetitive Flood Claims Grant Program
SBA	Small Business Administration
SHMO	State Hazard Mitigation Officer
SLR	Sea Level Rise
SOI	Southern Oscillation Index
SRL	Severe Repetitive Loss
SSRI	Social Science Research Institute
T-HAT	Tutuila Hazard Assessment Tool
TAOA	Territorial Administration on Aging
TB	Tuberculosis
TEMCO	Territorial Emergency Management Coordinating Office
TOFR	Territorial Office of Fiscal Reform
U.S.CRTF	United States Coral Reef Task Force

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UBC	Uniform Building Code
USACE	United State Army Corps of Engineers
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USDI	United States Department of Interior
USGS	United States Geological Survey
VEI	Volcanic Explosivity Index
WSO	Weather Service Office
WUIWT	Wildland/Urban Interface Working Team

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Appendix A. Planning Profile Supporting Material

2010 Census Population and Housing Density Statistics

CPH-T-8. Population, Housing Units, Land Area, and Density for U.S. Island Areas: 2010

Table 1b. Population, Housing Units, Land Area, and Density by Place for American Samoa: 2010

[For information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/sfas.pdf>]

American Samoa Place	District and Island	County	Total population	Total housing units	Land area in square miles	Average per square mile of land	
						Population density	Housing unit density
American Samoa			55,519	10,963	76.46	726.2	143.4
Aasu village			494	79	3.44	143.7	23.0
Aasu village (part)	Eastern District	Ituau county	0	0	0.04	0.0	0.0
Aasu village (part)	Western District	Leasina county	494	79	3.40	145.3	23.2
Afao village	Western District	Lealataua county	182	33	0.54	335.5	60.8
Afono village	Eastern District	Sua county	524	82	0.98	532.7	83.4
Agugulu village	Western District	Lealataua county	51	9	0.15	331.9	58.6
Alao village	Eastern District	Vaifanua county	495	102	0.53	941.4	194.0
Alega village	Eastern District	Sua county	54	12	0.39	139.3	31.0
Alofau village	Eastern District	Sa'ole county	646	140	0.50	1,280.3	277.5
Amakua village	Western District	Lealataua county	162	31	0.78	208.8	40.0
Amanave village	Western District	Lealataua county	250	52	0.30	824.0	171.4
Amatau village	Eastern District	Sua county	96	23	0.31	314.4	75.3
Amouli village	Eastern District	Sa'ole county	920	189	0.66	1,389.8	285.5
Anua village	Eastern District	Ma'oputasi county	18	5	0.07	259.4	72.1
Aoa village	Eastern District	Vaifanua county	855	168	0.67	1,284.1	252.3
Aoloau village	Western District	Leasina county	615	120	2.24	274.0	53.5
Asili village	Western District	Lealataua county	224	40	0.54	418.5	74.7
Atu'u village	Eastern District	Ma'oputasi county	359	62	0.06	6,091.5	1,052.0
Aua village	Eastern District	Ma'oputasi county	2,077	392	1.05	1,977.2	373.2
Auasi village	Eastern District	Sa'ole county	113	20	0.26	441.4	78.1
Auma village	Western District	Lealataua county	254	52	0.13	1,990.0	407.4
Aumi village	Eastern District	Sua county	186	29	0.70	265.0	41.3
Aunu'u village	Eastern District	Sa'ole county	436	97	0.58	745.7	165.9
Auto village	Eastern District	Sua county	262	53	0.33	795.7	161.0
Avai'o village	Eastern District	Sua county	44	12	0.28	159.2	43.4
Faga'alu village	Eastern District	Ma'oputasi county	910	197	0.45	2,004.4	433.9
Faga'itua village	Eastern District	Sua county	433	76	0.39	1,100.4	193.1
Fagali'i village	Western District	Lealataua county	247	43	0.60	409.2	71.2
Fagamalo village	Western District	Lealataua county	47	11	1.39	33.8	7.9
Faganeanea village	Eastern District	Ituau county	150	31	0.53	285.3	59.0
Fagasa village	Eastern District	Ituau county	831	154	1.65	504.3	93.5
Fagatogo village	Eastern District	Ma'oputasi county	1,737	347	0.71	2,452.2	469.9
Faifalo village	Western District	Lealataua county	108	29	0.25	440.2	118.2
Faleasao village	Manu'a District	Faleasao county	182	40	2.68	80.5	14.9
Faleniu village	Western District	Tualata county	1,898	347	0.25	7,741.2	1,415.3
Fatumafuti village	Eastern District	Ma'oputasi county	113	22	0.04	2,926.8	569.8
Fuliga village	Western District	Tualata county	723	116	1.35	537.2	86.2
Ili'i'i village	Western District	Tualata county	3,195	642	1.39	2,298.4	461.8
Lauli'i village	Eastern District	Sua county	892	150	0.52	1,713.8	288.2
Leicaloa village	Eastern District	Ma'oputasi county	448	102	0.34	1,334.5	303.8
Leone village	Western District	Lealataua county	1,919	418	1.49	1,287.4	280.4
Leusoali'i village	Manu'a District	Fitiuta county	117	34	4.22	27.7	8.0
Luma village	Manu'a District	Ta'u county	183	37	0.36	511.5	103.4
Maia village	Manu'a District	Fitiuta county	153	36	4.38	35.0	8.2
Malaeimi village			1,182	228	1.65	715.2	138.0
Malaeimi village (part)	Eastern District	Ituau county	0	0	0.26	0.0	0.0
Malaeimi village (part)	Western District	Tualata county	1,182	228	1.39	847.7	163.5
Malaeloa/Aitulagi village	Western District	Leasina county	698	137	1.39	503.5	98.8
Malaeloa/Ituau village	Western District	Tualata county	550	98	0.23	2,340.8	417.1
Maloota village	Western District	Lealataua county	8	2	1.21	6.6	1.7
Mapusagafou village	Western District	Tualata county	1,126	221	0.80	1,412.6	277.3
Masausi village	Eastern District	Sua county	164	29	0.37	440.2	77.8

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Masefau village	Eastern District	Sua county	425	88	1.64	259.8	53.8
Matu'u village	Eastern District	Ituau county	399	91	0.47	840.9	191.8
Mesepea village	Western District	Tualauta county	444	97	0.11	4,102.0	896.2
Nua village	Western District	Lealataua county	141	25	0.37	381.9	67.7
Nu'uuli village			3,955	775	2.97	1,330.4	260.7
Nu'uuli village (part)	Eastern District	Ituau county	3,294	659	2.41	1,367.4	273.6
Nu'uuli village (part)	Western District	Tualauta county	661	116	0.56	1,172.5	205.8
Ofu village	Manu'a District	Ofu county	176	103	2.84	62.0	36.3
Olosega village	Manu'a District	Olosega county	172	76	1.22	140.4	62.0
Olenoa village	Eastern District	Vaifanua county	150	26	0.40	378.3	65.6
Pagai village	Eastern District		118	18	0.15	796.3	121.5
Pagai village (part)	Eastern District	Sa'ole county	24	5	0.11	215.4	44.9
Pagai village (part)	Eastern District	Sua county	94	13	0.04	2,556.7	353.6
Pago Pago village	Eastern District	Ma'oputasi county	3,656	691	3.43	1,065.8	201.4
Pava'ia'i village	Western District	Tualauta county	2,450	432	0.73	3,342.7	589.4
Poloa village	Western District	Lealataua county	193	42	0.32	596.9	129.9
Puapua village	Western District	Lealataua county	965	190	0.37	2,580.8	508.1
Sa'ilele village	Eastern District	Sua county	75	14	0.54	139.9	26.1
Satala village	Eastern District	Ma'oputasi county	297	61	0.15	1,924.2	395.2
Se'etaga village	Western District	Lealataua county	299	51	0.27	1,102.2	188.0
Sili village	Manu'a District	Olosega county	5	3	0.81	6.1	3.7
Si'ufaga village	Manu'a District	Ta'u county	175	47	5.77	30.3	8.1
Swains village	Swains Island	Swains Island	17	7	0.94	18.1	7.5
Tafuna village			7,945	1,616	2.49	3,190.5	648.9
Tafuna village (part)	Eastern District	Ituau county	2	1	0.21	9.6	4.8
Tafuna village (part)	Western District	Tualauta county	7,943	1,615	2.28	3,479.6	707.5
Taputimu village	Western District	Tualatai county	841	159	0.62	1,360.5	257.2
Tula village	Eastern District	Vaifanua county	405	82	0.51	794.5	160.9
Ututei village	Eastern District	Ma'oputasi county	684	120	0.33	2,072.7	363.6
Utumea East village	Eastern District	Sa'ole county	48	15	0.19	253.0	79.1
Utumea West village	Western District	Lealataua county	53	10	0.26	204.4	38.6
Utusia village	Eastern District	Sua county	74	14	0.12	631.7	119.5
Vailoatai village	Western District	Tualatai county	1,447	263	0.41	3,500.2	636.2
Vaitogi village	Western District	Tualauta county	1,959	362	1.38	1,421.3	277.2
Vatia village	Eastern District	Vaifanua county	640	116	2.50	256.2	46.4

Source: U.S. Census Bureau, 2010 Census American Samoa
Released: October 2013

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Population Distribution for each Village

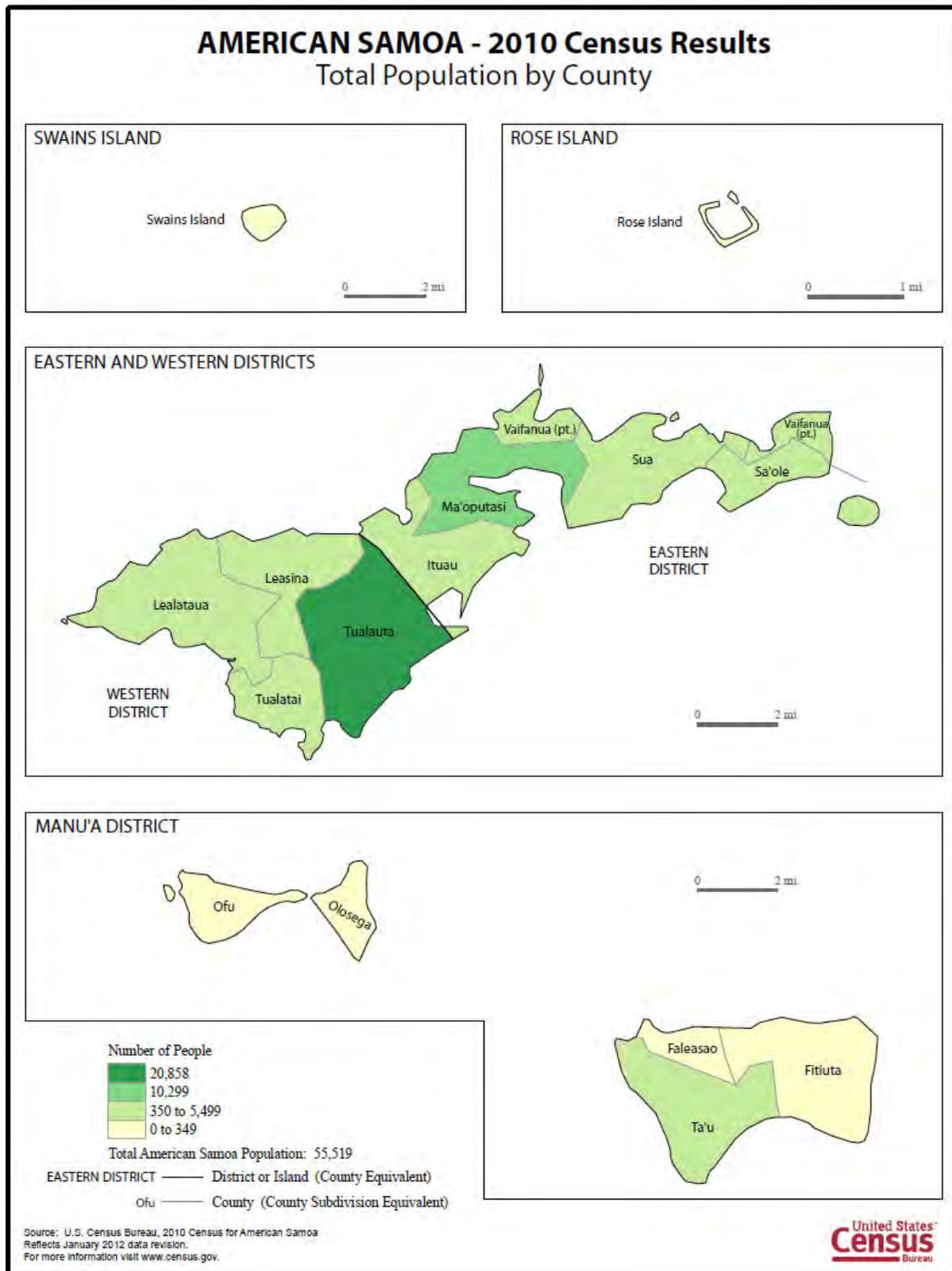
County (District)	Villages within	Approx. Size (sq. mi.)	2010 Population
TUTUILA ISLAND			
East Vaifanua (East District)	Alao Aoa Onenoa Tula Utumea East	2.31	1,953
Ituau (East District)	Faganeanea Fagasa Matuu Nuuuli	5.52	5,335
County (District)	Villages within	Approx. Size (sq. mi.)	2010 Population
Lealataua (West District)	Afao Agugulu Amaluia Amanave Asili Fagalii Fagamalo Failolo Leone Maloata Nua Poloa Seetaga Utumea West	9.22	3,884
Leasina (West District)	Aasu Aoloau Malaeloa Aitulagi	6.51	1,807
Maoputasi (East District)	Anua Atuu Aua Fagaalu Fagatogo Leloaloa Pago Pago Utulei	6.65	9,889
Saole (East District)	Alofau Amouli Auasi Aunu'u Island Pagai Utumea East	2.27	2,281
Sua (East District)	Afono Alega Amaua Aumi	3.00	3,223

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County (District)	Villages within	Approx. Size (sq. mi.)	2010 Population
	Auto Avaio Fagaitua Laulii Masausi Masefau Sailele		
(District)	Villages within	Approx. Size (sq. mi.)	2010 Population
Tualatai (West District)	Futiga Malaeloalo Ituau Taputimu Vailoatai	2.53	3,561
Tualata (West District)	Faleniū Iiili Malaeimi Mapusagafou Mesepe Nuuuli Pavaiai Tafuna Vaitogi	9.25	20,290
West Vaifanua (East District)	Vatia	9.25	640
AUNU'U ISLAND			
Saole (East District)	Aunu'u	0.59	436
MANU'A ISLAND			
Ta'u Island			
Faleasao (Manu'a District)	Faleasao	4.59	162
Fitiuta (Manu'a District)	Leusoalii Maia	6.73	270
Ta'u (Manu'a District)	Luma Siufaga	188.56	176
Ofu Island			
Ofu (Manu'a District)	Ofu	2.84	176
Olosega Island			
Olosega (Manu'a District)	Olosega Sili	2.03	177
Rose Atoll		0.08	0
Swains Island		0.58	17

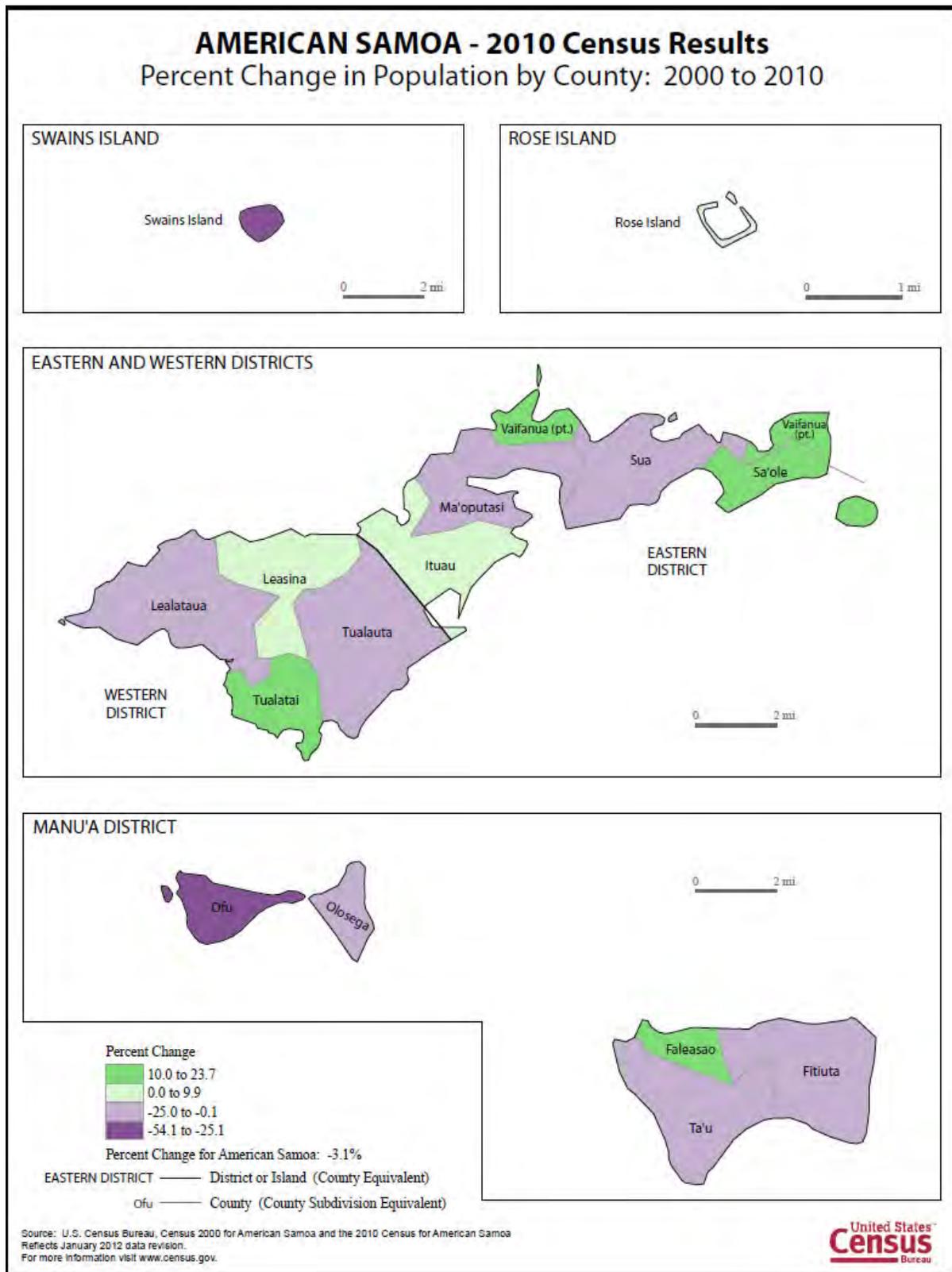
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Total Population by County



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Percent Change in Population by County: 2000 to 2010



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U.S. Energy Information Administration, American Samoa Territory Energy Profile²¹⁸



American Samoa Territory Energy Profile

American Samoa Quick Facts

- American Samoa uses imported fossil fuels for almost all of the territory's energy needs, including transportation, drinking and waste water treatment, and most (about 98% in 2016) of its electric power generation.
- Electricity prices in American Samoa vary with world petroleum prices. In mid-2019, residential electricity prices in American Samoa were about three times higher than the U.S. average and comparable to, but slightly higher than, Hawaii's average residential price.
- The Manu'a Island group was expected to reach 100% renewable-sourced electricity when Ofu and Olosega Islands completely converted to solar power, but a fire in 2019 damaged the battery storage system on Ofu Island. Generation on the two smaller islands in the group is again diesel-fueled.
- American Samoa has adopted a goal to obtain 50% of its energy from renewable energy resources by 2025 and 100% by 2040, and expects to replace diesel fuel primarily with solar energy.
- About two-fifths of American Samoan households are not connected to an electric power grid, and per capita electricity consumption in the territory is about one-fourth of the per capita electricity consumption of the 50 U.S. states.

Last Updated: November 21, 2019

Data

Last Update: March 19, 2020 | **Next Update:** April 16, 2020

Economy

Population and Industry	American Samoa	United States	Period
Population	0.1 million	327.2 million	2018
Gross Domestic Product	\$ 1 billion	\$ 19,485 billion	2017

Prices

Electricity	American Samoa	United States	Period
Residential	NA	12.69 cents/kWh	Dec-19
Commercial	NA	10.31 cents/kWh	Dec-19

²¹⁸ <https://www.eia.gov/state/analysis.php?sid=AQ>

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Prices

Industrial	NA	6.37 cents/kWh	Dec-19
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Reserves

Reserves	American Samoa	United States	Period
Crude Oil	0 billion barrels	42 billion barrels	2018
Natural Gas	0 trillion cu ft	438 trillion cu ft	2018
Recoverable Coal	0 million short tons	254,896 million short tons	2015
Capacity	American Samoa	United States	Period
Total Electricity Installed Capacity	*	1,074 million kW	2016

Imports & Exports

Total Imports	American Samoa	United States	Period
Crude Oil Imports	0 thousand barrels/day	7,850 thousand barrels/day	2016
Natural Gas Imports	0 billion cu ft	3,042 billion cu ft	2017
Coal Imports	--	7,777 thousand short tons	2017
Total Exports	American Samoa	United States	Period
Crude Oil Exports	0 thousand barrels/day	591 thousand barrels/day	2016
Natural Gas Exports	0 billion cu ft	3,168 billion cu ft	2017
Coal Exports	--	96,954 thousand short tons	2017

Supply

Production	American Samoa	United States	Period
Total Energy	0 trillion Btu	84 trillion Btu	2016
Crude Oil, NGPL, and Other Liquids	0 thousand barrels/day	17,914 thousand barrels/day	2018
Natural Gas - Gross	0 billion cu ft	32,915 billion cu ft	2015
Coal	--	774,610 thousand short tons	2017
Total Utility-Scale Net Electricity Generation	American Samoa	United States	Period

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Supply

Total Net Electricity Generation	*	4,095 billion kWh	2016
Petroleum, Natural Gas, and Coal Net Electricity Generation	*	2,654 billion kWh	2016
Total Electricity Generation from Renewable Sources	0 billion kWh	642 billion kWh	2016
» Hydroelectric	0 billion kWh	268 billion kWh	2016
» Other Renewables	0 billion kWh	374 billion kWh	2016

Consumption

by Source	American Samoa	United States	Period
Total Energy	*	98 trillion Btu	2016
Total Petroleum Products	--	19,958 thousand barrels/day	2017
» Motor Gasoline	--	9,327 thousand barrels/day	2017
» Distillate Fuel	--	3,932 thousand barrels/day	2017
» Liquefied Refinery Gases	--	1,299 thousand barrels/day	2017
» Jet Fuel	--	1,682 thousand barrels/day	2017
» Kerosene	--	5 thousand barrels/day	2017
» Residual Fuel	--	342 thousand barrels/day	2017
» Other Petroleum Products	--	3,371 thousand barrels/day	2017
Natural Gas	0 billion cu ft	27,110 billion cu ft	2017
Coal	--	707,511 thousand short tons	2017

Carbon Dioxide Emissions

by Source	American Samoa	United States	Period
Total Fossil Fuels	*	5,240 million metric tons	2016
Petroleum	*	2,375 million metric tons	2016
Natural Gas	0 million metric tons	1,507 million metric tons	2016

Territory of American Samoa Hazard Mitigation Plan

Carbon Dioxide Emissions

Coal	--	1,358 million metric tons	2016
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Analysis

Last Updated: November 21, 2019

Overview

American Samoa is part of the Samoan Islands chain, which includes both American Samoa and the independent nation of Samoa.¹ It is the southernmost territory of the United States and is the only U.S. possession in the southern hemisphere.² The territory's five inhabited islands and two uninhabited coral atolls are located about halfway between Hawaii and New Zealand and lie at the northern end of the Tonga Trench, the second-deepest oceanic trench in the world.^{3,4} American Samoa lacks fossil energy resources and depends on imported petroleum products, primarily diesel fuel, to meet most of its energy needs.⁵ However, the territory does have solar, wind, and biomass resources.^{6,7} The inhabited islands of American Samoa are volcanic in origin, but there have been no eruptions since the 19th century.^{8,9} Volcanic activity in the region may give the island group geothermal resources, but assessments have not yet identified any commercial geothermal potential.^{10,11} A small but increasing amount of the islands' electricity generation comes from solar energy.¹²

American Samoa depends on petroleum imports for almost all its energy needs.

American Samoa consists of the adjacent islands of Tutuila and Aunu'u; the Manu'a group of Ta'u, Ofu, and Olosega; and its two coral atolls, Swains and Rose islands. The territory has a total land area of about 80 square miles—slightly larger than Washington, DC.^{13,14} Following Polynesian tradition, nearly all land is communally owned by extended families.¹⁵ Most of American Samoa's population of about 55,000 people live on the largest island, Tutuila.^{16,17} The deepwater port at Pago Pago on Tutuila is one of the deepest natural harbors in the South Pacific. American Samoa has a tropical marine climate with little seasonal variation in temperature. A rainy season runs from November to April, but rain falls throughout the year, and some areas receive as much as 300 inches of rain annually. The islands also experience occasional devastating tropical cyclones.^{18,19}

American Samoa's gross domestic product (GDP) on a per capita basis is about one-fifth that of the United States.²⁰ The territory's largest private sector industry is tuna fishing and processing, and canned tuna is American Samoa's main export. The tuna industry was negatively impacted by an earthquake and tsunami that devastated American Samoa in September 2009.^{21,22} Since then, fish shortages have caused intermittent cannery closures.²³ Government is the territory's other major economic activity. Government agencies employ about two-fifths of the American Samoan labor force.²⁴ Livestock and agricultural products are not export items but are grown for local consumption and include bananas, coconuts, vegetables, taro, breadfruit, yams, copra, pineapples, papayas, and dairy products. American Samoa's potential for tourism is limited by its distance from major population centers and the lack of tourist accommodations.^{25,26,27} After the 2008 recession and the 2009 earthquake and tsunami, American Samoa's economy was aided, in part, by infusions of federal economic and disaster recovery assistance.²⁸ Despite the impacts of tropical cyclone Gita in early 2018, American Samoa's GDP rose in that year, again in part because of the influx of aid and aid workers.^{29,30,31}

Territory of American Samoa Hazard Mitigation Plan

Petroleum

American Samoa does not produce or refine crude oil and is dependent on imported petroleum products.³² Fluctuations in world petroleum product prices are a major concern for the islands' economy.³³ Petroleum products are imported in tankers, which unload at a terminal and tank farm adjacent to the main harbor at Pago Pago. The territory imports diesel fuel, jet fuel, and motor gasoline.³⁴ Before the 2009 earthquake and tsunami, American Samoa typically consumed about 4,100 barrels of petroleum and other liquids per day. Since 2011, the territory's petroleum consumption has been about 2,500 barrels per day, even though the population has remained fairly constant.^{35,36,37} The decrease is, in part, because of the installation of more efficient replacement generators after 2009 and because of the increased use of renewable resources for electricity generation.³⁸

Electricity

Nearly all of American Samoa's electricity is supplied by generators burning diesel fuel, and about 97% of the territory's power is generated on the main island, Tutuila.³⁹ The American Samoa Power Authority (ASPA), a government corporation, owns and operates two generating plants on Tutuila. Almost 40 megawatts of installed diesel-fueled capacity serve the island. The two power plants are the Tafuna plant that serves the airport and residential and small commercial customers on the western side of the island and the Satala plant that is located near Pago Pago Harbor close to the tuna canneries and a government building. As of 2018, an additional 5 megawatts of solar photovoltaic capacity was connected on the island.⁴⁰ The three islands of the Manu'a group had largely converted to solar power, but a fire at the solar facility on one of the two smaller islands has delayed that conversion.^{41,42,43} ASPA also provides drinking water, solid waste removal, and wastewater treatment.⁴⁴ Pumping, treating, distributing, and collecting water requires a significant share of ASPA's electricity.⁴⁵

The September 2009 earthquake and resulting tsunami severely impacted generating capacity in American Samoa. The Satala power plant was destroyed, and the generating capacity on Tutuila was reduced by more than half.⁴⁶ Leased generators burning ultra-low sulfur diesel temporarily replaced those destroyed in 2009, which had used high-sulfur diesel fuel.⁴⁷ Ultra-low sulfur diesel-fueled replacement generating units that were 20% more efficient than the old units came online at the plant site in the spring of 2017. The plant was rebuilt on higher ground to avoid floods and re-engineered to better resist earthquakes.⁴⁸ Additional federal grants were awarded to help fund underground power lines protected from high wind damage. There are a few buried power lines but most remain overhead because of cost constraints.^{49,50,51}

About two-fifths of American Samoa's households are not connected to an electric grid.

About two-fifths of American Samoa's households are not connected to an electric grid, and per capita electricity consumption in the territory is about one-fourth that of the 50 U.S. states.^{52,53,54,55} Industrial and commercial users consume two-fifths of all power generated in American Samoa. The residential sector uses about three-tenths. The government consumes about one-sixth, and the territory's utility and system losses account for the rest.⁵⁶

Pacific island nations have some of the highest electricity rates in the world.⁵⁷ Electricity rates in American Samoa fluctuate because the territory's fuel surcharge is linked to volatile world oil prices.⁵⁸ In mid-2019, despite increased renewable generation and world petroleum prices that were below their 2008 high, the residential electricity price in the territory was about three times higher than the average of the 50 states.

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Electricity prices in American Samoa are comparable to, but slightly higher than, electricity prices in Hawaii.^{59,60,61}

Renewable energy

American Samoa has a goal to meet 50% of its energy needs with renewable resources by 2025 and all of its energy needs with renewable resources by 2040. With American Samoa's high cost of electricity and geographic isolation, the government established the American Samoa Renewable Energy Committee (ASREC) in 2010 to work with federal experts to reduce the territory's reliance on fossil fuels by bringing sustainable renewable energy technologies to the islands.⁶² The committee developed strategies to assess and take advantage of the solar, wind, and geothermal renewable resource potential on Tutuila, American Samoa's main island. ASREC also launched a project to supply the smaller Manu'a island group entirely with renewable-sourced electricity generation. Electricity costs on those islands were 50% higher than on Tutuila.^{63,64} Subsequently, ASREC has considered ways to reduce petroleum use in land-based vehicles.⁶⁵

American Samoa obtains increasing amounts of its electricity from solar power and has plans to substantially expand solar energy use.

American Samoa is close to the equator, and has substantial solar energy resources.⁶⁶ In 2016, ASPA completed conversion from diesel-powered to solar photovoltaic (PV) electricity generation on the largest island in the Manu'a group, Ta'u, and replaced the use of about 100,000 gallons of diesel fuel per year. Ta'u has a hybrid solar and energy storage system that supplies 100% of the island's electricity. The 1.4-megawatt solar array is coupled with a 6 megawatt-hour battery storage system.^{67,68} As of May 2017, the other two islands in the Manu'a group, Ofu and Olosega, fueled 80% of their electricity needs with solar energy from a 350-kilowatt solar PV array, batteries with 1,000 kilowatt-hours of storage, and three new fuel-efficient diesel generators.⁶⁹

By 2017, the Manu'a island group received 90% of its electricity from renewable energy. The Manu'a group was expected to reach 100% renewable-sourced electricity when Ofu Island and Olosega Island completely converted to solar power, but the battery storage system for the solar plant on those two islands experienced a fire in 2019, and their generation is again diesel fueled.^{70,71} ASPA has announced a similar solar project on Tutuila. The Tutuila solar project will have battery backup and will generate 30 million kilowatt-hours of power each year. It is anticipated that the Tutuila solar project will offset 2 million gallons of diesel fuel purchases annually.⁷² In 2018, ASPA was connected to 5 megawatts of ground-mounted solar PV generation and 900 kilowatts of customer-sited, small-scale generation.⁷³ Customer installations include arrays on rooftops of government and private buildings, and solar hot water systems. In late 2018, ASPA signed a contract for the installation of 20 megawatts of additional solar PV capacity on Tutuila.⁷⁴

An ASPA study identified some potential wind power sites around Tutuila.⁷⁵ In 2018, ASPA solicited proposals for the installation of wind generating capacity, and later that year a contract was signed for the construction of a 42-megawatt wind project on Tutuila.^{76,77} Challenges for wind energy development in American Samoa include tropical cyclones, community acceptance, and grid stability. American Samoa's communal land ownership structure makes long-term leasing for larger projects a potential hurdle for development.⁷⁸ Preliminary studies of American Samoa's geology also indicate geothermal energy could provide a stable, economical baseload for the islands, but commercially viable geothermal project sites have not been found.⁷⁹

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Waste heat emitted by diesel generators at ASPA's Tafuna plant on Tutuila is captured and used to produce electricity.⁸⁰ In 2014, the utility signed an agreement to buy electricity generated at a waste-to-energy plant to be built at Tutuila's Futiga landfill, which cut waste in the landfill and helped meet ASPA's electricity needs.⁸¹ Waste volumes at the landfill are near capacity, and in 2018, an ASPA project to recompact trash was completed that increased the landfill's capacity and extended the life of the landfill by 10 years.^{82, 83}

American Samoa encouraged customer-sited, small-scale generation projects by adopting a net metering law in 2008. The law allows owners of small solar or wind facilities, installed primarily for the consumer's use, to receive credit for surplus power sent to the grid.⁸⁴ To reduce demand and improve energy efficiency, the government offers residential weatherization assistance as well.⁸⁵

Coal

American Samoa has no known coal reserves and does not produce or consume coal.⁸⁶ Although coal is not used in American Samoa, the port of Pago Pago was a refueling site for both Naval and commercial trans-Pacific coal-fired shipping from 1899 until 1951.⁸⁷

Natural gas

American Samoa has no known natural gas reserves and does not produce or consume natural gas.⁸⁸

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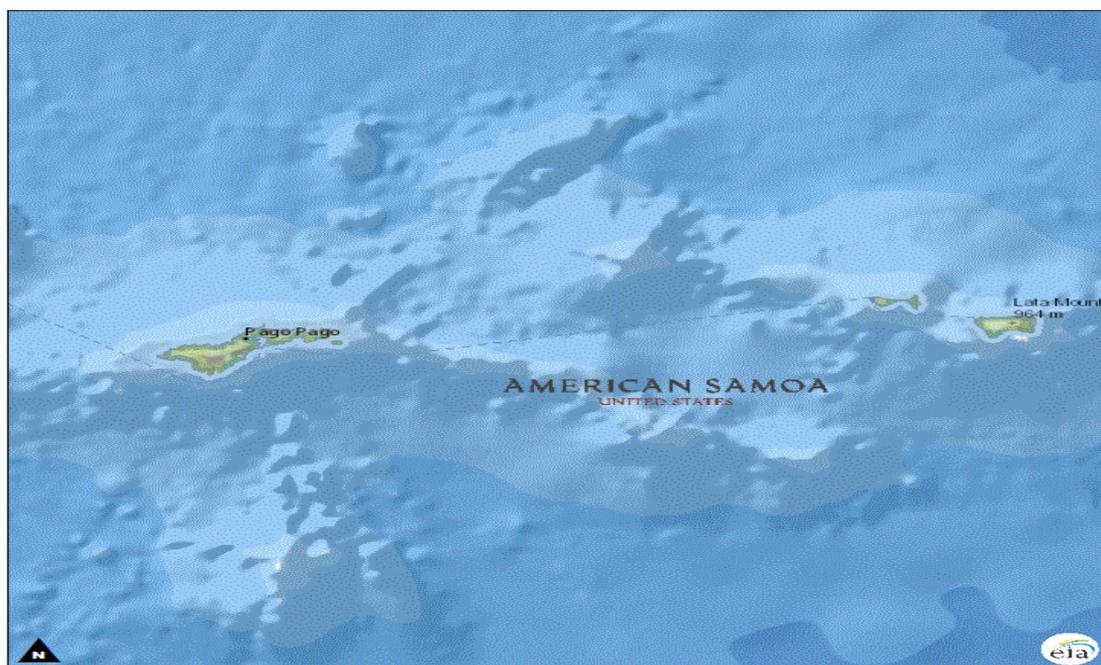
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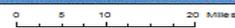
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Mask	Nuclear Power Plant	Petroleum Refinery
Surface Coal Mine	Other Power Plant	Strategic Petroleum Reserve
Underground Coal Mine	Other Fossil Gases Power Plant	NGL Market Hub (z)
Biomass Power Plant	Petroleum Power Plant	Natural Gas Market Hub (z)
Coal Power Plant	Pumped Storage Power Plant	Natural Gas Inter/Intrastate Pipeline (z)
Geothermal Power Plant	Solar Power Plant	Petroleum Port
Hydroelectric Power Plant	Wind Power Plant	LNG Import/Export Terminal
Natural Gas Power Plant	Wood Power Plant	

<http://www.eia.gov/state/>

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How a Pacific Island Changes from Diesel to 100% Solar Power²¹⁹

How a Pacific Island Changed From Diesel to 100% Solar Power

The island of Ta'u in American Samoa now boasts a solar microgrid from Tesla's SolarCity.

BY DANIEL LIN

PUBLISHED FEBRUARY 23, 2017

TA'U, AMERICAN SAMOA On a recent Wednesday evening on the island of Ta'u—one of the outer islands in American Samoa—most of the people in all three villages are at *pese*—or church choir—practice. The annual island-wide youth group showcases are coming up and each choir senses the pressure of having to perfect their routines.

For the Faleasao village choir, there is added pressure from being the smallest village on the island. But this year, the underdog choir believe they have a special routine that will blow away the competition. Their secret weapon: Disney's *Moana*. Specifically, an adapted version of the song "We Know The Way," complete with synchronized dance moves to mimic life as voyaging islanders. Time 1:18

WHAT IS SOLAR POWER?

In a nearby home, a TV is tuned to a local Samoan news station, but the sound is muted. The only noise is the low humming of a box fan and the distant singing of the village choir. Musu Fuiava Mutini happily hums along, glued to her tablet device. Mutini, 82, is a village elder who has seen her home change immensely through the years.

"Before, there used to be lots of people living here," she says. "But in the time of Hurricane Tusi in 1987, everything was destroyed. Most people moved away, to Pago Pago [capital of American Samoa] or the U.S." She pauses and sighs, caught in a distant memory. "This island is very different now."

In many ways, islands like Ta'u are a microcosm for our planet. Space and resources are both limited and the success of human communities depends on the effective management of these critical components. In looking toward a more sustainable future, the hundreds of residents of Ta'u

²¹⁹ <https://www.nationalgeographic.com/news/2017/02/tau-american-samoa-solar-power-microgrid-tesla-solarcity/>

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have put their faith in a new solar energy project, which some say they would like to see replicated around the world. ([See how Pacific Islanders are living with climate change.](#))

The Solar Revolution

In November, Ta'u saw the completion of a new solar-powered microgrid, which shifted the entire island's energy generation from 100 percent diesel fuel to 100 percent solar. (The island's population varies with the season but usually falls between 200 and 600 people.)

The solar project was installed by SolarCity, a California-based company recently purchased by Elon Musk's Tesla. The \$8 million project was funded by the U.S. Department of Interior and the American Samoa Power Authority (ASPA).

Located on seven acres of land on the northern coast of the island, the system includes 5,328 solar panels, generating 1.410 megawatts of electricity. The energy can be stored in 60 Tesla Powerpacks—large batteries that allow Ta'u to stay powered for up to three days without any sunlight.

Installation of the panels wasn't easy—Ta'u is some 4,000 miles from California. Extra considerations had to be made for the island's extreme humidity and likelihood of severe tropical storms. As a result, the system was built with the capability of withstanding Category 5 hurricane winds.

The last time Ta'u underwent an energy revolution was in 1972, when ASPA constructed a diesel power plant and provided island-wide electricity for the first time. Prior to that, kerosene lanterns were the primary source of evening light. For the few families who could afford it, small home generators were a luxury. For everyone else, life moved at a slower, simpler pace.

Introducing diesel generators to Ta'u essentially introduced a new way of life. Suddenly, lights turned on with the flick of a switch and the list of activities around the villages and inside homes increased drastically. With electricity also came new ways of preparing and preserving food, thus changing local diets. Pretty soon, the loud humming of diesel generators became a part of the island's soundtrack.

The Modern Island Dilemma

Even with the relatively small amount of energy consumers on Ta'u, the offset of fossil fuels from switching over to solar power is significant: about 110,000 gallons of diesel, not to mention the amount of fuel it takes for shipping. These numbers can make a strong argument for bringing these types of renewable energy projects to island communities, but the reality is that there is still trepidation around the idea of uprooting the status quo.

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“There are islands that have conferences upon conferences where all they talk about is sustainability,” says Danielle Mauga, one of ASPA’s engineers, when asked about the decision to proceed with this multi-million dollar project.

“A lot of other islands are working towards the same goal, yet this island has managed to achieve a major milestone by being able to claim energy independence with solar power,” says Mauga. ([Learn about a solar microgrid in Haiti.](#))

Aside from the environmental concerns of burning diesel fuel, another side effect was the loss of the self reliance of old. Instead, people on Ta'u relied on the shipment of food, supplies, and drums of oil.

That left them at the mercy of shipping schedules. Although a supply vessel is supposed to arrive every fortnight, delays due to weather and mechanical problems are frequent, sometimes even stretching for months. Rationing of food and fuel is a regular occurrence.

Many other Pacific islands face the same reality of dependence on imported goods and energy.

The Community Perspective

But since switching over from diesel power to solar power, life on the island of Ta'u has gone on as usual. People in all three villages resumed their daily routines—work, tending to the plantation, going to church, resting, repeat—without missing a beat. In fact, when ASPA and SolarCity officially “flipped the switch” for the solar power plant (and simultaneously switched off the diesel generators) in November, the lights around the island barely flickered.

When the diesel power plant was built over four decades ago, the changes were immediately felt by the community. This time, the new solar facility—though just as monumental of a technological shift—does not have the same life-changing sensation for consumers of the public utility. Switching from kerosene lanterns to a light switch is a much more obvious disruption to daily island life than switching from diesel to solar power.

But this is exactly what makes the Ta’u solar energy project a success, say the project's backers. People can go about their normal routines without any interruption, even though everything has changed behind the scenes.

And yet, it seems as though everybody on this little island is aware that they are a part of something special. Ask anyone in Ta’u what they think about the project and they will probably

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mention one of two things: relief that they no longer have to rely so heavily on unreliable shipments of fuel, and an understanding that 110,000 gallons of diesel fuel is no small amount.

The project has also seemed to sow the seeds of sustainability. In the island's classrooms, children yell out buzzwords like “Going Green” and “Saving the Planet” when asked to reflect about solar energy, while adults see it as a boon that will save them money and stress in the long run.

Looking up from her tablet, village elder Mutini says the solar panels may help brighten the future of the island. “I think these new changes to the island are good blessings,” she continues. “Maybe the changes will bring more people back here again.”

A Roadmap for the Future?

Just as ancient Polynesians once viewed the ocean as a set of pathways between islands, Samoans today also have a deep sense of interconnectedness with the world beyond their shores. Technology, connectivity, and travel options have improved exponentially, thus making the distance between even the remotest islands seem closer than before.

The solar project on Ta’u may also help inform conversations that are taking place on other islands around the world. Communities want to know if renewable energy is worth the investment, if the technology is reliable, and if people will respond well.

Ta’u's elders hope their future will more closely resemble their distant past, when people were self-sufficient and living in harmony with their environment.

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American Samoa Government News²²⁰



AMERICAN SAMOA GOVERNMENT NEWS

HOME	GOVERNMENT	SERVICES	VISITORS	CONTACT US
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Manu'a now powered by Solar Energy - October 27, 2016

In Ta'u, electricity is now 100% renewable (solar) energy resulting in a significant decrease in American Samoa's carbon footprint at a global level. On October 27th, Governor Lolo Moliga, other government officials and guests were in Ta'u, Manu'a for the official dedication and commissioning of the ASPA Ta'u Renewable Energy PV Project. American Samoa Power Authority Director Utu Abe Malae explained that this project was funded with 80% of revenues collected through ASPA's customer electricity accounts, plus ASED funds, as well as 20% provided by the Department of Interior. "What you do in Tutuila, must also be done in Manu'a... was Governor Lolo Matalasi Moliga's vision" said Director Malae, "...and today a part of his vision has been accomplished..."

The project is situated in the village of Faleasao and is operated and maintained by the American Samoa Power Authority. The project description lists 1,410 kW of Solar panels and 6,000 kWh of battery storage. Also, three new 275KW Cummins Diesel Generators and a 480V switchgear. ASPA acknowledges the great assistance and support of all the individuals and agencies that involved in making this development possible;

- Honorable Lolo Matalasi Moliga-Governor
- Honorable Lemanu Peleti Mauga-Lt. Governor
- U.S. Department of Interior
- ASPA Customers
- ASED
- ASREC
- Solar City
- Cummins South Pacific
- McConnell Dowell
- Happy Trucking
- Paramount Builders Inc.
- Workers from Ta'u
- Faleasao Village
- Leilua'ialii Fa'aitu Fa'aitu Jr.
- Ma'o Fa'auma Gogo
- Alailefaleula Penieli Tela



More photos on Facebook 

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²²⁰ <https://www.americansamoa.gov/aspa-solar>

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This Island in American Samoa is Almost 100% Powered by Tesla Solar Panels²²¹



SolarCity/YouTube

TECH

This Island in American Samoa Is Almost 100% Powered by Tesla Solar Panels

PETER DOCKRILL

23 NOVEMBER 2016

Tesla has announced their solar panels are nearly entirely powering the island of Ta'u in [American Samoa](#).

The island used to depend entirely on imported diesel fuel for its electricity, but a new initiative has seen the islanders build a 1.4-megawatt microgrid that absorbs and stores solar power for all their energy needs.

Ta'u is one of five main islands in the South Pacific that make up American Samoa, and is located more than 7,000 kilometres (4,350 miles) from the west coast of the US.

It's pretty isolated, and with a tiny population of less than 600 residents, Ta'u has historically relied on shipping for everything they can't grow, make, or otherwise produce on the island – including the fuel that powers their electricity system.

"I recall a time they weren't able to get the boat out here for two months," says [Keith Ahsoon](#), a local resident whose family owns one of Ta'u's food stores.

²²¹ <https://www.sciencealert.com/this-island-in-american-samoa-is-almost-100-powered-by-tesla-solar-panels>

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"We rely on that boat for everything, including importing diesel for the generators for all of our electricity."

Each of those generators burn through some 1,135 litres (300 gallons) of fuel per day, amounting to approximately 414,500 litres (109,500 gallons) of diesel yearly – and that's not counting the energy costs of shipping fuel to Ta'u in the first place.

Now, thanks to a partnership between [SolarCity](#) and Tesla, an array of 5,328 solar panels – along with 60 Tesla Powerpacks (the industrial-grade version of the company's [Powerwall batteries](#)) – the islanders have been able to break their dependence on diesel imports for the first time.

The project, funded by the American Samoa Economic Development Authority, the Environmental Protection Agency, and the Department of Interior, kicked off operations this week, after being in construction for one year.

Tesla and SolarCity haven't disclosed exactly how much of Ta'u's electricity will now be provided by the microgrid, but a [SolarCity blog post](#) says it can supply "nearly 100 percent of the island's power needs".

Of course, it's easier and more practical to install a standalone solar system like this on a Sun-drenched island with a population under 600 than it would be in a large, denser and potentially much less sunny city [like the ones most of us live in](#).

But the project still offers a tantalising glimpse of how we could [unshackle ourselves from fossil fuels](#) with the right clean energy infrastructure.

The system offers 6 megawatt hours of storage, meaning the island can stay powered for three full days without the sun shining – but when it does, the microgrid absorbs enough solar in just 7 hours of sunlight to top the Powerpacks back up to 100 percent capacity.

Provided sunny weather is constant enough, the microgrid will enable a much more consistent power supply than the rationing and outages Ta'u residents used to experience under their old fuel-based system.

"Once diesel gets low, we try to save it by using it only for mornings and afternoons," [says Ahsoon](#). "It's hard to live not knowing what's going to happen. I remember growing up using candlelight."

Territory of American Samoa Hazard Mitigation Plan

Tesla and Solar City are **currently installing** an even bigger solar farm with almost 55,000 solar panels on the Hawaiian island of Kauai – and Tesla CEO Elon Musk has **declared** the companies intend to build hundreds more of these installations.

As far as Ahsoon is concerned, investing in clean energy over fossil fuel-based power is a step in the right direction.

"Living on an island, you experience global warming firsthand," **he says**. "Beach erosions and other noticeable changes are a part of life here. It's a serious problem, and this project will hopefully set a good example for everyone else to follow."

Appendix B. Planning Process Supporting Material

Press Release May 1, 2020

FOR IMMEDIATE RELEASE

OFFICE OF DISASTER ASSISTANCE AND PETROLEUM MANAGEMENT (ODAPM)

MAY 1, 2020



Disaster Planning Public Survey

Territory of American Samoa

American Samoa Hazard Mitigation Plan

The Territory of American Samoa is currently engaged in a planning process to update the Hazard Mitigation Plan from 2015. This plan outlines ways for the Territory to become less vulnerable to disasters caused by natural hazards, such as hurricanes, earthquakes, flooding and landslides. Public participation is an essential piece of this planning process.

The public is encouraged to complete the 2020 American Samoa Hazard Mitigation Public Opinion Survey. You can find it online at this address;

<https://www.surveymonkey.com/r/AmericanSamoa2020>.

The survey provides an opportunity for you to share your opinions and participate in the mitigation planning process. The information you provide will help us better understand your hazard concerns and can lead to mitigation activities that should help lessen the impacts of future disasters.

The purpose of the Hazard Mitigation Plan Update is to identify and assess the territory's natural hazard risks and determine how to best minimize and manage those risks. Upon completion, this plan will be presented to the Governor's Authorized Representative (DR-4357 TS Gita) for review and adoption and then submitted to the Federal Emergency Management Agency (FEMA) Region

Territory of American Samoa Hazard Mitigation Plan

IX for review and approval. A FEMA approved plan makes American Samoa eligible for federal mitigation grant funding.

The Territory of American Samoa FEMA approved mitigation plan enabled over \$18 million for hazard mitigation funding following the 2009 tsunami disaster. FEMA provides funds for mitigation work before and after a disaster if an approved mitigation plan is in place. Keeping the plan current protects the Territory. Projects identified in the plan to receive priority as funding becomes available.

Public participation is an important part of the mitigation planning process. Residents, business owners and government officials are encouraged to participate in the Public Opinion Survey. If you are interested in learning more or have a question, please contact Lima Fiatoa lima.fiatoa@odapm.as.gov.

FOR IMMEDIATE RELEASE

OFFICE OF DISASTER ASSISTANCE AND PETROLEUM MANAGEMENT (ODAPM)

MAY 1, 2020



**Disaster Planning Public Survey
Territory of American Samoa
American Samoa Hazard Mitigation Plan**

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Territory of American Samoa Hazard Mitigation Plan

BizFest opens today at Suigaula o le Atuvasa

Wed, 04/11/2018 - 2:27pm



Commerce Department director Keniseli Lafaele [SN file photo]

By Fili Sagapolutele

fili@samoanews.com

Pago Pago, AMERICAN SAMOA — The US Federal Emergency Management Agency (FEMA) is joining its local counterparts participating in the three-day 2018 Business Festival, or BizFest, which opens today at Suigaula o le Atuvasa in Utulei and the event is expected to attract many more visitors with the arrival tomorrow of the Emerald Princess cruise ship. Commerce Department director Keniseli Lafaele said last week that the BizFest, which is part of the 2018 Flag Day events, focuses on supporting public-private partnership within key industries. It also aims to showcase the various products and services — both existing or on the horizon — offered by local entrepreneurs and businesses.

In a statement yesterday, FEMA announced that its mitigation team and the Hazard Mitigation Office of American Samoa Office of Disaster Assistance will participate in the BizFest. And they will feature at their booth, “how-to materials” on how to build better and stronger.

Informal discussions and printed material in both the Samoan and English languages will feature:

Territory of American Samoa Hazard Mitigation Plan

- How to elevate electrical components so they will be above water if your house floods
- How to use flood resistant materials
- A check-list to use with contractors
- Other helpful tips and information
- A display on how to tie building components together, from the foundation through the walls to the roof to withstand wind pressure
- Keychains and other interesting and eye-catching items for adults and children.

According to FEMA, “specialists will answer questions to make this business fair both interesting and informative so people can minimize damage the next time a disaster strikes.”

The FEMA team is on island along with other federal partners such as the US Small Business Administration (SBA), in response to February’s Tropical Storm Gita, which devastated key areas on Tutuila.

Asked for reaction to FEMA’s participation in the BizFest, Lafaele told Samoa News yesterday that “it’s a good venue to spread valuable info to the people and businesses.” Lafaele said last week that the vision behind the BizFest is that “we want to create a platform to support our local businesses and entrepreneurs, but do so with the fun and informal elements of a festival — food, entertainment, and events that highlight the various industries we will focus on this year.”

Highlighted industries will include: Technology & Health Care; Fisheries & Agriculture; and Tourism & Food/Beverage.

“Let’s begin our Flag Day celebration by celebrating the future of our economy, our small businesses and entrepreneurs,” the DOC director said.

T

he 2018 Flag Day ceremony is set for Apr. 17 at Veterans Memorial Stadium in Tafuna. And just in time for the BizFest, is tomorrow’s arrival of the Emerald Princess calling into the Port of Pago Pago around 10a.m. from Hilo, Hawai’i and departing around 7p.m. for Samoa. The cruise will be carrying 3,672 passengers with 1,200 crew members, according to the American Samoa Visitors Bureau.

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At the BizFest, cultural activities, handmade craft demonstrations, entertainment and Samoan local recipe delights will be featured and showcased “as a special treat for our one-day visitors,” said ASVB deputy director Vaito’a Hans Langkilde, adding that cruise ship market vendors will be set up at the Fagatogo malae, while other displays including Samoan food will be available at the Fagatogo Marketplace.

The Visitors Bureau reminds all (commercial bus & taxi) tour drivers to dress accordingly: For men please wear a clean “elei” or Polynesian printed shirt and lavalava/slacks, and for women, elei or Polynesian print puletasi or tops when soliciting tour services for visitors off the ship.

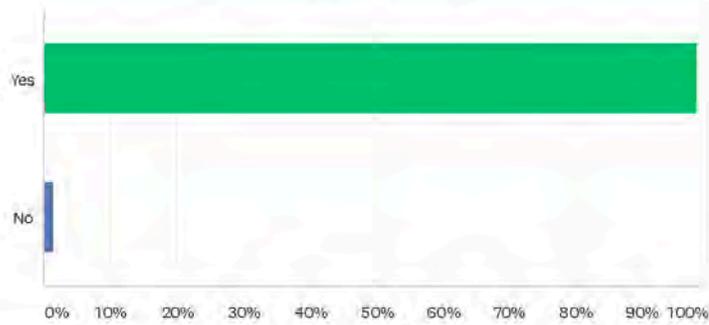
Territory of American Samoa Hazard Mitigation Plan

Public Survey Results

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q1 Have you noticed changes in weather patterns in the last five years?

Answered: 69 Skipped: 0



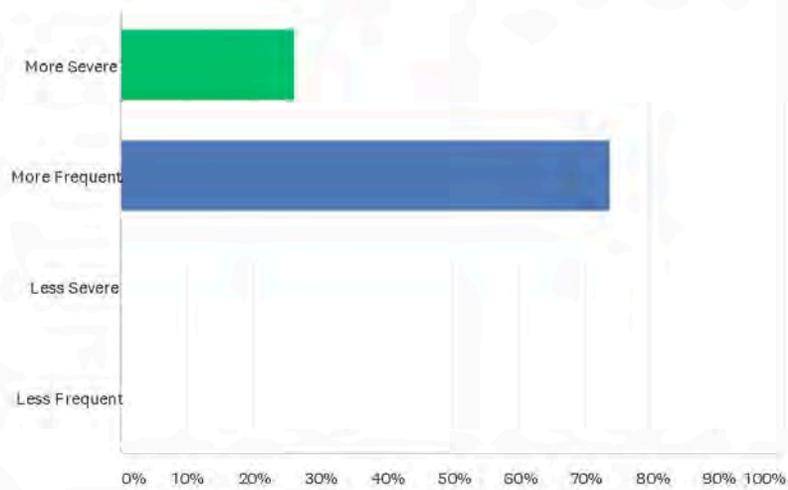
ANSWER CHOICES	RESPONSES	
Yes	98.55%	68
No	1.45%	1
TOTAL		69

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q2 If yes, are these events more severe or more frequent?

Answered: 69 Skipped: 0



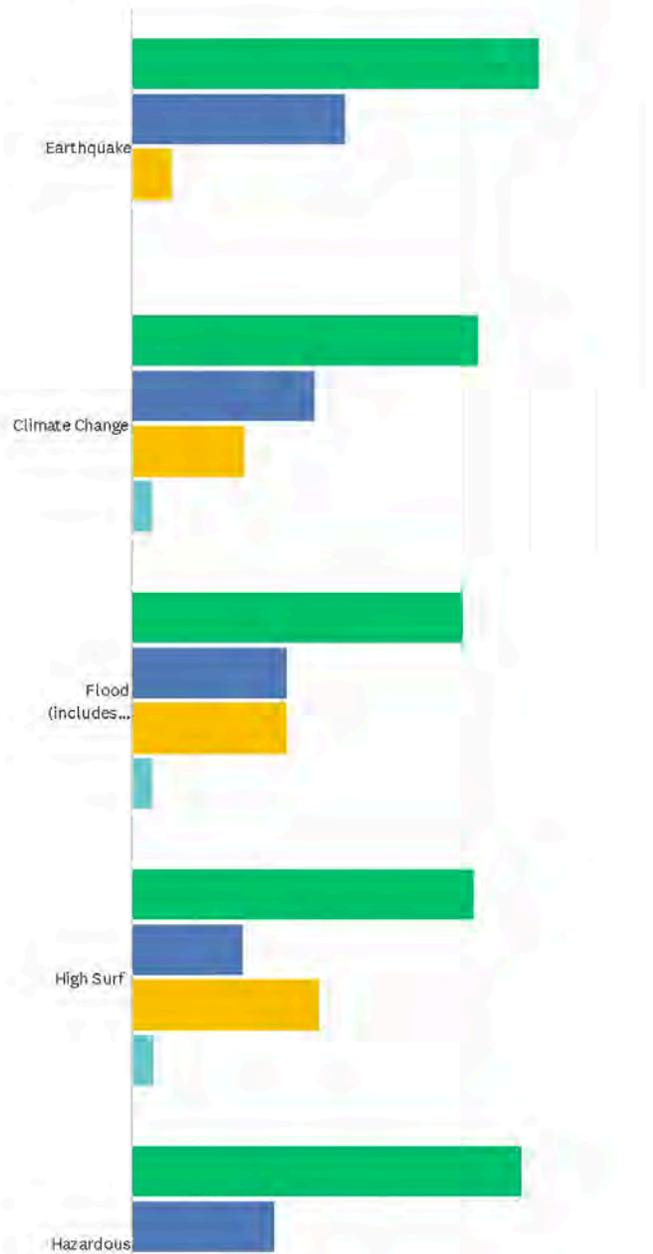
ANSWER CHOICES	RESPONSES	
More Severe	26.09%	18
More Frequent	73.91%	51
Less Severe	0.00%	0
Less Frequent	0.00%	0
TOTAL		69

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

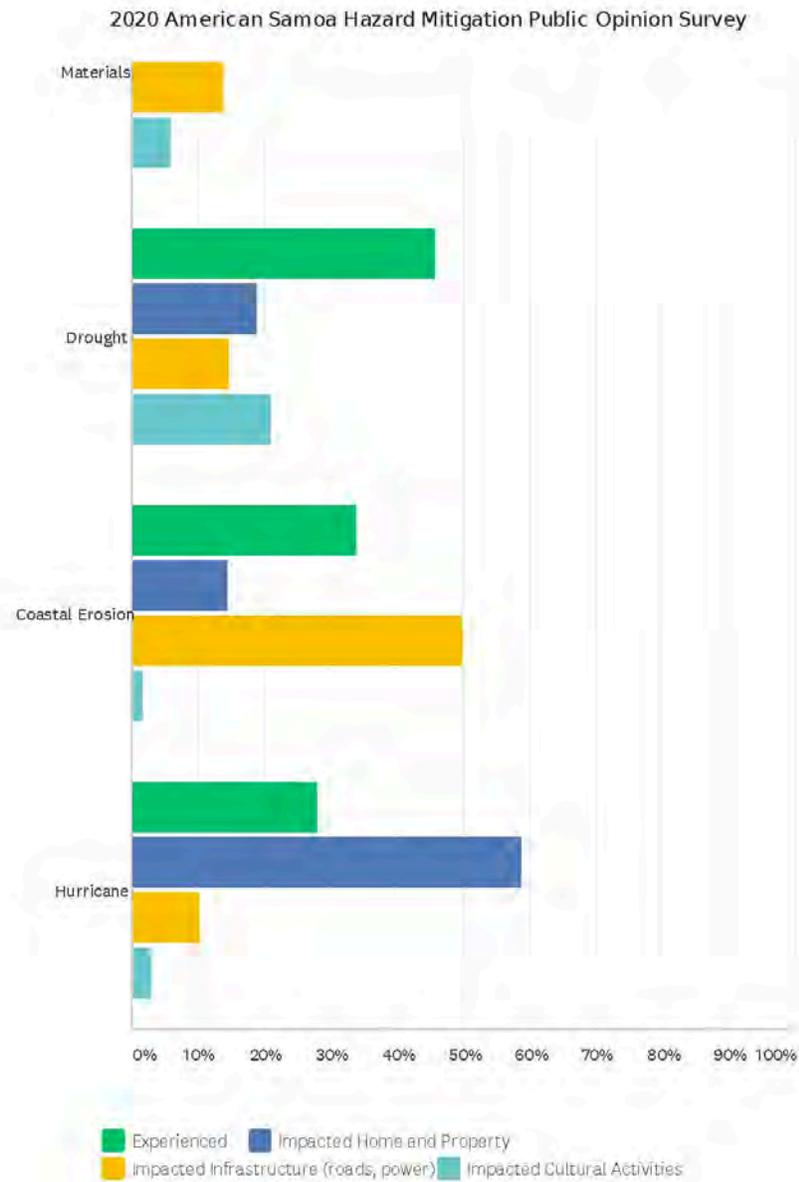
Q3 Which of these disasters have you experienced? Have they impacted your home, local community, cultural activities? Check all that apply.

Answered: 69 Skipped: 0



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Territory of American Samoa Hazard Mitigation Plan



Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

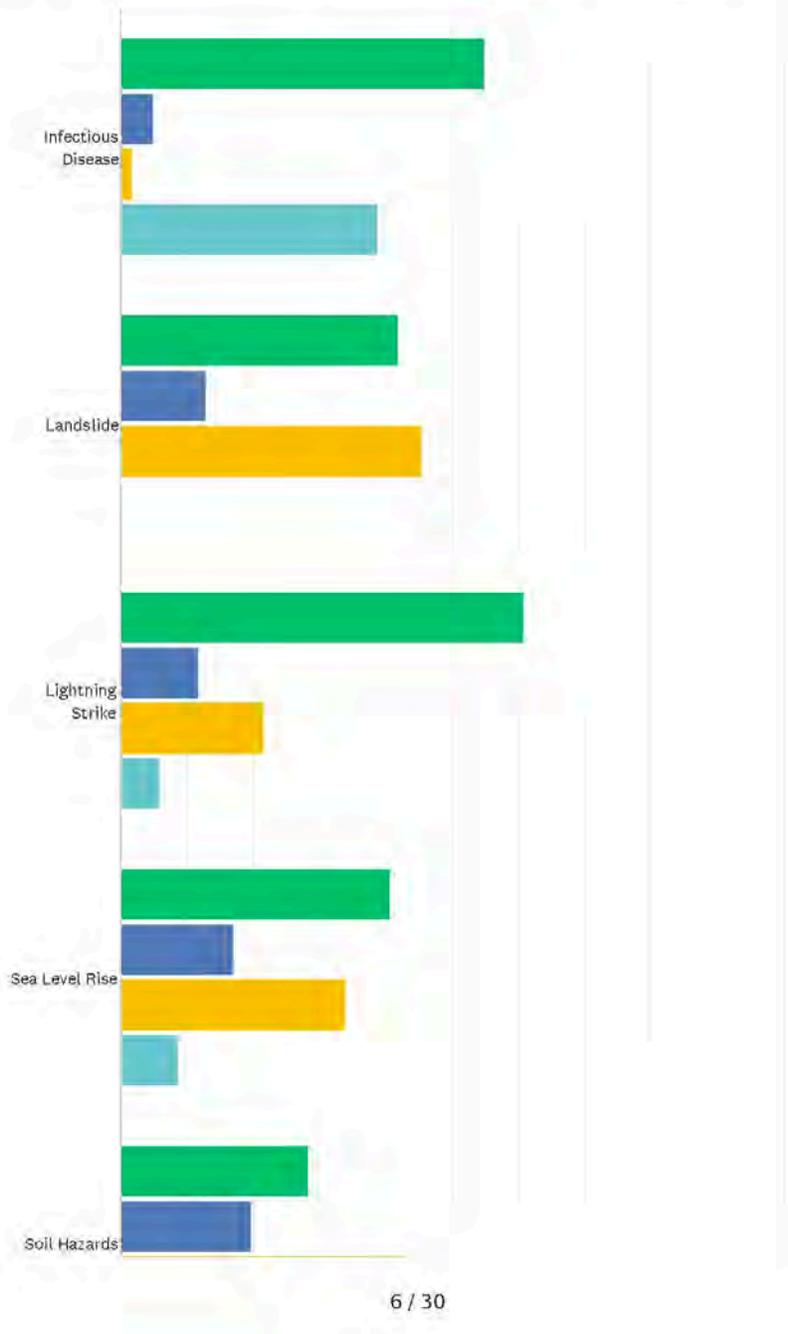
	EXPERIENCED	IMPACTED HOME AND PROPERTY	IMPACTED INFRASTRUCTURE (ROADS, POWER)	IMPACTED CULTURAL ACTIVITIES	TOTAL
Earthquake	61.54% 40	32.31% 21	6.15% 4	0.00% 0	65
Climate Change	52.31% 34	27.69% 18	16.92% 11	3.08% 2	65
Flood (includes coastal, riverine and flash flooding)	50.00% 32	23.44% 15	23.44% 15	3.13% 2	64
High Surf	51.67% 31	16.67% 10	28.33% 17	3.33% 2	60
Hazardous Materials	58.82% 30	21.57% 11	13.73% 7	5.88% 3	51
Drought	45.83% 22	18.75% 9	14.58% 7	20.83% 10	48
Coastal Erosion	33.87% 21	14.52% 9	50.00% 31	1.61% 1	62
Hurricane	27.94% 19	58.82% 40	10.29% 7	2.94% 2	68

Territory of American Samoa Hazard Mitigation Plan

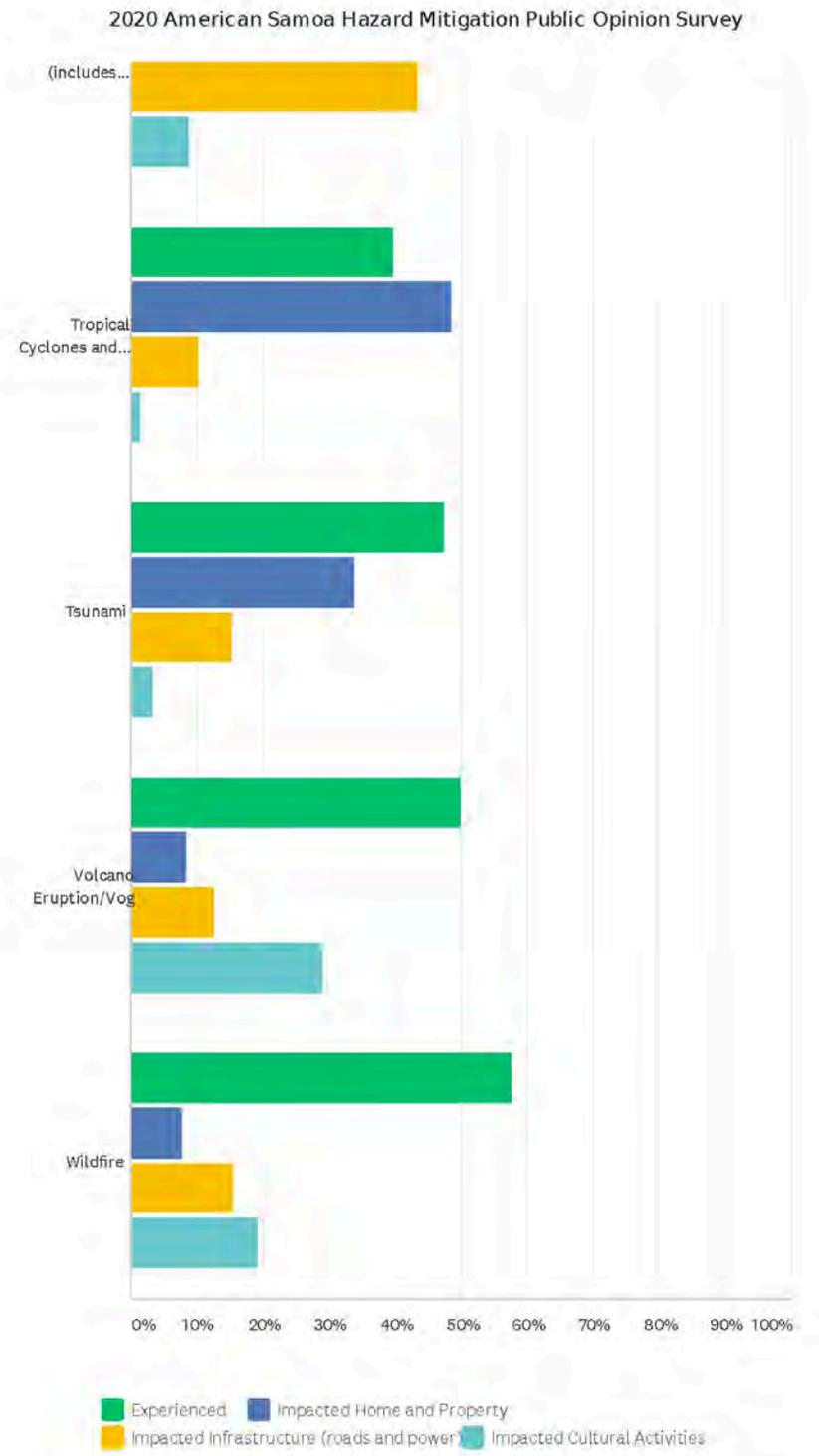
2020 American Samoa Hazard Mitigation Public Opinion Survey

Q4 Which of these disasters have you experienced? Have they impacted your home, local community, cultural activities? Check all that apply.

Answered: 68 Skipped: 1



Territory of American Samoa Hazard Mitigation Plan



Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

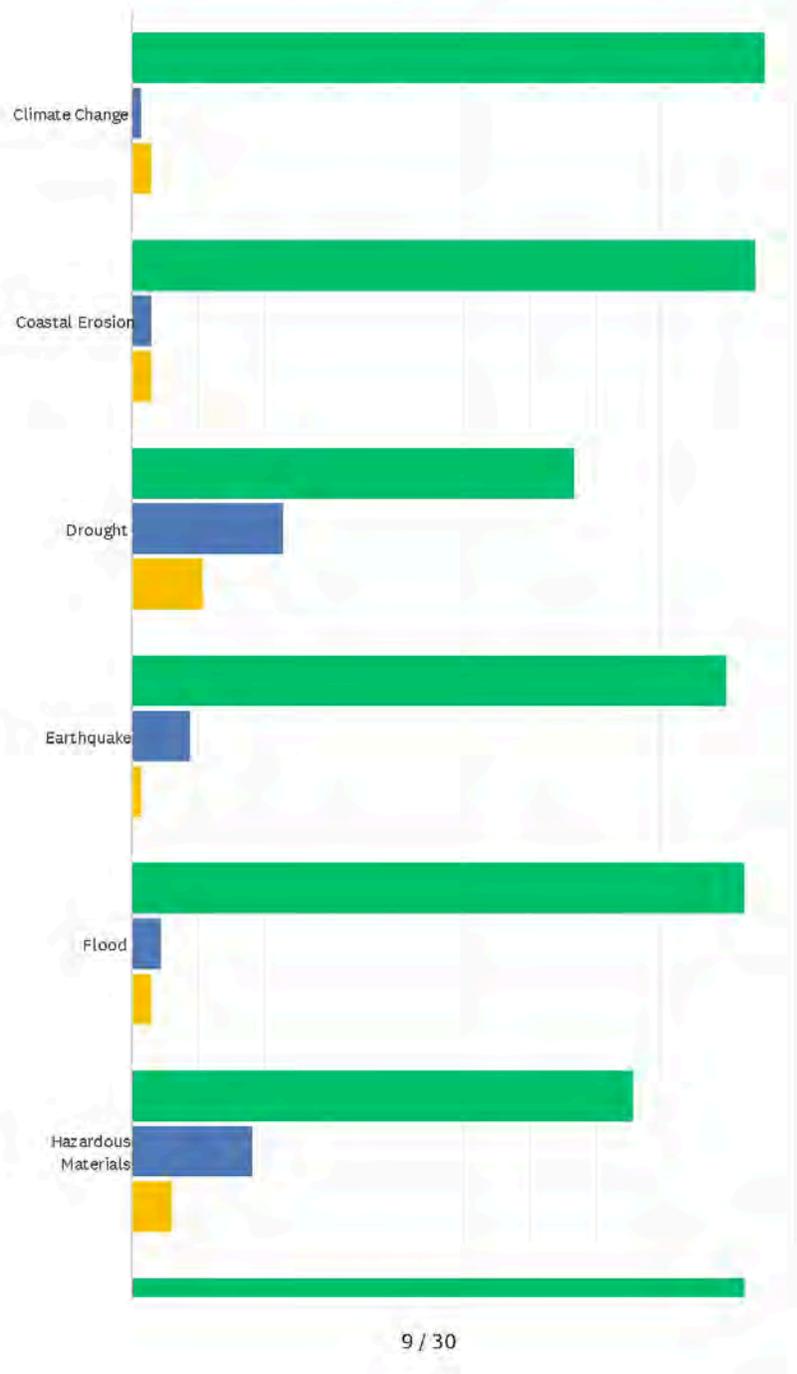
	EXPERIENCED	IMPACTED HOME AND PROPERTY	IMPACTED INFRASTRUCTURE (ROADS AND POWER)	IMPACTED CULTURAL ACTIVITIES	TOTAL
Infectious Disease	54.84% 34	4.84% 3	1.61% 1	38.71% 24	62
Landslide	41.82% 23	12.73% 7	45.45% 25	0.00% 0	55
Lightning Strike	60.78% 31	11.76% 6	21.57% 11	5.88% 3	51
Sea Level Rise	40.68% 24	16.95% 10	33.90% 20	8.47% 5	59
Soil Hazards (includes expansion, subsidence, and sinkholes)	28.26% 13	19.57% 9	43.48% 20	8.70% 4	46
Tropical Cyclones and High Wind Storms	39.71% 27	48.53% 33	10.29% 7	1.47% 1	68
Tsunami	47.46% 28	33.90% 20	15.25% 9	3.39% 2	59
Volcano Eruption/Vog	50.00% 12	8.33% 2	12.50% 3	29.17% 7	24
Wildfire	57.69% 15	7.69% 2	15.38% 4	19.23% 5	26

Territory of American Samoa Hazard Mitigation Plan

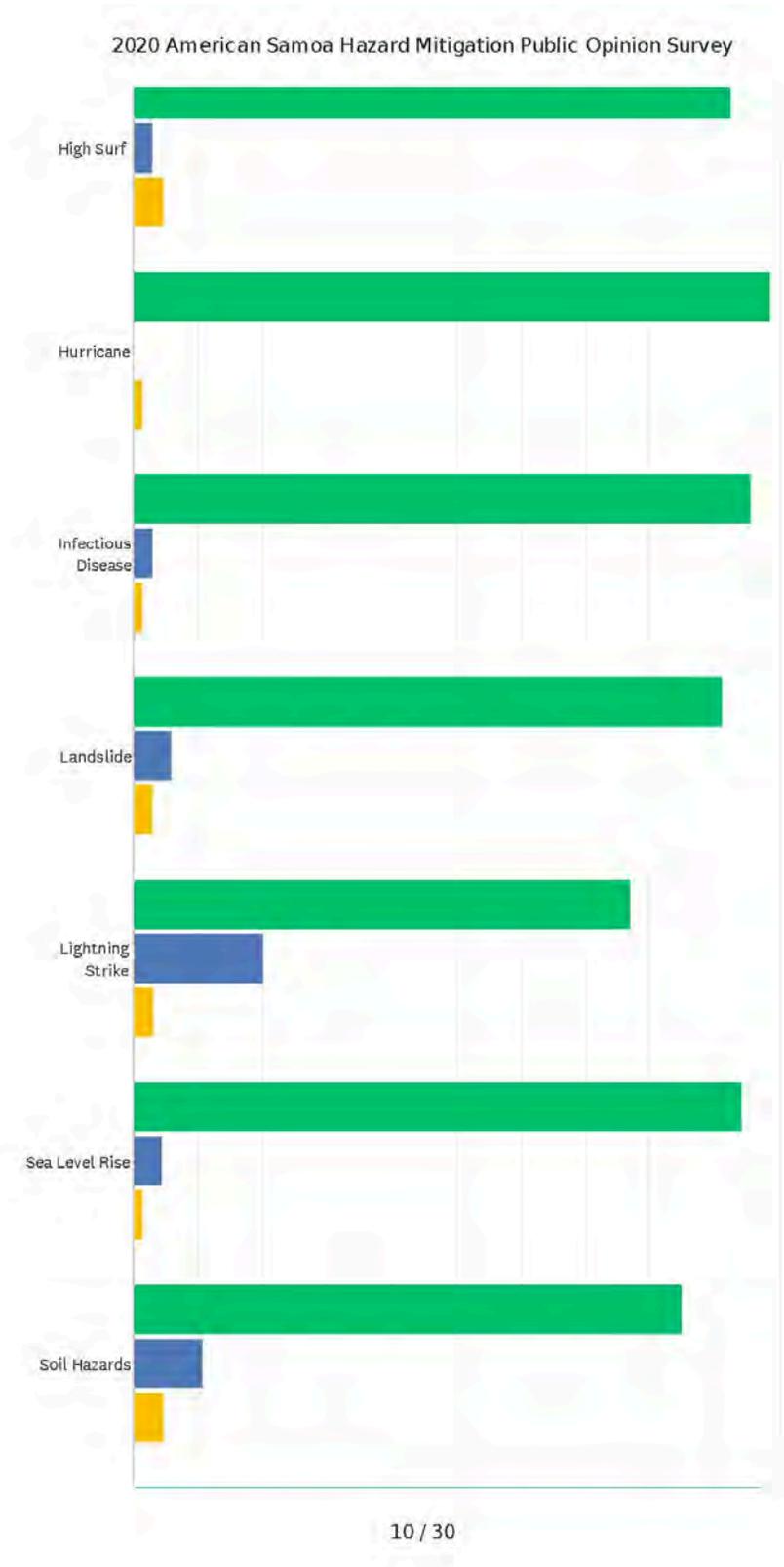
2020 American Samoa Hazard Mitigation Public Opinion Survey

Q5 How concerned are you about the following hazards?

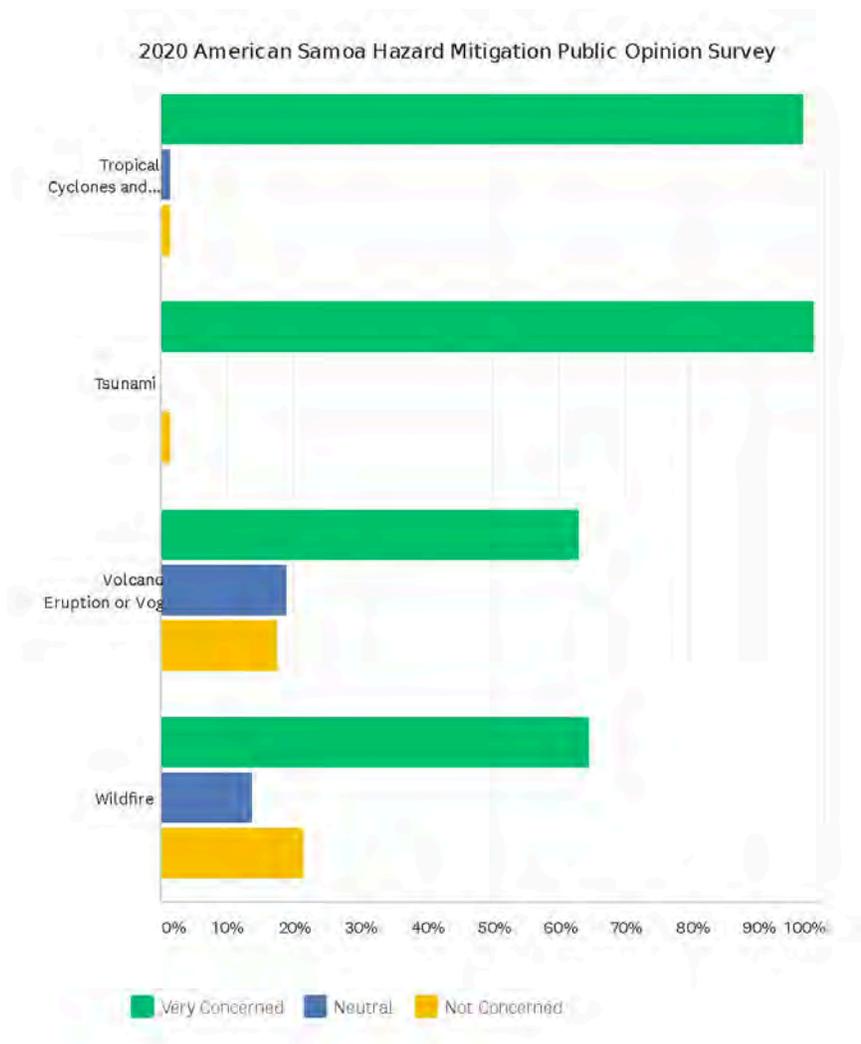
Answered: 69 Skipped: 0



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2020 American Samoa Hazard Mitigation Public Opinion Survey

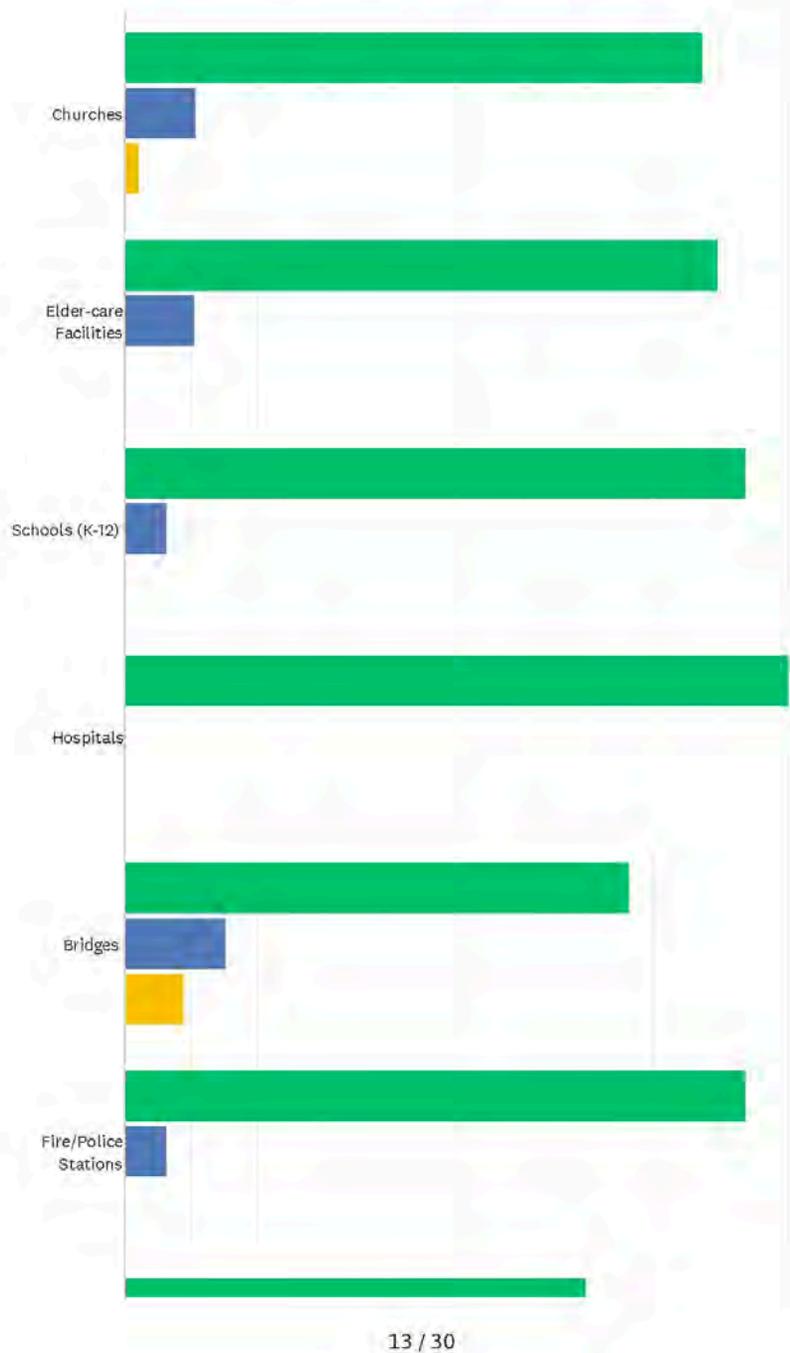
	VERY CONCERNED	NEUTRAL	NOT CONCERNED	TOTAL
Climate Change	95.65% 66	1.45% 1	2.90% 2	69
Coastal Erosion	94.20% 65	2.90% 2	2.90% 2	69
Drought	66.67% 44	22.73% 15	10.61% 7	66
Earthquake	89.71% 61	8.82% 6	1.47% 1	68
Flood	92.54% 62	4.48% 3	2.99% 2	67
Hazardous Materials	75.76% 50	18.18% 12	6.06% 4	66
High Surf	92.42% 61	3.03% 2	4.55% 3	66
Hurricane	98.55% 68	0.00% 0	1.45% 1	69
Infectious Disease	95.65% 66	2.90% 2	1.45% 1	69
Landslide	91.18% 62	5.88% 4	2.94% 2	68
Lightning Strike	76.92% 50	20.00% 13	3.08% 2	65
Sea Level Rise	94.20% 65	4.35% 3	1.45% 1	69
Soil Hazards	84.85% 56	10.61% 7	4.55% 3	66
Tropical Cyclones and High Wind Storms	97.10% 67	1.45% 1	1.45% 1	69
Tsunami	98.55% 68	0.00% 0	1.45% 1	69
Volcano Eruption or Vog	63.24% 43	19.12% 13	17.65% 12	68
Wildfire	64.62% 42	13.85% 9	21.54% 14	65

Territory of American Samoa Hazard Mitigation Plan

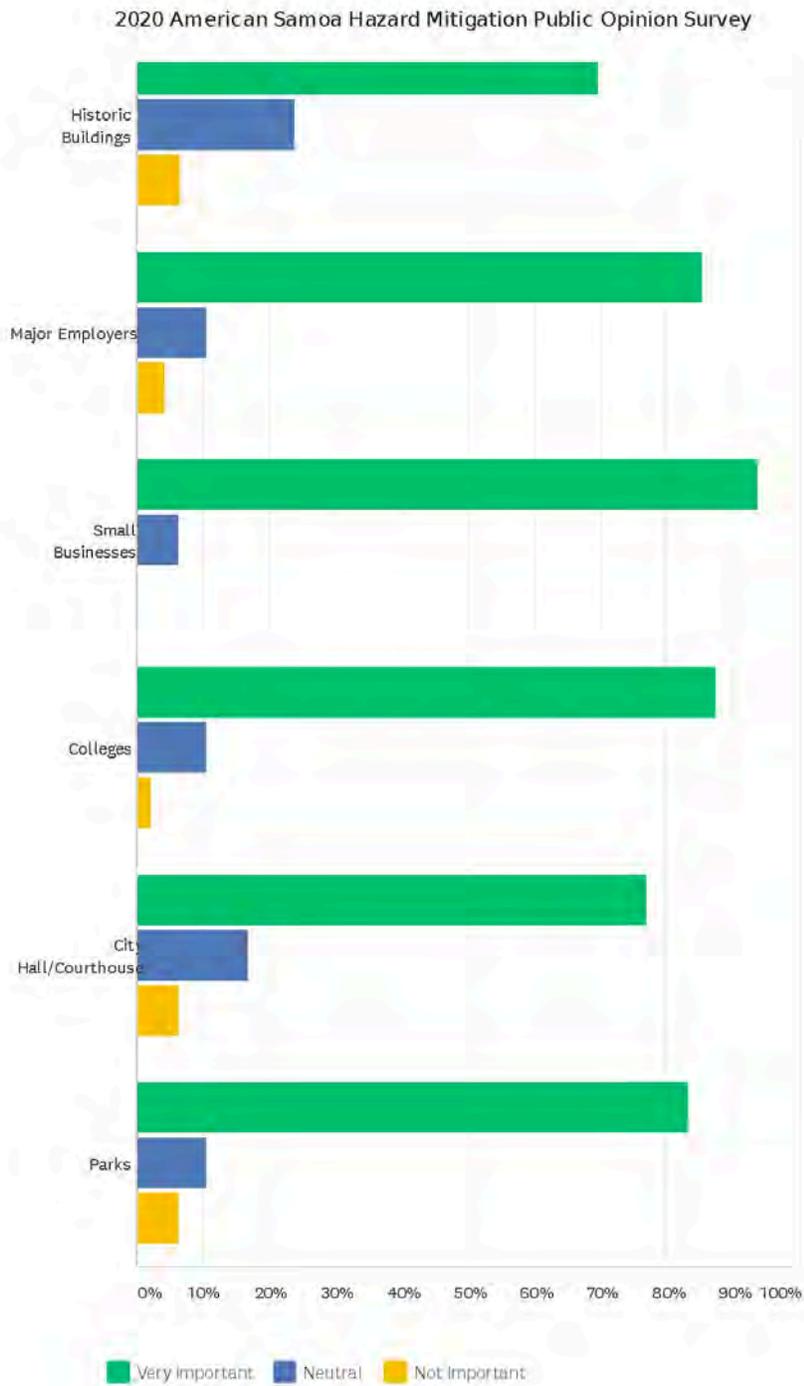
2020 American Samoa Hazard Mitigation Public Opinion Survey

Q6 How important are the following community assets to you?

Answered: 48 Skipped: 21



Territory of American Samoa Hazard Mitigation Plan



Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

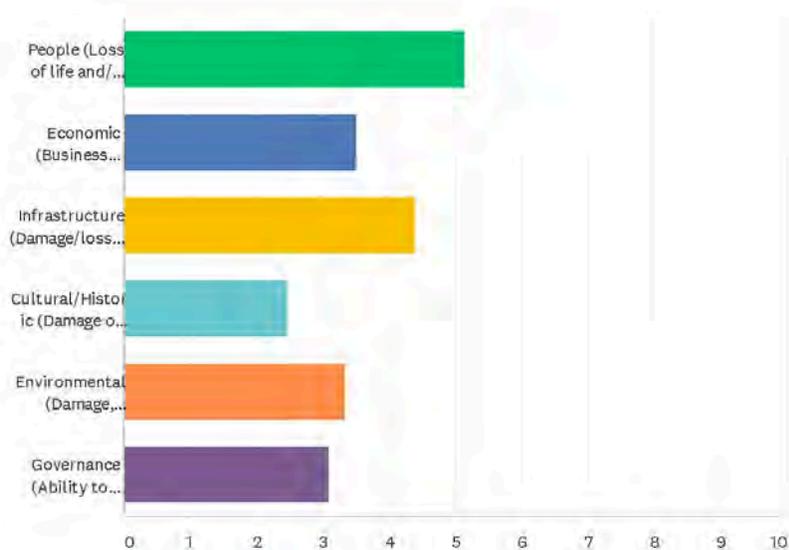
	VERY IMPORTANT	NEUTRAL	NOT IMPORTANT	TOTAL
Churches	87.23% 41	10.64% 5	2.13% 1	47
Elder-care Facilities	89.58% 43	10.42% 5	0.00% 0	48
Schools (K-12)	93.75% 45	6.25% 3	0.00% 0	48
Hospitals	100.00% 48	0.00% 0	0.00% 0	48
Bridges	76.09% 35	15.22% 7	8.70% 4	46
Fire/Police Stations	93.75% 45	6.25% 3	0.00% 0	48
Historic Buildings	69.57% 32	23.91% 11	6.52% 3	46
Major Employers	85.42% 41	10.42% 5	4.17% 2	48
Small Businesses	93.75% 45	6.25% 3	0.00% 0	48
Colleges	87.50% 42	10.42% 5	2.08% 1	48
City Hall/Courthouse	77.08% 37	16.67% 8	6.25% 3	48
Parks	83.33% 40	10.42% 5	6.25% 3	48

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q7 In your opinion, which of the following categories are most susceptible to natural hazards in your community? (Please rank the Community Assets in order of vulnerability, 1 being most vulnerable and 6 being least vulnerable.)

Answered: 47 Skipped: 22



	1	2	3	4	5	6	TOTAL	SCORE
People (Loss of life and/or injuries)	68.57% 24	8.57% 3	5.71% 2	5.71% 2	8.57% 3	2.86% 1	35	5.14
Economic (Business interruptions/closures, job losses, etc.)	2.86% 1	22.86% 8	22.86% 8	34.29% 12	8.57% 3	8.57% 3	35	3.51
Infrastructure (Damage/loss or roads, bridges, utilities, schools, etc.)	17.14% 6	40.00% 14	20.00% 7	14.29% 5	5.71% 2	2.86% 1	35	4.40
Cultural/Historic (Damage or loss of libraries, museums, historic properties, etc.)	0.00% 0	5.26% 2	28.95% 11	10.53% 4	18.42% 7	36.84% 14	38	2.47
Environmental (Damage, contamination or loss of forests, beaches, trees, etc.)	12.50% 5	17.50% 7	12.50% 5	15.00% 6	35.00% 14	7.50% 3	40	3.35
Governance (Ability to maintain order and/or provide public amenities and services.)	18.60% 8	9.30% 4	13.95% 6	11.63% 5	13.95% 6	32.56% 14	43	3.09

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q8 In your opinion, what are some actions that your local government could take to reduce or eliminate the risk of future natural hazard damages in your community?

Answered: 45 Skipped: 3

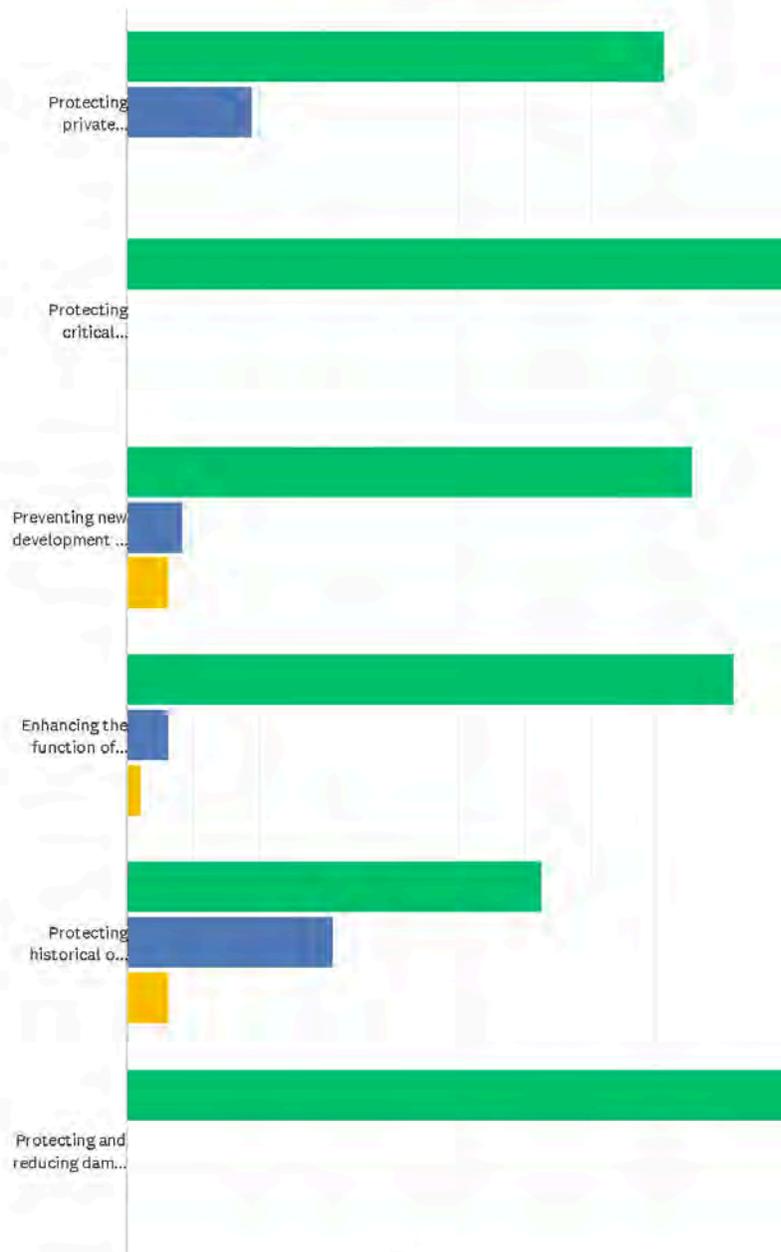
17 / 30

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q9 Let us know your priorities regarding planning for natural hazards in your community.

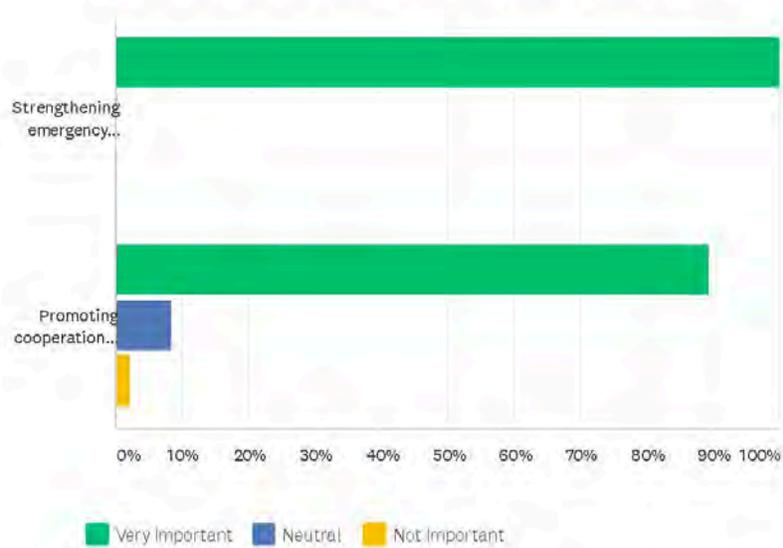
Answered: 48 Skipped: 21



18 / 30

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey



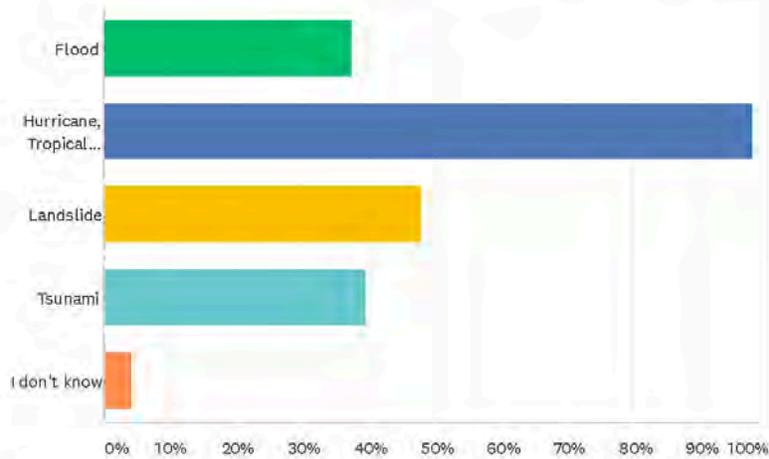
	VERY IMPORTANT	NEUTRAL	NOT IMPORTANT	TOTAL
Protecting private property	81.25% 39	18.75% 9	0.00% 0	48
Protecting critical facilities (roads, hospitals, and fire stations, etc.)	100.00% 48	0.00% 0	0.00% 0	48
Preventing new development in high hazard areas	85.42% 41	8.33% 4	6.25% 3	48
Enhancing the function of natural features (streams, wetlands, etc.)	91.67% 44	6.25% 3	2.08% 1	48
Protecting historical or cultural landmarks	62.50% 30	31.25% 15	6.25% 3	48
Protecting and reducing damage to utilities	100.00% 48	0.00% 0	0.00% 0	48
Strengthening emergency services (fire, police, and ambulance.)	100.00% 48	0.00% 0	0.00% 0	48
Promoting cooperation among public agencies, citizens, non-profit organizations, and businesses	89.58% 43	8.33% 4	2.08% 1	48

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q10 Is your home at risk to the following hazards? (Check all that apply.)

Answered: 48 Skipped: 21



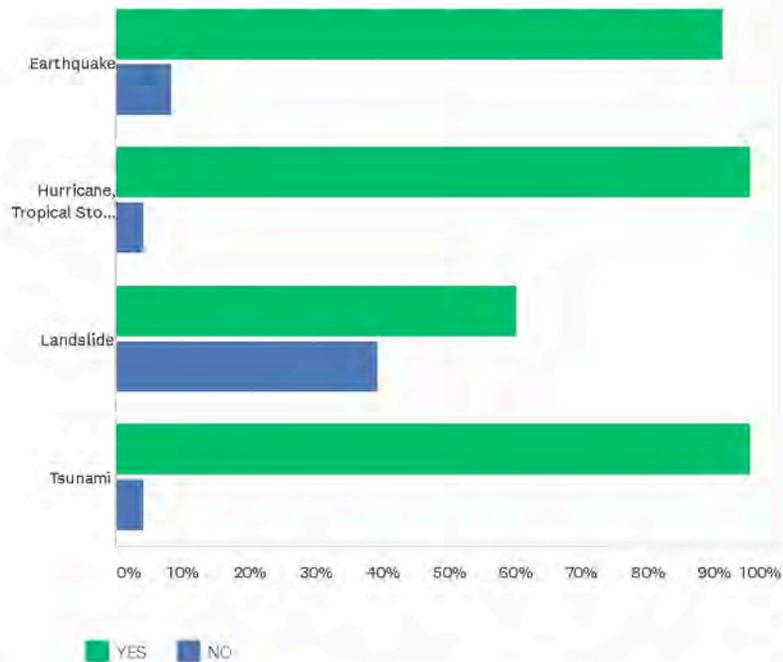
ANSWER CHOICES	RESPONSES	
Flood	37.50%	18
Hurricane, Tropical Cyclone or High Winds	97.92%	47
Landslide	47.92%	23
Tsunami	39.58%	19
I don't know	4.17%	2
Total Respondents: 48		

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q11 Do you know what to do in the event of one of these emergencies?

Answered: 48 Skipped: 21



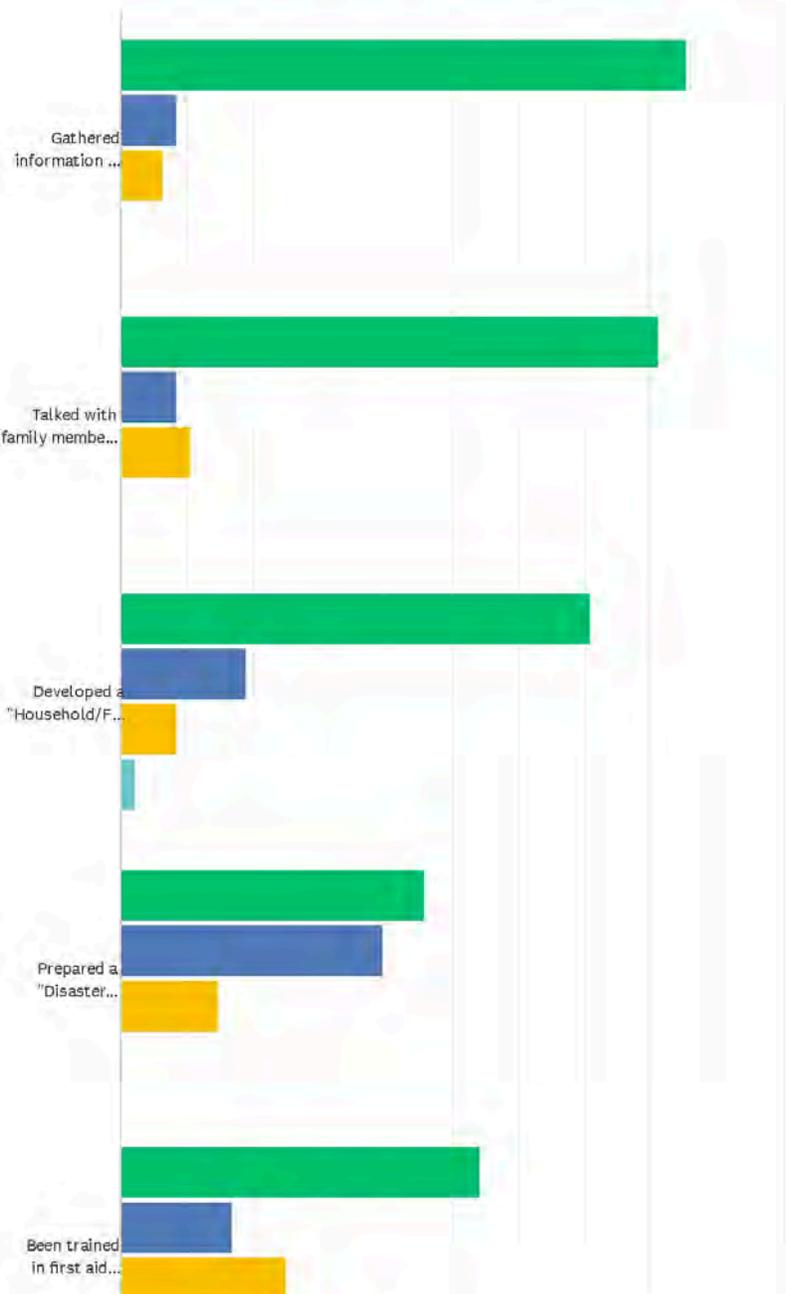
	YES	NO	TOTAL
Earthquake	91.67% 44	8.33% 4	48
Hurricane, Tropical Storm or High Winds	95.83% 46	4.17% 2	48
Landslide	60.42% 29	39.58% 19	48
Tsunami	95.83% 46	4.17% 2	48

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

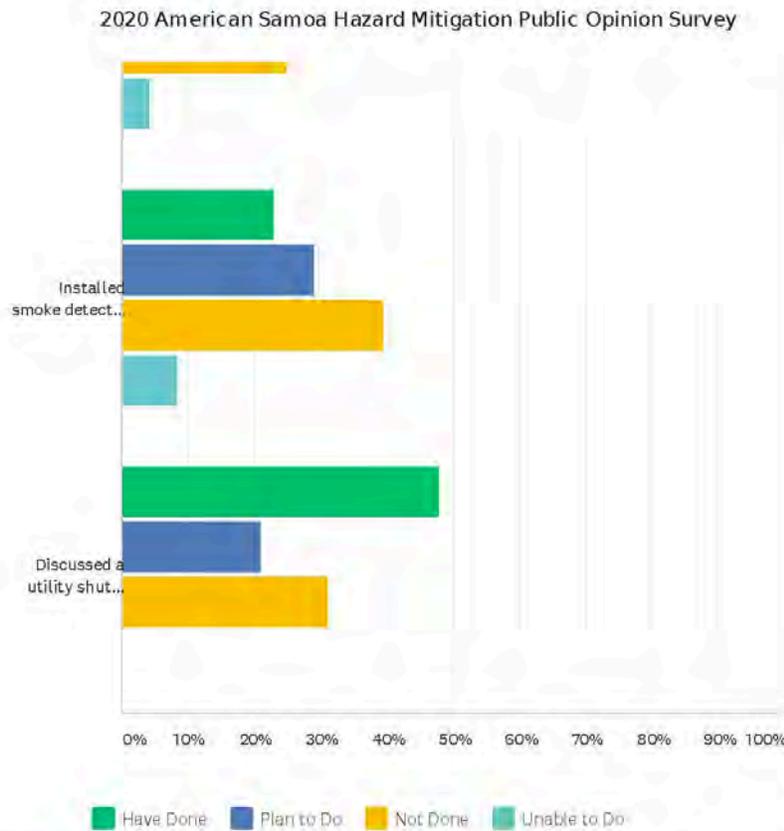
Q12 What have you done to prepare for a disaster?

Answered: 48 Skipped: 21



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Territory of American Samoa Hazard Mitigation Plan



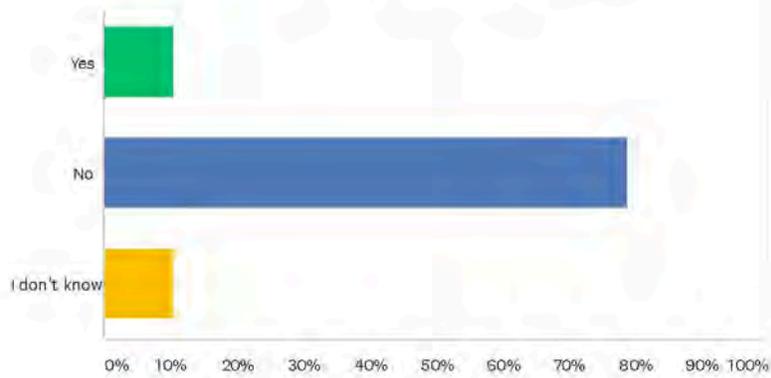
	HAVE DONE	PLAN TO DO	NOT DONE	UNABLE TO DO	TOTAL
Gathered information on natural disasters or emergency preparedness.	85.42% 41	8.33% 4	6.25% 3	0.00% 0	48
Talked with family members about what to do in case of a natural disaster.	81.25% 39	8.33% 4	10.42% 5	0.00% 0	48
Developed a "Household/Family Emergency Plan."	70.83% 34	18.75% 9	8.33% 4	2.08% 1	48
Prepared a "Disaster Supply Kit."	45.83% 22	39.58% 19	14.58% 7	0.00% 0	48
Been trained in first aid or CPR in the last year.	54.17% 26	16.67% 8	25.00% 12	4.17% 2	48
Installed smoke detectors on each level of our house.	22.92% 11	29.17% 14	39.58% 19	8.33% 4	48
Discussed a utility shutoff procedure in the event of a natural disaster.	47.92% 23	20.83% 10	31.25% 15	0.00% 0	48

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q13 Do you have flood insurance?

Answered: 48 Skipped: 21



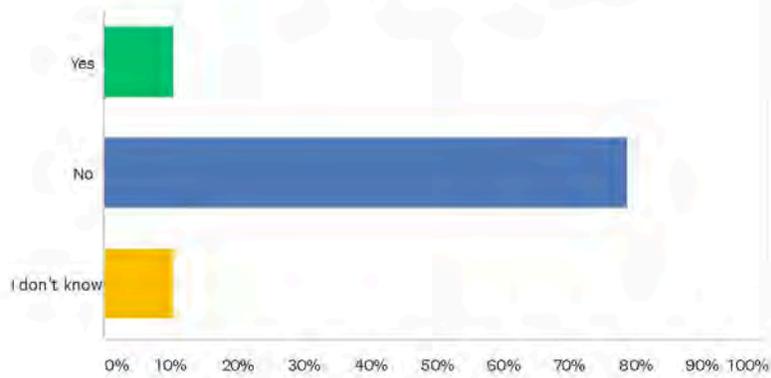
ANSWER CHOICES	RESPONSES	
Yes	10.42%	5
No	79.17%	38
I don't know	10.42%	5
TOTAL		48

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q13 Do you have flood insurance?

Answered: 48 Skipped: 21



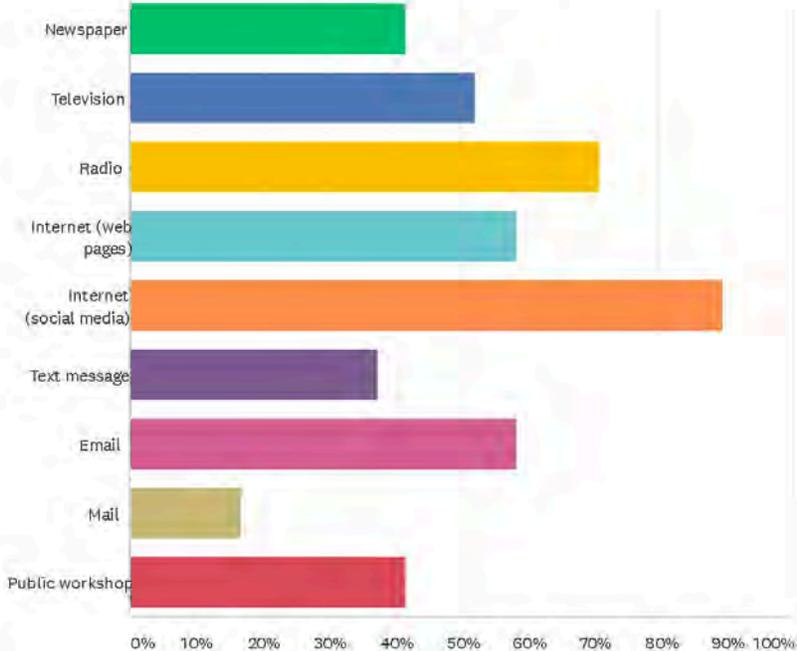
ANSWER CHOICES	RESPONSES	
Yes	10.42%	5
No	79.17%	38
I don't know	10.42%	5
TOTAL		48

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q15 What is the most effective way for you to receive information about how to make your home and community more resistant to natural hazards?

Answered: 48 Skipped: 21



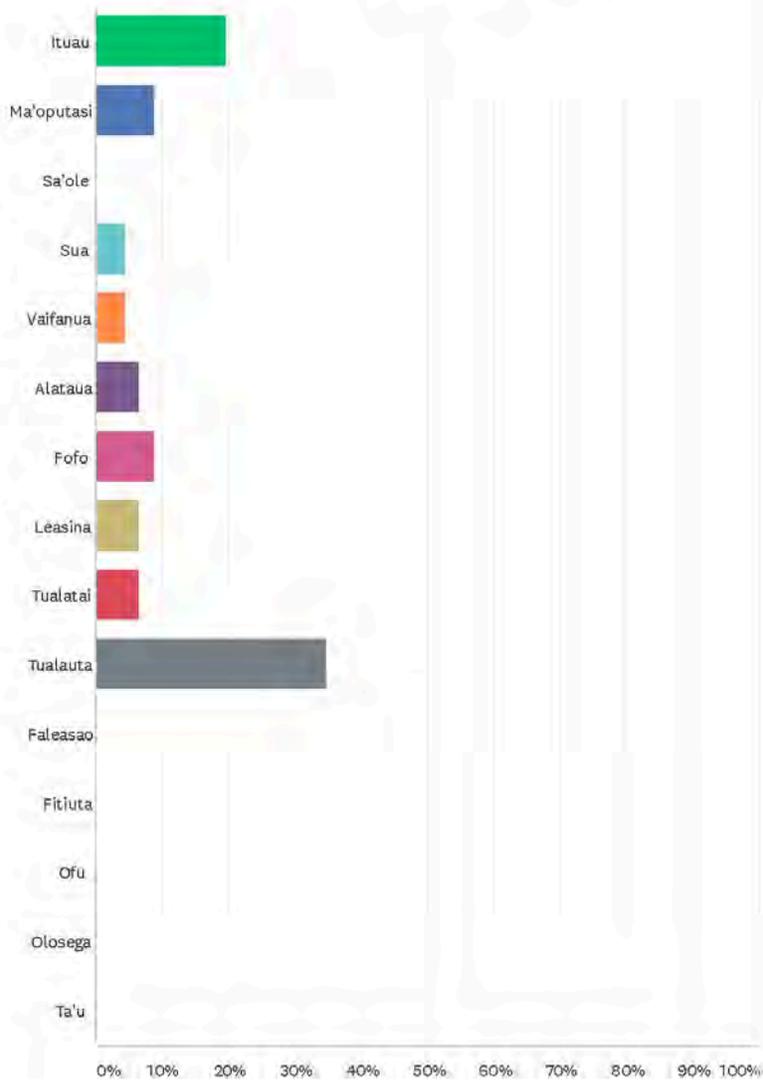
ANSWER CHOICES	RESPONSES	
Newspaper	41.67%	20
Television	52.08%	25
Radio	70.83%	34
Internet (web pages)	58.33%	28
Internet (social media)	89.58%	43
Text message	37.50%	18
Email	58.33%	28
Mail	16.67%	8
Public workshop	41.67%	20
Total Respondents: 48		

Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

Q16 Which county do you live in?

Answered: 46 Skipped: 23



Territory of American Samoa Hazard Mitigation Plan

2020 American Samoa Hazard Mitigation Public Opinion Survey

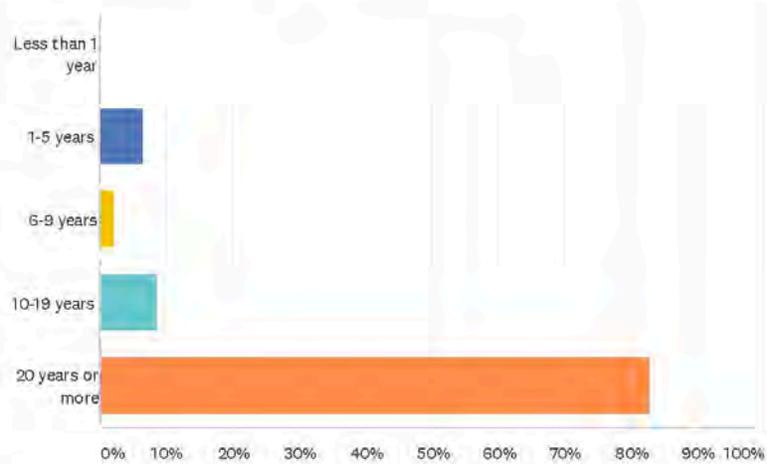
ANSWER CHOICES	RESPONSES	
Ituau	19.57%	9
Ma'oputasi	8.70%	4
Sa'ole	0.00%	0
Sua	4.35%	2
Vaifanua	4.35%	2
Alataua	6.52%	3
Fofo	8.70%	4
Leasina	6.52%	3
Tualatai	6.52%	3
Tualauta	34.78%	16
Faleasao	0.00%	0
Fitiuta	0.00%	0
Ofu	0.00%	0
Olosega	0.00%	0
Ta'u	0.00%	0
TOTAL		46

Territory of American Samoa Hazard Mitigation Plan

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Q17 How long have you lived in American Samoa?

Answered: 47 Skipped: 22



ANSWER CHOICES	RESPONSES
Less than 1 year	0.00% 0
1-5 years	6.38% 3
6-9 years	2.13% 1
10-19 years	8.51% 4
20 years or more	82.98% 39
TOTAL	47

Territory of American Samoa Hazard Mitigation Plan

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Q18 Please add any comments you would like to make regarding hazard mitigation and disaster preparedness.

Answered: 17 Skipped: 52

Appendix C. Risk Assessment Supporting Material

Critical Facilities and Risk Analysis

The existing critical facility list was refreshed for the 2020 plan update. There are 18 newly built critical facilities since the 2014 plan was completed which are indicated in the table below. Most new facilities have multiple buildings but were listed as one. Alatuau II School was FEMA funded; the additional new facilities were funded by American Samoa's Department of Interior Fund or the General Fund.

Information presented below to determine critical facilities most at risk is carryover from the 2014 analysis given 2020 data limitations. However, all new critical facilities were evaluated for flood hazard exposure for the 2020 plan, and 8 new critical facilities are located in flood zones. (Note, this assignment does not account for building elevation or other structural protections. Please see Chapter 4 for additional information on methodology.) The table below lists the critical facilities and indicates whether or not the critical facility is at risk to hazards.

Tutuila critical facilities have a combined estimated value of \$1,225,730,003.

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Table 56 Tutuila Critical Facilities

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
Critical Facilities													
Church/Shelter	CCCAS Hall	Aasu	--	\$360,000							X		
Church/Shelter	CCCAS Hall	Aasu	--	\$360,000							X		
Church/Shelter	CCCAS Hall	Afono	--	\$288,000				X			X	X	
Church/Shelter	Catholic Hall	Alao	--	\$580,000				X			X	X	
Church/Shelter	Catholic Hall	Alao	--	\$580,000				X			X	X	
Church/Shelter	CCCAS	Amanave	--	\$480,000				X				X	X
Church/Shelter	CCCAS	Amanave	--	\$480,000				X				X	X
Church/Shelter	CCCAS	Amanave	--	\$480,000				X				X	X
Church/Shelter	CCCAS Hall	Amaua	--	\$616,000				X			X	X	X
Church/Shelter	CCCAS Hall	Amaua	--	\$616,000				X			X	X	X
Church/Shelter	CCCAS Hall	Amouli	--	\$560,000				X			X	X	X
Church/Shelter	CCCAS Hall	Aoa	--	\$781,500				X			X	X	
Church/Shelter	CCCAS Hall	Aoa	--	\$781,500				X			X	X	
Church/Shelter	CCCAS Hall	Aoloau	--	\$792,000							X		
Church/Shelter	CCCAS Hall	Aoloau	--	\$792,000							X		
Church/Shelter	CCCAS Hall	Aoloau	--	\$792,000							X		
Church/Shelter	CCCAS	Asili	--	\$760,000							X	X	X
Church/Shelter	CCCAS	Asili	--	\$760,000							X	X	X
Church/Shelter	CCCAS Hall	Auasi	--	\$318,000				X			X	X	
Church/Shelter	CCCAS Hall	Auasi	--	\$318,000				X			X	X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
Church/Shelter	LDS Church	Auto	--	\$210,000				X			X	X	X
Church/Shelter	CCCAS Hall	Fagaalu	--	\$360,000				X			X	X	
Church/Shelter	CCCAS Church	Fagamalo	--	\$572,000				X			X	X	
Church/Shelter	CCCAS Church	Fagamalo	--	\$572,000				X			X	X	
Church/Shelter	CCCAS Hall	Fagasa	--	\$784,000				X			X	X	
Church/Shelter	CCCAS Hall	Fagasa	--	\$784,000							X	X	
Church/Shelter	CCCAS Hall	Fagatogo	--	\$288,000							X	X	
Church/Shelter	Methodist Hall	Fagatogo	--	\$712,500				X			X	X	
Church/Shelter	CCCAS Hall	Malaeloa	--	\$861,000							X	X	
Church/Shelter	CCCAS Hall	Malaeloa	--	\$861,000							X	X	
Church/Shelter	LDS Church	Mapusaga	--	\$966,000							X		
Church/Shelter	LDS Church	Mapusaga	--	\$966,000							X		
Church/Shelter	CCCAS Hall	Masausi	--	\$120,000				X			X	X	
Church/Shelter	Methodist Hall	Nuuuli-tai	--	\$303,900				X			X	X	
Church/Shelter	CCCAS Hall	Onenoa	--	\$162,000				X			X	X	
Church/Shelter	CCCAS Hall	Sailele	--	\$486,000				X			X	X	
Church/Shelter	CCCAS Maota Tina	Tafuna	--	\$714,000							X	X	
Church/Shelter	CCCAS Hall	Taputimu	--	\$852,000							X	X	
Church/Shelter	CCCAS Hall	Taputimu	--	\$852,000							X	X	
Church/Shelter	CCCAS Hall	Tula	--	\$594,000				X			X	X	
Church/Shelter	CCCAS Hall	Tula	--	\$594,000				X			X	X	
Church/Shelter	CCCAS Hall	Tula	--	\$594,000							X	X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
Church/Shelter	CCCAS Hall	Tula	--	\$594,000							X	X	
Church/Shelter	CCCAS Hall	Utumea	--	\$560,000				X			X	X	
Church/Shelter	CCCAS Hall	Vailoatai	--	\$460,000							X	X	
Church/Shelter	CCCAS Hall	Vaitogi	--	\$528,000							X	X	
Church/Shelter	CCCAS Hall	Vaitogi	--	\$528,000							X	X	
Church/Shelter	CCCAS Hall	Vatia	--	\$360,000				X			X	X	X
Commercial	VCS Samoa Packing Co	Atuu	--	\$16,382,320				X			X	X	
Commercial	Star Kist Samoa Co.	Satala	--	\$17,909,360				X			X	X	
Commercial	Star Kist Samoa Co.	Satala	--	\$17,909,360							X	X	
Communications	KSBS Radio Station	Fagaalu	A. Sene	\$384,000							X	X	
Communications	American Samoa Telec	Fagatogo	ASG	\$960,000				X			X	X	
Communications	KVZK-TV	Fagatogo	ASG	\$650,000							X	X	
Communications	KKHJ Radio Station	Pago Pago	--	--		X	X	X			X	X	
Communications	Blue Sky Company	Tafuna	--	\$400,000							X	X	
Fire	Sub-station East	Fagaitua	ASG	\$288,000				X			X	X	X
Fire	DPS Fire Division	Fagatogo	ASG	\$150,000				X			X	X	
Fire	DPS Fire Division	Fagatogo	ASG	\$150,000				X			X	X	
Fire	DPS Fire Division	Fagatogo	ASG	--	X				X				
Fire	Fire Station	Tualatai/Leone	--	--							X		
Fire	Fire Station	Tualauta/Nu'uuli	--	--							X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Fuel Storage	Airport Tank Farm	PPG Airport	--	\$7,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs.	Fagatogo	ASG	\$14,000,000				X			X	X	
Government	ASG Gov.'t Bldgs. - FONO	Fagatogo Downtown	ASG	--	X				X				
Government	Museum	Fagatogo Downtown	ASG	--	X				X				
Government	Governors House	Fagatogo	--	--								X	
Government	High Court	Fagatogo	--	\$1,452,328				X			X	X	
Government	District Court	Pago Pago	--	\$54,349			X	X			X	X	
Government	New District Court	Pago Pago	--	--				X				X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
Government	Shipyard Office	Satala	ASG	--	X				X				
Government	Temco and DMV	Tafuna	--	\$349,080				X			X	X	
Government	Dept of Education	Utulei	--	--							X	X	
Government	Faletusi Library	Utulei	--	\$960,000							X	X	
Government	LT Gov House	Utulei	--	--				X			X	X	
Government	Samoa Affairs	Utulei	--	\$550,000							X	X	
Health	Testing/Patient Quarantine	Fagaalu	ASG	--	X								
Hospital	LBJ Tropical Medical	Fagaalu	ASG	\$18,836,193							X	X	
Hospital	LBJ Tropical Medical	Fagaalu	ASG	\$18,836,193							X	X	
Hospital	LBJ Tropical Medical	Fagaalu	ASG	\$18,836,193							X	X	
Hospital	LBJ Tropical Medical	Fagaalu	ASG	\$18,836,193							X	X	
Hospital 2	Hospital	Saole	--	--							X	X	X
Police	Faqaitua Sub-station	Fagaitua	ASG	\$144,000				X			X	X	X
Police	DPS Central Station	Fagatogo	ASG	\$770,414				X			X	X	
Processing Site	Samoa Packing	Atuu	--	\$16,382,320				X			X	X	
Processing Site	Star Kist Samoa	Atuu	--	\$17,909,360				X			X	X	
Processing Site	Samoa Seiner Suppls	Container Dck	--	--								X	
School	Alataua II School	Alataua	ASG	--	X								
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Alofau Elementary	Alofau	ASG	\$745,000							X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School	Aua Elementary	Aua	ASG	\$1,500,000				X			X	X	
School/Shelter	Aua Consolidated School	Aua	ASG	--	X			X					
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	X
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	
School/Shelter	Faga'itua High	Faga'itua	ASG	\$1,750,000				X			X	X	
School/Shelter	Faga'itua High	Faga'itua	ASG	--	X			X					
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Ilili Elementary	Ilili	ASG	\$1,250,000							X		
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000				X			X	X	
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000				X			X	X	
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000							X	X	
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000							X	X	
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000							X	X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000							X	X	
School/Shelter	Laulii Elementary	Laulii	ASG	\$545,000							X	X	
School/Shelter	Leone High	Leone	ASG	\$1,960,000							X		
School/Shelter	Leone High	Leone	ASG	\$1,960,000							X		
School/Shelter	Leone High	Leone	ASG	\$1,960,000							X		
School	Midkiff Elementary	Leone	ASG	--	X								
School/Shelter	Masefau Elementary	Masefau	ASG	\$675,000			X				X	X	X
School/Shelter	Masefau Elementary	Masefau	ASG	\$675,000			X				X	X	X
School/Shelter	Masefau Elementary	Masefau	ASG	\$675,000			X				X	X	X
School/Shelter	Masefau Elementary	Masefau	ASG	\$675,000				X			X		X
School/Shelter	Masefau Elementary	Masefau	ASG	--	X				X				
	Matafao Elementary School		--	--									
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School/Shelter	Manulele Elementary	Nuuuli-uta	ASG	\$940,000							X	X	
School	Matafao Elementary	Matafao	ASG	--	X				X				
School	Nuuuli Poly Tech	Nuuuli	ASG	--	X								
School/Shelter	Manulele Tausala Elementary	Nuuuli	ASG	--	X								
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	\$1,400,000							X	X	
School/Shelter	Pago Pago Elementary	Pago Pago	ASG	--	X								
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	\$2,650,000							X	X	
School/Shelter	Pavai'ai Elementary	Pavai'ai	ASG	--	X								
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000				X			X	X	X
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000				X			X	X	X
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	X

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	X
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	X
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	X
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Seetaqa Elementary	Seetaga	ASG	\$520,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School/Shelter	Samoana High	Utulei	ASG	\$1,055,000							X	X	
School	Samoana High	Utulei	ASG	--	X								
School/Shelter	Tafuna Elementary	Tafuna	ASG	--	X								
School/Shelter	Tafuna High	Tafuna	ASG	--	X								

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
Transportation	Container Dock	Fagatogo	ASG	\$18,131,380				X			X	X	
Transportation	InterIsland Ferry T.	Fagatogo	ASG	\$400,000				X			X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Transportation	PPG Intern. Airport	Tafuna	ASG	\$69,080,080							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
Utilities	ASPA Tafuna Plant	Tafuna	ASG	\$18,000,000							X	X	
ASTCA Infrastructure													
50 FT POLE	AFONO MAFA SITE	AFONO	--	--						X			
50 FT POLE	AIRPORT SITE	TAFUNA	--	--							X	X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
60 FT	ALOFAU	ALOFAU	--	--						X	X	X	
NA	ALOFAU	ALOFAU	--	--						X	X	X	
BLDG	ALOFAU	ALOFAU	--	--						X	X	X	
DCO BLDG	ALOFAU	ALOFAU	--	--						X	X	X	
DCO BLDG	ALOFAU	AOLOFAU	--	--						X	X	X	
60 FT	ALOFAU	ALOFAU	--	--						X	X	X	
50 FT POLE	AOA MAFA SITE	AOA	--	--						X	X	X	
DCO BLDG	AUNUU	AUNUU	--	--				X				X	
110 FT	AUNUU	AUNUU	--	--				X				X	
DCO BLDG	AUNUU	AUNUU	--	--				X				X	
110 FT	AUNUU	AUNUU	--	--				X				X	
110 FT	BREAKERS POINT	LAULII	--	--								X	X
110 FT	BREAKERS POINT	LAULII	--	--								X	X
DCO BLDG	BREAKERS POINT	LAULII	--	--								X	X
DCO BLDG	BREAKERS POINT	LAULII	--	--								X	X
40 FT	FAGAITUA	FAGAITUA	--	--				X			X	X	
DCO BLDG	FAGAITUA	FAGAITUA	--	--				X			X	X	
50 FT POLE	FAGASA MAFA SITE	FAGASA	--	--									
30 FT	FAGATOGO	FAGATOGO	--	--							X	X	
DCO BLDG	FAGATOGO	FAGATOGO	--	--							X	X	
50 FT	FAGATOGO	FAGATOGO	--	--							X	X	
50 FT	FAGATOGO	FAGATOGO	--	--							X	X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
NA	FAGATOGO	FAGATOGO	--	--				X			X	X	
BTS BLDG	FAGATOGO 5E	FAGATOGO	--	--						X	X	X	
50 FT POLE	FALENIU SITE	FALENIU	--	--				X			X	X	
100FT	FITIUTA	FITIUTA	--	--								X	
140 FT	ILILI	ILILI	--	--							X	X	
35 FT	ILILI	ILILI	--	--							X	X	
140 FT	ILILI	ILILI	--	--							X	X	
DCO BLDG	ILILI	ILILI	--	--							X	X	
DCO BLDG	ILILI	ILILI	--	--							X	X	
50 FT	LEONE	LEONE	--	--							X	X	
25 FT POLE	MATUU SITE	MATUU	--	--				X		X		X	X
DCO BLDG	NEW LEONE	LEONE	--	--							X		
DCO BLDG	NEW LEONE	LEONE	--	--							X		
NA	NEW LEONE	LEONE	--	--							X		
NA	NEW LEONE	LEONE	--	--							X		
NA	NUUULI	NUUULI	--	--				X			X	X	
50 FT	OLOTELE	AOLOAU	--	--							X		
110 FT	OLOTELE	AOLOAU	--	--							X		
50 FT	OLOTELE	AOLOAU	--	--							X		
40 FT	OLOTELE	AOLOAU	--	--							X		
25 FT	OLOTELE	AOLOAU	--	--							X		
30 FT	OLOTELE	AOLOAU	--	--							X		

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
50 FT POLE	ONENOA TANK SITE	ONENOA	--	--						X	X	X	
50 FT POLE	POLOA TANK SITE	POLOA	--	--									
110 FT	SATALA	SATALA	--	--							X	X	
110 FT	SATALA	SATALA	--	--							X	X	
DCO BLDG	SATALA	SATALA	--	--							X	X	
DCO BLDG	SATALA	SATALA	--	--							X	X	
110 FT	TAFUNA	NUUULI	--	--							X	X	
DCO BLDG	TAFUNA	NUUULI	--	--							X	X	
DCO BLDG	TAFUNA	NUUULI	--	--							X	X	
110 FT	TAFUNA	NUUULI	--	--							X	X	
NA	TAFUNA	TAFUNA	--	--							X	X	
NA	TAFUNA	TAFUNA	--	--							X	X	
NA	TAFUNA	TAFUNA	--	--							X	X	
40 FT	TAPUTIMU	TAPUTIMU	--	--							X	X	
140 FT	TAPUTIMU	TAPUTIMU	--	--							X	X	
DCO BLDG	TAPUTIMU	TAPUTIMU	--	--							X	X	
DCO BLDG	TAPUTIMU	TAPUTIMU	--	--							X	X	
140 FT	TAPUTIMU	TAPUTIMU	--	--							X	X	
50 FT POLE	UTULEI PRINT SHOP SITE	UTULEI	--	--				X			X	X	
Assembly Areas										X		X	
	1	1	Pago Pago	--	--					X	X	X	
	2	2	Pago Pago	--	--					X	X	X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
	3	Pago Pago	--	--						X	X	X	
	4	Fagatogo	--	--						X	X	X	
	5	Anua	--	--						X	X	X	
	6	Atuu	--	--						X		X	
	7	Fagatogo	--	--						X		X	
	8	Fagaalu	--	--						X		X	
	9	Fagaalu	--	--						X		X	
	10	Utulei	--	--						X	X	X	
	11	Aua	--	--						X	X	X	
	12	Laulii	--	--						X		X	X
	13	Fatumafuti	--	--								X	
	14	Leone	--	--				X			X	X	
	15	Leone	--	--								X	
	16	Amaluia	--	--								X	X
	17	Amaluia	--	--								X	X
	18	Asili	--	--								X	
	19	Afao	--	--							X	X	
	20	Afao	--	--						X		X	X
	21	Utumea West	--	--						X		X	X
	22	Amanave	--	--						X		X	
	23	Poloa	--	--								X	
	24	Fagalii	--	--								X	

Territory of American Samoa Hazard Mitigation Plan

Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
	25	25 Maloata	--	--								X	
	26	26 Fagamalo	--	--						X		X	
Tsunami Sirens													
	1	1 Leloaloa	--	--							X	X	X
	2	2 Laulii	--	--								X	X
	3	3 Auto	--	--								X	
	4	4 Pago Pago	--	--			X				X	X	
	5	5 Utulei	--	--							X	X	
	6	6 Fagaalu	--	--							X	X	
	7	7 Faganeanea	--	--						X		X	X
	8	8 Nu'uuli	--	--							X	X	X
	9	9 Nu'uuli	--	--							X	X	
	10	10 Fagatogo	--	--							X	X	X
	11	11 Aumi	--	--						X		X	X
	12	12 Alofau	--	--							X	X	X
	13	13 Amouli	--	--							X	X	X
	14	14 Alao	--	--							X	X	
	15	15 Tula	--	--							X	X	
	16	16 Onenoa	--	--							X	X	
	17	17 Aoa	--	--							X	X	
	18	18 Saiele	--	--							X	X	
	19	19 Masefau	--	--			X				X	X	

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
	20	20 Vatia	--	--							X	X	X
	21	21 Afona	--	--							X	X	
	22	22 Fagasa	--	--							X	X	
	23	23 Tafuna	--	--							X	X	
	24	24 Tafuna	--	--							X	X	
	25	25 Leone	--	--							X		
	26	26 Leone	--	--							X	X	
	27	27 Leone	--	--							X	X	
	28	28 Amaluia	--	--							X	X	X
	29	29 Asili	--	--							X	X	X
	30	30 Afao	--	--							X	X	X
	31	31 Nua	--	--							X	X	X
	32	32 Agugulu	--	--							X	X	
	33	33 Amanave	--	--							X	X	X
	34	34 Poloa	--	--						X		X	X
	35	35 Fagalii	--	--								X	
	36	36 Fagamalo	--	--							X	X	
	43	43 Vaitogi	--	--							X	X	
Safe Zones													
	1	East Tutuila	--	--		X	X						
	2	Nua/Afao	--	--		X	X						
	3	Maloata	--	--		X	X						

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Facility Type	Name	Village	Ownership	Value (est)	New for 2020	1 FT SLR	3 FT SLR	A / AE Floodplain	V / VE Floodplain	High Landslide Risk	High Earthquake Risk	Tsunami Risk	Coastal Erosion
4		Fagamalo	--	--		X	X						

Table 57 Ta'u Critical Facilities

Type	Name	Village	New for 2020	1 FT SLR	3 FT SLR	A/AE zone	V/VE zone	High Landslide Risk	Tsunami Risk
Critical Facilities									
Church/Shelter	Church	Luma							X
Church/Shelter	Church	Luma				X			X
Church/Shelter	LMS Church	Leusoalii							X
Church/Shelter	LMS Church	Luma				X			X
Commercial	Amerika Samoa Bank	Maia							X
Commercial	Niumata Hotel	Luma				X			X
Commercial	Pay-n-Save Retail and Grocery Store	Luma				X			X
Commercial	Salisa Store	Luma				X			X
Commercial	Store	Maia							X
Commercial	Store	Luma				X			X
Commercial	Store	Luma				X			X

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Type	Name	Village	New for 2020	1 FT SLR	3 FT SLR	A/AE zone	V/VE zone	High Landslide Risk	Tsunami Risk
Commercial	Store	Luma				X			X
Commercial	U'u Gaoa Store	Luma				X			
Fuel Tank	ASPA Tanks	Faleasao					X		X
Government	ASPA	Faleasao				X			X
Government	ASPA	Faleasao				X	X		X
Government	ASPA	Faleasao					X		X
Government	DPW	Siufaga				X	X		X
Government	DPW	Faleasao					X		X
Government	Manuatele Criminal Justice Planning Agency	Luma							
Government	United States Post Office & Store	Faleasao							X
Hospital	Hospital	Luma				X			X
School/Shelter	Early Childhood Education	Luma				X			X
School/Shelter	Faleasao Elementary School	Faleasao				X			X
School/Shelter	Faleasao Elementary School	Faleasao							X
School/Shelter	Faleasao Elementary School	Faleasao							X
School/Shelter	Faleasao Elementary School	Faleasao							X
School/Shelter	Faleasao Elementary School	Faleasao				X	X		X
School/Shelter	Faleasao Elementary School	Faleasao				X			X
School/Shelter	Manu'a High School	Luma							
School/Shelter	Manu'a High School	Luma							
School/Shelter	Manu'a High School	Luma							
School/Shelter	Manu'a High School	Luma							
School/Shelter	Manu'a High School	Luma							

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Type	Name	Village	New for 2020	SLR		Tsunami		High Landslide Risk	Tsunami Risk
				1 FT SLR	3 FT SLR	A/AE zone	V/VE zone		
School/Shelter	Manu'a High School Gymnasium	Luma							
School/Shelter	Manu'a High School Locker Room	Luma							
School/Shelter	Matasaua School	Leusoalii							X
School/Shelter	Matasaua School	Leusoalii							X
School/Shelter	Matasaua School	Leusoalii							X
School/Shelter	Matasaua School	Leusoalii							X
Transportation	Aiport Terminal	Maia							X
Unknown	Unknown	Luma			X				X
Tsunami Sirens									
	37	37 Siufaga (Ta'u)	X						X
	38	38 Luma (Ta'u)	X				X		X
	39	39 Faleasao (Ta'u)	X						X
	40	40 Leusoalii (Ta'u)	X						
	41	41 Olosega	X						
	42	42 Ofu	X						X
ASTCA Infrastructure									
130 FT	TAU	TAU	X						X
130 FT	TAU	TAU	X						X
DCO BLDG	TAU	TAU	X						X
DCO BLDG	TAU	TAU	X						X
60 FT	OFU	OFU	X						X
DCO BLDG	OFU	OFU	X						X

Territory of American Samoa Hazard Mitigation Plan

Type	Name	Village	New for 2020	1 FT SLR	3 FT SLR	A/AE zone	V/VE zone	High Landslide Risk	Tsunami Risk
DCO BLDG	OFU	OFU	X						X
60 FT	OFU	OFU	X						X
40 FT POLE	OFU SITE	OFU	X						X
30 FT POLE	OLOSEGA SITE	OLOSEGA	X						

Territory of American Samoa Hazard Mitigation Plan

Previous Occurrences

All previous occurrence event tables are updated to May 2020 unless otherwise noted.

Bolded events indicate more significant occurrences (such as known associated damages).

A “*” indicates the reported event came from a source other than NOAA, such as the previous hazard mitigation plan.

Table 58 Previous Flood Occurrences

Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
Manu’a Islands					
11/23/1999	Flood	Ta’u	Scattered thunderstorms over the territory with rainfall totals of 2.92 inches for the day. Flooding of low-lying areas and overflow of streams was widespread across the islands.	0/0	None reported
1/19/2000	Flood	Ta’u	Widespread Flood	0/0	\$27,600
10/11/2000	Flood	Manu’a	Widespread flooding of low lying areas and overflow most of the streams across the territory. Some mud and landslides were also reported by the Territorial emergency Management Coordinating Office (TEMCO).	0/0	None reported
1/19/2000	Flash Flood	Ta’u	Heavy rain associated with a stationary trough of low pressure associated with a tropical disturbance west of Tutuila and eastward across the Manu’a Islands caused widespread flooding across the territory.	0/0	None reported
11/20/2000	Flood	Manu’a	None reported	0/0	None reported
12/26/2001	Flood	Manu’a	Various tropical systems developed north of American Samoa and began spreading showers	0/0	None reported

²²² Inflated to 2014 dollars.

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			over the territory on Christmas day with heavier showers arriving on the 26 th . Overtopped streams and heavy runoff flooded roads and low-lying areas across the territory. Total rainfall from this tropical depression was 3.61 inches.		
5/26/2002	Flood	Ta'u	Residences of Ta'u reported heavy runoffs and landslide at the Auauuli due to heavy showers.		None reported
5/24/2005	Flash Flood	Manu'a	An active trough associated with heavy rain and thunderstorms resulted in 4 inches of rain across the Islands. Over-flow of small streams and street ponding created traffic congestion for motorists.	0/0	None reported
8/17/2005	Flash Flood	Manu'a	A stationary trough near the Islands was associated produced heavy rain near mountainous areas caused flash flooding and made driving difficult for motorists. Some residents were overwhelmed with puddles of water in their homes. A total precipitation amount of 2.45 inches was reported.	0/0	None reported
12/7/2005	Flash Flood	Manu'a	The Weather Service Office (WSO) recorded between 2 to 3 inches of rainfall for this event. Residents along low-lying villages reported runoff and increasing flow of water along small streams. Roads were covered with water and residential yards experienced ponding.	0/0	None reported
12/26/2005	Flood	Manu'a	A convection in the vicinity of the Islands increased immensely in the early hours which produced over 3 inches across the islands. Flooding of roadways,	0/0	None reported

Territory of American Samoa Hazard Mitigation Plan

Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			especially in villages prone to flooding, was reported. Rising water near small streams surprised several residents as in-flow of water swept through their homes. The Weather Service Office received a total of 3.14 inches of rain for this episode.		
2/6/2006	Heavy Rain	Manu'a			None reported
2/7/2007	Flash Flood	Ofu	The Weather Service Office recorded between 2 to 3 inches of rainfall for this event. Residents along low-lying villages reported run-off and increasing flow of water along small streams. Roads were covered with water and residential yards were left with puddle of water.	0/0	None reported
2/22/2007	Flash Flood	Ta'u	Locally heavy rainfall swathed some village grounds with runoff along small streams. A flash flood warning was issued, and 1-3 inches of rainfall was reported.	0/0	None reported
12/28/2015	Heavy Rain	Ofu	None reported	0/0	None reported
11/23/2017	Heavy Rain	Ofu	Heavy runoff and flash flooding affected most villages especially low-lying areas including Ottoville and Tafuna Road. The Weather Service Office recorded 5.39 inches of rainfall.	0/0	None reported
10/28/2019	Flash Flood	Ofu	An active trough over the island territory ushered heavy showers with the bulk of the rain dumped on Manu'a islands. However, as Manu'a has no official rain gauge reports, we went off of the reports from the usual skywarn spotters.	0/0	\$5,000

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
Event Name, Date	Event	Geographical Extent	Impact	Deaths/ Injuries	Estimated Losses (\$)
Tutuila					
10/9/1967*	Flood	Tutuila	Flooding, landslides, electrical power failures. Damaged roads, culverts, and homes. 7.5 inches of rain was reported at Pago Pago Airport.	0/0	None reported
12/26/1969*	Flood	Tutuila	Roads blocked	0/0	\$162,000 to clear roads
11/9/1979*	Flood	Tutuila, Manu'a	None reported. Disaster Declaration.	0/0	None reported
5/3/1985*	Flood	Tutuila	Major damage to Pago Pago. Thirteen residences, five businesses, and several public facilities were flooded, causing \$60,000 in public damages, and \$40,000 of damage to businesses. The local Red Cross chapter provided assistance to a number of families during this event.	0/0	\$132,650 in public damage, \$88,000 to businesses
6/30/1994	Flash Flood	Tutuila	Flooding of low lying areas especially along the east side of the island of Tutuila. Some homes were damaged due to minor flooding.		\$8,000
7/10/1994	Flash Flood	Tutuila	Minor flooding due to isolated heavy showers on Tutuila.		None reported
7/13/1994	Flash Flood	Tutuila	Minor flooding due to heavy showers on Tutuila.		None reported
11/12/1994	Heavy Rain	Tutuila (western villages)	Western parts of American Samoa received nearly 7 inches of rain in 6 hours. Minor flooding was reported.	0/0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
9/25/1998	Flood	Tutuila	Heavy storms brought floods to several villages island wide, especially homes near stream. A large number of underground water wells were shut down because of high salt content, but two desalination machines-to make the water drinkable-were acquired with support from the federal government. The rainfall recorded for this month was 4.30 in. at WSO-Pago Pago, where the normal for September is 6.61 in.	0	0
5/12/1999	Flood	Tutuila	An active trough of low pressure over Samoa produced heavy rain, which caused flooding and landslides across Tutuila. Some homes were flooded with the significant rise of water. Broken trees and gravel washed off nearby mountains and blocked roads at some villages, like Nu'uuli. The rainfall total for this event was 7.78 inches.	0/0	0
7/12/1999	Flood	Tutuila	None reported	0/0	0
8/19/1999	Flash Flood	Tutuila	Heavy showers caused by a trough of low pressure over Samoa dumped 2 inches of rainfall between 2000 and 2300 causing flooding of low lying areas across the territory.	0/0	None reported
9/15/1999	Flood	Tutuila	The heavy showers associated with a stationary trough flooded and overflow many of the streams. Mud and landslides occurred at Poloa and Fagamalo causing temporary blockage of the road.	0/0	\$114,000

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			Moreover, heavy showers added on already saturated grounds again caused mud and land slide along the Poloa-Fagamalo road and widespread flooding of low lying areas as well as overflow of streams.		
11/23/1999	Flood	Tutuila	An active trough of low pressure that extends onto the islands from the southwest spread heavy showers with scattered thunderstorms over the territory with rainfall totals of 2.92 inches for the day. Flooding of low lying areas and overflow of streams was widespread across the islands.	0	None reported
12/2/1999	Flood	Pago Pago	None reported	0	None reported
12/28/1999	Flood	Tutuila	None reported	0	None reported
1/19/2000	Flash Flood	Tutuila	Heavy rain associated with a stationary trough of low pressure that extends from a tropical disturbance northwest of Tutuila caused widespread flooding across the territory.	0	\$27,000
2/27/2000	Flash Flood	Tutuila	Heavy rain associated with a tropical disturbance near Samoa dumped 6.65 inches of rainfall in 7 hours. Several families were evacuated from Tula village in the eastern tip of Tutuila because of flooding. TEMCO reported many other families with homes being flooded across the territory because of the heavy rain. A man just escaped injury as his car was smashed by a large rock at the Laauli'i lookout because of a landslide, one of the	0	\$552,000

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			various land and mudslides being reported by TEMCO across the territory.		
3/5/2000	Flood	Tutuila	Heavy showers associated with a tropical depression far south of Samoa fell across the territory Sunday afternoon to Monday morning. The Weather Station Office at Tafuna Airport recorded 8.18 inches of rainfall from Sunday afternoon to Monday afternoon. Numerous small streams were overflow with widespread flooding of low-lying areas as well as mud and police and TEMCO reported landslides across Tutuila Sunday and Monday.	0	None reported
3/25/2000	Flood	Tutuila	Heavy showers associated with a trough of low pressure dumped almost 2 inches of rainfall as recorded at the airport in 2 hours. The heavy showers caused widespread flooding of low lying areas, small streams to overflow and numerous mudslides over western Tutuila.	0	None reported
10/11/2000	Flood	Tutuila	None reported	0	
11/20/2000	Flood	Tutuila	A stationary trough of low pressure over American Samoa spread heavy showers over the territory causing localized flooding of low lying areas and overflow streams ditches. Debris was washed onto the road creating hazardous driving conditions.	0	None reported
1/7/2001	Flood	Tutuila	Heavy showers in the afternoon dumped more than 2 inches of rainfall in 4 hours as an upper level	0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			trough of low pressure moved over the islands. Minor flooding in Pago Pago with various small streams being overflowed, washing debris over roads and walkways. No major damages were reported.		
2/14/2001	Flood	Tutuila	An active trough of low-pressure southwest of Samoa occasionally spread heavy showers over Tutuila. Minor flooding of streams and low-lying areas along the roadways due to both heavy showers and heavy runoffs. No major damages were reported apart from debris washed onto the roads and public parks.	0	None reported
3/23/2001	Flood	Tutuila	Heavy showers and thunderstorms associated with an active trough of low pressure just south of Samoa caused widespread flooding of low lying areas as well as overflowing of small streams and caused bonding of streets and roadways across Tutuila. The police reported various mud and landslides west of Poloa.	0	None reported
3/26/2001	Flood	Tutuila	An active trough of low pressure became nearly stationary across the Samoan Island for several days. These heavy showers and heavy runoff caused flooding of low lying areas, overflow of small streams and mud and landslides across the Tutuila.	0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
5/13/2001	Flood	Central Portion	A convective cell over central Tutuila dumped heavy showers over the area causing flooding of low lying areas and overflow streams from Nu'uuli to Aua. Heavy runoffs and the overflow of streams washed debris onto the road causing traffic jams in Pago Pago from Pago Park. Suspended road construction work for 24 hours. Except for clean-up work and the temporary suspension of road construction no major damages were reported.	0	None reported
7/14/2001	Flood	Tutuila	Heavy showers fell over Tutuila dumping more than 2 inches of rainfall in 4 hours. These heavy showers were associated with a trough of low pressure that moved over the islands. Widespread flooding of low lying areas and small streams. Ponding of streets as well as heavy runoffs were noted at Nu'uuli and the Bay area.	0	None reported
11/4/2001	Flood	Tutuila	Minor flooding reported from Nu'uuli to Pago Pago. No major damages were reported except for some debris being washed onto the roads in Tafuna and Nu'uuli.	0	None reported
11/10/2001	Flood	Tutuila	An upper level trough of low pressure moving over the territory from the north dump heavy showers over Tutuila causing flooding of low lying areas and overflow of streams. The heavy showers and runoffs plus saturated grounds caused mud and landslides at Poloa and at Avau Point.	0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
12/25/2001	Flood	Tutuila	An active trough of low pressure was oriented northwest to southeast about 200-300 miles to the north of Samoa through the last 10 days. Various tropical systems developed within this rough, with the first of these tropical depressions began spreading showers over the territory on Christmas day with heavier showers arriving on the 26th. The thunderstorms with heavy showers caused flooding of streams. The overflow streams and heavy runoff flooded roads and low lying areas across the territory. Total rainfall from this tropical depression was 3.61 inches.	0	None reported
3/20/2002	Flood	Tutuila	Heavy showers associated with a stationary trough of low pressure over Samoa dumped 2 inches of rainfall in 24 hours causing flooding of low lying areas in the afternoon and into the evenings. Heavy runoffs continued to overflow small streams and caused some minor landslides as grounds has been saturated as it was raining on and off for the last two days. No major damages were reported.	0	None reported
4/19/2002	Flood	Tutuila	Heavy showers caused widespread flooding across the territory marking one of the wettest Flag Day in recent memories. More than two inches of rainfall fell in 2 hours during an activity packed Flag Day celebration. With the heavy runoff and showers, numerous land and mudslides occurred across	0	\$66,000

Territory of American Samoa Hazard Mitigation Plan

Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			Tutuila. The Weather Service at Tafuna recorded 6.56 inches of rainfall in three days.		
5/26/2002	Flood	Tutuila	Heavy showers dumped 2.09 inches of rainfall in less than 4 hours causing flooding of low-lying areas and streets. The heavy showers and runoffs caused overflow of streams and flooding of streets. Except for debris being washed onto the streets, no major damages were reported.	0	None reported
10/6/2002	Flood	Tutuila	Heavy showers caused flooding of low lying areas and heavy runoffs washed debris onto the roads across the island. Land and mudslides were reported along many mountainous areas and along the public highway due to heavy showers and runoffs. Except for cleanup work no major damages were reported across the territory.	0	None reported
11/15/2002	Flood	Tutuila	Heavy showers dumped more than 3 inches of rainfall in less than 3 hours causing overrun of streams and overflow ditches. Widespread flooding of low-lying areas and streets. Some land and mudslides were reported with debris decorating much of the island. Very little damage was reported except for usual cleanup.	0	None reported
4/10/2003	Flood	Tutuila	An active convective band of thundershowers dumped 2.72 inches of rainfall in less than 3 hours.	0	
5/19/2003	Flash Flood	Tutuila	A flash flood occurred across Tutuila from Nu'uuli Uta to Pago Pago many communities near	5/6	\$65M property;

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			<p>mountains and valleys. The main stream in Pago Pago rapidly overflowed and flooded many homes and businesses along the stream and all of lower Pago Pago. Over ten landslides were reported. A major landslide buried and killed 3 young men from the age of 18 to 23 years old in Pago Pago as two other men narrowly escaped this same landslide. One of these men was med-vac to Honolulu for treatment as the Hospital at Fagaalu was 90% out of business as the whole hospital was flooded. A lady in her early 40s was killed by a landslide in Fagatogo that buried the Langkilde Business Center. Another young men in his 20s was rescued and was med-vac to Honolulu on the same flight with gentleman from Pago Pago. Torrential rainfall and excessive runoff flooded Pago Pago, Fagatogo, Lower Utulei, and Fagaalu where the hospital is located. The whole village of Matu'u was flooded so as the inland and valley side of Nu'uuli. Numerous families were evacuated and had taken up shelters at temporary shelters set up by the Territorial Emergency Management Coordinating Office TEMCO. FEMA and TEMCO are currently providing assistance to families who were affected by the floods and landslides. President Bush had declared American Samoa a disaster area due to</p>		<p>\$1.2M crop damage</p>

Territory of American Samoa Hazard Mitigation Plan

Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			the flash floods and landslides. 10.68 inches of rain was reported. (An additional death has since been reported.)		
6/13/2003	Flood	Tutuila	Heavy showers fell on the territory from an active trough of low pressure over Samoa. More than 2 inches of rain fell between 330 pm and 430pm which caused rapid flooding of low lying areas and triggered some landslides in areas previously affected by the heavy rain of May 19, 2003.	0/0	\$64,000
12/22/2003	Heavy Rain	Tutuila	An active upper level trough of low pressure, which moved over, the islands Monday evening dumped almost 3 inches of rainfall in 6 hours. The heavy showers caused widespread flooding of low lying areas and overflow streams creating traffic jams in flooded streets.	0/0	None Reported
9/7/2004	Flood	Tutuila	Heavy rain caused street ponding and flooding in some villages. An unstable air mass aloft, well-associated with a trough connected to a strong gale southwest of Pago Pago, remained over the Samoan Islands within 24 hours. No damages or injuries reported.	0	None Reported
9/8/2004	Flash Flood	Tutuila	Heavy rain caused stream overflow and street flooding of over 2 feet across Tutuila. The Tafuna Office recorded about 3.30 inches of rain within the 24-hour period. Rocks and debris were spotted	0	None Reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			along the main-road. No injury or damages reported.		
5/24/2005	Flash Flood	Tutuila	Thunderstorms associated with a trough near the Islands brought a lot of rain over Tutuila and Manu'a. Several residents experienced flooding in their homes due to overflow of small streams and poor drainages in some areas on Tutuila Island. The Weather Service Office recorded a total precipitation of 5.21 inches during this period.	0	None Reported
6/30/2005	Flood	Tutuila	Less than 30 homes in Fagatogo village were tarnished with mud and debris due to overflow of small streams from heavy rain. Heavy rain over Tutuila caused street ponding and drainage issues across the Island.	0	None Reported
8/17/2005	Flash Flood	Tutuila	An active trough associated with heavy rain and thunderstorms dumped a lot of rain across the Islands. The Weather Service Office in Tafuna recorded about 4 inches from this event. Overflow of small streams and street ponding created traffic congestion for motorists. There were no reports of mudslides or injuries.	0	None Reported
12/7/2005	Flash Flood	Tutuila	A stationary trough near the Islands was associated with a lot of active weather producing a lot of rain across the Samoan Islands. Reports of heavy rain near mountainous areas caused flash flooding and made driving difficult for motorists. Some residents	0	None Reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			were overwhelmed with puddles of water in their homes. A 24-hour total of 2.45 inches was accumulated for the day's event.		
12/8/2005	Flood	Tutuila	A stationary trough near Samoan Islands produced widespread showers across Tutuila. The WSO recorded about 1.48 inches of rain for this event but reports from across Tutuila Aunu'u and Manu'a were that roadways were flooded in several villages due to the overflow of small streams and poor drainage. A few flooded roads on Tutuila caused several small cars and sports vehicles to stall for hours. No injury reported.	0	None Reported
12/15/2005	Flash Flood	Tutuila	Heavy rain caused flash flooding and loss of control of water flow in a lot of villages on the Island of Tutuila. Flood-prone roads caused some small cars and vans to stall for hours, and reports of increasing water in small streams across the Island was noticeable throughout this event. An area of convective activity from the north of Tutuila produced a lot of rain and the Weather Service Office recorded about 2.46 inches of rain for this episode.	0	None Reported
12/17/2005	Flood	Tutuila	A nearly stationary trough in the vicinity of the Samoan Islands produced widespread showers across Tutuila Island. Thunderstorms were observed by the Weather Service Office in Pago	0	None Reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			Pago. Almost all roadways received at least 1 to 3 inches of ponding while other villages experienced overflow of small streams due to continuous downpour of rain for this event. The Weather Service Office recorded a total precipitation of 2.51 inches for this episode.		
12/21/2005	Flood	Tutuila	Occasional showers caused ponding along roadways and overflow of small streams near mountainous areas. A total precipitation of 3.06 inches was recorded at the Weather Service Office.	0	None Reported
12/26/2005	Flood	Tutuila	A convection in the vicinity of the Islands increased immensely which produced a lot of rain across Tutuila and Manu'a Islands. Flooding of roadways especially villages prone to flooding in Tutuila reported stalled vehicles and traffic congestion. Rising water near small streams surprised several residents as inflow of water swept through their homes. The Weather Service Office received a total of 3.14 inches of rain for this episode.	0	None Reported
1/31/2006	Flash Flood	Tutuila	Locally heavy rainfall across the Island of Tutuila caused an increase in rising waters and overflow of small streams, especially villages located to the West of the International Airport. Homes were swamped with water from 6 inches to 3 feet, and many personal properties were spoiled and damaged from this episode. Motorists experienced	0	\$118,000 in property; \$18,000 in crop

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			difficulties bypassing stalled sedans and trucks in some flooded areas in the village of Tafuna. Less than 50 people evacuated their homes. The Weather Service Office recorded a total precipitation of 5.68 inches for this event.		
2/1/2006	Flash Flood, Heavy Rain	Tutuila	Heavy rainfall flooded 50 percent of homes in the village of Tafuna. Personal properties, including household goods, were ruined by the increasing flow of water. Two families were "forced from their homes by the floodwaters" and no injury reported. Heavy rainfall impacted roads causing potholes and "in some cases becoming deeper, resulting in an overall traffic slowdown around the Island." The Weather Service Office recorded a total precipitation of 5.53 inches.	0	\$59,000 in property; \$2,000 in crop
2/6/2006	Heavy Rain	Tutuila	Heavy rainfall caused an increase in rising water in several villages across the Island of Tutuila. Some roads were flooded with at least 1 to 3 inches of water, causing traffic congestion in some areas. A total rainfall of 4.22 inches was recorded	0/0	None Reported
12/4/2006	Flash Flood	Pago Pago	Thunderstorms and heavy rainfall were associated with an active trough near the Islands. The Weather Service Office recorded about 4.72 inches of precipitation for this event; residents reported widespread flooding and landslides across the Island of Tutuila.	0	None Reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
2/2/2007	Flash Flood	Pago Pago	The Weather Service Office recorded between 2 to 3 inches of rainfall in 3 hours. Residents along low-lying villages reported run-off and increasing flow of water along small streams. Roads were covered with water and there was ponding in residential yards.	0	None Reported
2/22/2007	Flash Flood	Tutuila, Pago Pago	An intensified convection from the east expanded across Manu'a, Aunu'u and Tutuila Islands early Thursday morning. Locally heavy rainfall swathed some village grounds with runoff along small streams. The Weather Service replaced a Small Stream Flood Advisory with a Flash Flood Warning and recorded about 1 to 3 inches of rainfall for this event.	0	None Reported
9/3/2007	Flash Flood	Pago Pago	A Flash Flood Warning for Tutuila was issued. Debris washed onto the roads and mud and landslides occurred at Malota and Fagamalo. Three inches of rain in three hours were reported.	0	None Reported
12/7/2007	Flash Flood	Pago Pago	A monsoon trough that extends all the way from the Solomon Islands southeastward to just south of the Samoa Group spread heavy rain and thunderstorms across the islands over the weekend. The sat nearly stationary just to the south of the islands and caused widespread flooding across Tutuila. Flash Flooding was reported from the Malaeimi Valley to the Bay Area.	0	\$287,000 in property damage

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			<p>Heavy showers and runoffs overflowed most streams from Faganeanea to Pago Pago and dumped lots of debris and rocks on the roads. The X-Ray room and part of the Surgical Ward at the LBJ Medical Center was flooded as the jammed and clogged up Fagaalu stream force all the water and mud onto the hospital parking lot into part of the hospital. Fortunately, the hospital had taken all necessary precautions avoiding a major disaster in protecting lives and properties. The National Weather Service had a Flash Flood Warning, which gave enough time for the public to prepare for the flooding.</p>		
<p>12/8/2008</p>	<p>Flash Flood</p>	<p>Vaitogi</p>	<p>An active trough of low pressure developed northeast of the islands. The Pago Pago National Weather Service Office recorded 13.55 inches of rainfall total over 6 days. Furthermore, the Pago Pago NWS had issued small stream advisories for the islands during the period and a flash flood warning on the last day of the episode. The Department of Public Safety and the Department of the Public Works both reported roads inundated by the overflow of streams and major works due to drainage problems. No other major damages were reported. With a saturated ground from the previous days, a slow- moving trough poured 3.59</p>	<p>0</p>	

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			inches of rain over the islands on the 8th of December. The Pago Pago NWS issued the flash flood warning. The flash flood from the slow-moving trough produced heavy runoffs of streams and inundated low lying of the islands.		
12/10/2009	Flash Flood	Pago Pago	Heavy rainfall caused runoff and flooded roadways. Two homes were flooded in the village of Tafuna due to poor drainages. The WSO received 6.41 inches of rainfall during this event.	0	None Reported
11/20/2010	Flash Flood	Tutuila, Vaitogi	Over 2 inches of rainfall caused small stream runoff and flooded roadways along villages with poor drainages on Tutuila and some parts of Aunu'u and Manu'a. No injury or damages reported.	0	None Reported
12/18/2010	Flash Flood	Tutuila, Vaitogi	Heavy rainfall caused runoff and overflow of small streams on Tutuila, Aunu'u and Manu'a, especially near poor drainage areas. The Weather Service Office received nearly 3 inches of rainfall during this episode.	0	None Reported
6/3/2011	Flash Flood	Tutuila, Vaitogi	On a late Friday morning, a slow moving Squall line or Mesoscale Convective System had inundated low-lying areas of Tutuila and Aunu'u. The National Weather Service Office in Pago Pago issued a Flash Flood Warning and later recorded rainfall totals of 2.17 inches in an hour period. Residents had reported inundations along poor drainage and low lying areas. The American Samoa Department of	0	None Reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			Homeland Security reported overflow of streams onto roads in which had created numerous counts of potholes on and along major roadways. No other damages were reported.		
11/21/2011	Flash Flood	Tutuila, Vaitogi	A nearly stationary trough to the southwest of the Samoan Islands has triggered heavy rainfall. Flash flooding, landslides, and heavy run-off were reported from across the Island of Tutuila. The Weather Service office received 2.56 inches of rainfall for this episode.	0/0	None Reported
7/29/2014	Flooding	All islands	July 29- August 3 flooding and storms that also spurred landslides. The events resulted in a disaster declaration. Over \$5 million in damages including government buildings flooding (2 feet in the registrar's office) and 100 homes destroyed. One fatality was reported from a teenager swimming in a swollen creek. She was swept out to sea. Additional damage to agriculture was reported. Bananas were near maturation when the storms destroyed many of them. Additional information is reported below.	1/0	\$5 million
1/8/2014	Flash Flood	Vaitogi	None reported	0/0	None reported
11/27/2015	Flash Flood	Pago Pago	Tropical Cyclone Tuni produced heavy rainfall across American Samoa. During a 48 hour period, over 7.80 inches of rainfall were recorded at the Weather Service Office in Tafuna. Flash flooding	0/0	\$8,000,000

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			triggered strong runoff and landslides in some villages on the Island of Tutuila, and strong runoff near mountainous location swept water into homes and family stores. Heavy rainfall triggered strong runoff especially along the central and eastern district of Tutuila. Public parking lot and roads were flooded, and landslides were reported mainly from the eastern district.		
12/28/2015	Heavy Rain	Vaitogi	A series of heavy rainfall between the hours of 5AM to 5PM triggered flash flooding across American Samoa. There were reports of landslides from the Eastern district near Masefau and Auasi villages, and strong runoffs from streams and mountains have impacted homes in the villages of Nu'uuli and Aua. The Weather Service Office recorded nearly five inches of rainfall from 5AM to 5PM. There were no injuries or fatalities reported.	0/0	None reported
5/1/2016	Heavy Rain	Vaitogi	None reported	0/0	None reported
5/11/2016	Flash Flood	Vaitogi	None reported	0/0	None reported
5/21/2016	Flash Flood	Vaitogi	None reported	0/0	None reported
2/8/2017	Heavy Rain	Vaitogi	The Weather Service Office received 3.27 inches of rainfall during the 24-hour period while heavier showers fell near mountainous locations. Gusty winds up to 50 mph have impacted a few banana plantation across Tutuila. Heavy water ponding was noticeable in the Tualauta region and Eastern	0/0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			district. Reports of immensely heavy rain were also reported from Manu'a Islands.		
5/10/2017	Heavy Rain	Vaitogi	Extremely heavy runoffs, landslides, and severe flash flooding were results of heavy rain from an active surface trough near American Samoa. The Weather Service Office in Tafuna recorded over 8 inches of rainfall during the first day of this rainy event, and over 2.40 inches of precipitation on the second day. Yet, higher amounts of rainfall drenched locations near mountains and valleys. Over a dozen homes and private properties were flooded and critically impacted across American Samoa, causing several families to self-evacuate.	0/0	\$350,000
8/19/2017	Heavy Rain	Vaitogi	None reported	0/0	None reported
9/22/2017	Heavy Rain	Pago Pago	The Weather Service Office recorded over 3.70 inches of rainfall.	0/0	None reported
10/12/2017	Flash Flood	Vaitogi	None reported	0/0	\$7,000
10/18/2017	Heavy Rain	Vaitogi	The Weather Service Office recorded 5.02 inches for this two-day episode.	0/0	None reported
10/29/2017	Heavy Rain	Vaitogi	Weather Service Office recorded about 4.58 inches of rainfall during this episode.	0/0	None reported
11/23/2017	Heavy Rain	Vaitogi	None reported	0/0	None reported
12/7/2017	Flash Flood	Vaitogi	None reported	0/0	None reported
12/10/2017	Flash Flood	Vaitogi	None reported	0/0	None reported
1/5/2018	Flash Flood	Vaitogi	None reported	0/0	\$30,000

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
1/30/2018	Heavy Rain	Vaitogi	Moderate to heavy rains just days earlier leading up to January 30th triggered a mudslide near a residential area in the village of Utulei, between the hours of 7:30 AM and 8 AM. The Emergency management reported a huge banyan tree fell over the roof and patio of a two-story home. The home sustained severe damages to roofing and interior of property, but no injury or fatality was reported. The Weather Service Office received about 0.60 inch of rainfall from 7 AM to 10 AM,	0/0	\$27,000
8/1/2018	Flash Flood	Vaitogi	None reported	0/0	\$10,000
9/3/2018	Flash Flood	Pago Pago	None reported	0/0	\$5,000
9/13/2018	Flash Flood	Pago Pago	None reported	0/0	\$5,000
9/17/2018	Flash Flood	Pago Pago	None reported	0/0	\$10,000
9/29/2018	Flash Flood	Pago Pago	None reported	0/0	\$10,000
9/30/2018	Heavy Rain	Pago Pago	Landslide/Mudslide reported at Faga'alu Village due to continuous heavy rainfall.	0/0	\$10,000
10/1/2018	Flash Flood	Pago Pago	None reported	0/0	\$5,000
10/10/2018	Flash Flood	Pago Pago	None reported	0/0	\$10,000
10/19/2018	Flash Flood	Pago Pago	None reported	0/0	\$15,000
3/6/2019	Flash Flood	Vaitogi	None reported	0/0	None reported
4/26/2019	Flash Flood	Vaitogi	None reported	0/0	None reported
5/3/2019	Flash Flood	Vaitogi	WSO Pago Pago recorded 2.16 inches of rain within the hour. Teachers reported flooding at Tafuna High School and outside of classrooms. Midkiff elementary reports flooding near classrooms.	0/0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			Fagaima resident reported flooding in the front of her home about 1 foot deep. Hard for cars to drive through.		
5/12/2019	Flash Flood	Pago Pago	None reported	0/0	None reported
6/11/2019	Flash Flood	Pago Pago	None reported	0/0	None reported
7/22/2019	Flash Flood	Vaitogi	None reported	0/0	None reported
7/25/2019	Flash Flood	Vaitogi	WSO Pago Pago recorded 2.16 inches of rain within the hour. Teachers reported flooding at Tafuna High School and outside of classrooms. Midkiff elementary reports flooding near classrooms. Fagaima resident reported flooding in the front of her home about 1 foot deep. Hard for cars to drive through.	0/0	\$10,000
8/16/2019	Flash Flood	Vaitogi	None reported	0/0	None reported
10/15/2019	Flash Flood	Vaitogi	None reported	0/0	None reported
12/24/2019	Heavy Rain	Vaitogi	Heavy precipitation of 3.35 inches of rain over a 24-hour period was recorded at the NWS Pago Pago. As grounds were already saturated prior to this event, many flooded reports in the typical villages with poor drainage systems like Futiga, Tafuna, and Fagaalu were called in. Also, 2 landslides were observed. 1. in Fagaalu 2. in Fatu ma Futi village.	0/0	None reported
1/16/2020	Heavy Rain	Vaitogi	This weather event produced heavy showers and strong winds over the territory, which caused landslides and flooded roadways as well as downed trees and power lines. For a 48-hour period (from	0/0	None reported

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Event Name, Date	Event	Geographical Extent	Impacts	Deaths/ Injuries	Estimated Losses (\$) ²²²
			the 16th to the 18th) the WSO Pago Pago recorded 5.52 inches of rain. This rain event prompted a landslide in Agugulu that blocked the westbound lane.		
1/22/2020	Heavy Rain	Vaitogi	Due to grounds being saturated over a long period of time from the monsoonal trough event that began on the 17th of January, landslides and flooded roadways were easily susceptible during rain events. An NWS employee and several callers from the public reported landslides in Amaluia and a minor landslide in Fatu ma Futi. Over a 24-hour period 5.83 inches of rain was recorded at the WSO Pago Pago. This event caused the roads on both lanes to be blocked in Amaluia (there are only two lanes in American Samoa), which left residents from villages west of Amaluia stuck westbound until roads were cleared by Public Works later that evening. A minor landslide in Fatu ma Futi blocked only one lane, luckily only a few minor boulders fell, and public works was able to clear it up quickly.	0/0	\$10,000

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Table 59 High Surf Occurrences

Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
ALL ISLANDS						
3/29/1999	High Surf	All (south-facing shores)	8-12	High surf of 8 to 12 feet along south shores of the islands.	0/0	None Reported
4/27/1999	High Surf	All (south-facing shores)	6-10	High surf of 6 to 10 feet along the south shores.	0	None Reported
5/12/1999	High Surf	All (south-facing shores)	8-12	Surf of 8 to 12 feet along south shores.	0	None Reported
10/12/2004	Heavy Surf/High Surf	All (south-facing shores)	8-12	High pressure far south of the Islands generated south to southeast swells of 4 to 6 feet, producing 8 to 12 feet surf along south shores of all Islands.	0	None Reported
10/22/2004	Heavy Surf/High Surf	All (south-facing shores)	10-12	A large area of trade wind swells was reinforced by a south swell of 4 to 6 feet. Large surf of 10 to 12 feet with occasional higher sets reached south shores of all Islands.	0	None Reported
10/30/2004	Heavy Surf/High Surf	All (south-facing shores)	5-7	Large south swells of 5 to 7 feet were generated by intense low pressure far south of the Islands.	0	None Reported
2/3/2005	Heavy Surf/High Surf	All (southeast-facing shores)	10-14	Southeast swells of 5 to 7 feet generated by Tropical Cyclone Meena far east of Tutuila produced surf heights of 10 to 14	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				feet along southeast facing shores of Tutuila and Manu'a.		
2/27/2005	Heavy Surf/High Surf	All (south-southwest facing shores)	not reported	Large swells generated by Tropical Cyclone Percy pummeled east and south facing shores of Tutuila and Manu'a Islands.	0	None Reported
6/1/2005	Heavy Surf/High Surf	All (south and southwest-facing shores)	5-6	South to southwest swells of 5 to 6 feet produced surf heights of 10 to 12 feet along south and southwest facing shores of Tutuila and Manu'a.	0	None Reported
6/5/2005	Heavy Surf/High Surf	All (south-southwest facing shores)	10-14 (Manu'a& Tutuila); 4-5 (Swain)	An intense low pressure near New Zealand generated large south to southwest swells of 7 feet, producing surf heights of 12 to 14 feet with occasional higher sets along south shores of Tutuila and Manu'a. Swells of 4 to 5 feet from this trend reached Swains for a couple of days.	0	None Reported
7/1/2005	Heavy Surf/High Surf	All (south-facing shores)	10-14	Surf of 10 to 14 feet was generated by a south swell from a low-pressure area far south of Tutuila and Manu'a Islands.	0	None Reported
7/22/2005	Heavy Surf/High Surf	All (south-facing shores)	12	Large swells associated with an intense low pressure far south of	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				the Islands reached Tutuila and Manu'a Islands, producing surf heights around 12 feet along south shores of the Islands.		
8/8/2005	Heavy Surf/High Surf	All (east and southeast-facing shores)	10-12	Large surf near 10 to 12 feet was generated by strong low pressure far south of the Samoan Islands. Coral debris were washed on-shore and near the street from this event.	0	None Reported
9/12/2005	Heavy Surf/High Surf	All (south-facing shores)	10-14	An intense low pressure far south of the Islands generated south swells of 5 to 7 feet, which produced surf heights of 10 to 14 feet along south facing shores of American Samoa.	0	None Reported
10/1/2005	Heavy Surf/High Surf	All (south-facing shores)	10-12	An intense low pressure far south of the Islands generated a south swell of 4 to 6 feet, which produced high surf of 10 to 12 feet along south facing shores of the Islands.	0	None Reported
11/1/2005	Heavy Surf/High Surf	All (south-facing shores)	8-12	The normal surf was generated by a very low intense pressure area far south of the island of Tutuila,	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				Aunu'u and Manu'a. Surf swells 8 to 12 feet high in the islands.		
6/23/2007	High Surf	All (south-facing shores)	8-12	High surf of 8 to 12 feet with occasional higher sets impacted much of south facing shores of Tutuila, Aunu'u and the Manu'a islands in the last week of the month. Higher than normal surf was generated from a gale low off of New Zealand. There were no significant damages.	0	None Reported
8/24/2007	High Surf	All (south-facing shores)	not reported	High Surf Advisories were posted for all south-facing shores of Tutuila from August 24th to August 31st. Result of heavy swell from an intense low-pressure area far south of the islands No significant damages were reported.	0	None Reported
9/1/2007	High Surf	All (south-facing shores)	8-12	High surf continued into September generated from a low far south of the islands September 1st to September 5th. No significant damages were reported.	0	

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
9/14/2007	High Surf	All (south-facing shores)	8-14	Another intense low-pressure system far south of the islands generated heavy southerly swell across the Samoan Islands from September 14th to the 19th. Surf of 8 to 14 feet impacted most of south facing shores especially from Avau to Fatumafuti and from Lauli'i to Tula. No significant damages were reported.	0	None Reported
6/1/2008	High Surf	All (south-facing shores)	8-14	A series of Low Pressure Systems moving eastward across New Zealand generated swells of 8 to 14 feet along south facing shores of Tutuila, Aunu'u, and Manu'a. This event occurred on the 1st to the 21st of June. During this period, high surf advisory where posted at major beaches of the islands, which caused less activities and beach goers to be seen at the beaches. Sea spray from breaking waves and wave crest were also observed. There were no reports of serious injuries or property damage.	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
7/1/2008	High Surf	All (south-facing shores)	8-14	EPISODE NARRATIVE: Heavy swell from a series intense low pressure systems far south of American Samoa combined with strong trade wind surge generated surf of 8 to 14 feet with occasional higher sets. This high surf episode lasted from June 24th continuing towards July 23rd. Some coastal flooding was reported during high tides from Pagai to Cape Matatula on the 14th of July. The rainfall recorded on this day was 1.78 inches, which was the highest rainfall for the month of July. In addition, high surf advisory was posted on major beaches and was announced on local media for public awareness. No significant damages were reported.	0	None Reported
9/5/2008	High Surf	All (south-facing shores)	10-14	A High Surf Advisory was issued on September 5 due to a series of Low Pressure Systems north of New Zealand, which produced moderate to strong swells. These Swells affected south facing	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				shores of the islands of Tutuila, Aunu'u, and Manu'a		
5/14-15/2014 ²²³	High Surf	All	7-9	High Surf Advisory issued		
6/1/2014	High Surf	All	7-9	High surf advisory (7 to 9 ft.)		None Reported
MANU`A						
2/15/2005	Heavy Surf/High Surf	Manu'a		A 68-foot vessel was afloat within 50 miles north of Manu'a, said to be "disabled with no steering wheel but had power." High swells generated by Hurricane Olaf. Crew members were not hurt. The Associated Press reported a vessel sank on February 16th in "50-foot waves and 120 mph winds about 95 miles north of American Samoa and the four rescued crew members were on a life raft when they were found." There were reports about other missing vessels based in Western Samoa but were later found by Coast	0/2	\$10,000

²²³

<http://alerts.weather.gov/cap/wwacapget.php?x=AS125154314360.HighSurfAdvisory.1251543EC210AS.STUCFWPPG.925ea42183e00926419895f300ded287>

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				Guards and Rescue Team from New Zealand.		
6/18/2015	High Surf	Manu`a	12 - 15	Combined long-period swells and trade-wind generated seas and swells have triggered the Pacific Islands Ocean Observing System (PacIOOS) buoy to detach from its moore. A storm low near New Zealand was responsible for these hazardous south swells of 12 to 15 feet.	0/0	\$0
7/22/2015	High Surf	Manu`a	Not reported	Not reported	0/0	\$0
8/30/2015	High Surf	Manu`a	Not reported	Not reported	0/0	\$0
12/28/2015	Rip Current	Manu`a	Not reported	The Talanei News reported a drowning incident of a 31 year old male near the village of Faleasao during the afternoon time. Hazardous seas and surfs were results of an active monsoonal trough that moved near the east of Manu'a. There were Advisories for high surf and small craft that were issued for all of American Samoa prior to this tragedy. The Department of Police Service dispatcher confirmed that the	1/0	\$0

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				<p>body of the victim has not been recovered.</p> <p>The Department of Public Safety dispatcher confirmed a drowning incident of a male fisherman in his early 30s on December 28th. The victim was swept to sea and his boy has not been recovered.</p> <p>Strong swells and hazardous seas have prevented the Search and Rescue team from conducting their services to find the missing man. The Advisories for small craft and high surf were issued prior to this unfortunate tragedy. A strong monsoonal trough near the east of Manu'a was responsible for strong gusty winds...hazardous surfs and swells.</p>		
8/21/2018	High Surf	Manu`a	Not reported	Not reported	0/0	\$0
SWAINS						
SWAINS (ZONE)	7/22/2015	High Surf	Swains	Not reported	Not reported	0/0
SWAINS (ZONE)	8/21/2018	High Surf	Swains	Not reported	Not reported	0/0
TUTUILA						
6/2/1998	High Surf	Tutuila	5-8	A surface high southwest of Samoa produced waves from 5 to	1/0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				8 feet and a resulting high surf advisory was broadcasted from June 2-4. A police officer was killed at sea (because of high surf) on June 3, after he responded to a call about a teenager that was going to commit suicide at sea. The youngster was saved but the officer was later found on the 4th of June.		
4/6/2000	High Surf	Tutuila (south-facing shores)	8-14	High surf of 8-14 feet affected the south shores of Tutuila for 6 days, creating strong rip currents at most of the bays especially from Nu'uuli to Fagaalu. The high surf gave warnings were issued to swimmers and fishermen.	0	None Reported
4/28/2000	High Surf	Tutuila			0	None Reported
5/14/2000	High Surf	Tutuila (south-facing shores)	20	An intense low pressure far south of Samoa generated high swell which created surf up to 20 ft. in some exposed areas along south shores of American Samoa. The extremely high surf combined with high tides caused some beach erosion. Many low-lying	0	\$100,000

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				areas along the main road were blocked with debris, sand and rocks and needed cleanup. These were some of the highest surf observed in a non-Tropical Cyclone system.		
5/28/2000	High Surf	Tutuila (south-facing shores)	20-30	Another strong low pressure in a series of low-pressure systems which moved from west to east, south of Samoa, generated high swell with surf up to 20 feet. Surf up to 30 feet was reported from Vailoatai to Vaitogi. Some areas of road from Nu'uuli to Fagaalu were again overrun by the high surf during high tides, causing some traffic backups	0	None Reported
6/1/2000	High Surf	Tutuila (south-facing shores)	3-5	An intense low-pressure area south of Samoa, moving from west to east, generated high surf along south shores of American Samoa. Damaging wave action and strong rip currents associated with the extremely high surf were being observed all the way from Vaitogi to Vailoatai and from	0	\$50,000

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				Nu'uuli to Fagaalu. Surf of 3 to 5 feet was also observed within the Bay Area, which is very rare. Sections of the Main road were washed off or overrun by surf spreading debris, sand and rocks from Vasaaiga to Fatumafuti.		
12/15/2000	High Surf Advisory	Tutuila (south-facing shores)	10-15	Surf of 10 to 15 feet bounded south shores of Tutuila over the weekend. These high surf were generated by an unusually strong low pressure area east of New Zealand at this time of the year. Some beaches were closed to the public due to strong rip currents especially during high tides. No major damages were reported through this episode.	0	None Reported
12/3/2001	High Surf Advisory	Tutuila (south-facing shores)		High surf generated by an intense low-pressure area far south of Samoa washed out a temporary access road at Avau Point which cost about \$200,000.00 to construct. The exceptionally high surf was reported throughout the south shores of the Tutuila. No	0	\$200,000

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				other major damages were reported besides debris being washed onto the roads along lower coastal areas.		
12/26/2001	High Surf Advisory	Tutuila (north-facing shores)		High surf generated by Tropical Cyclone Waka affected the north shores of the territory. The high surf then came from the west and later from the south as Waka continued southward.	0	None Reported
1/1/2002	High Surf Advisory	Tutuila (south-facing shores)		High surf generated by Tropical Cyclone Waka continued along the south shores.	0	None Reported
8/19/2002	High Surf Advisory	Tutuila (south-facing shores)		High Surf Advisory was issued for south shores of Tutuila due to heavy swell generated by a low-pressure area far south of Samoa. No significant damages or injuries were reported during this high surf episode.	0	None Reported
5/1/2003	Heavy Surf/High Surf	Tutuila		None reported	0	None Reported
5/17/2003	Heavy Surf/High Surf	Tutuila		This high surf/heavy surf event, which lasted for over a week created many problems not only for the swimmers and fishermen	0	\$3,500,000

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				but for the general public as well due to flash flooding. The high surf combined with exceptionally high tides blocked all streams from draining into the ocean that caused numerous flooding in all bridges from the Bay Area to Nu'uuli. Estimated damages to the bridges and coastal roads were in the millions. President Bush has declared American Samoa a disaster area because of the flash floods, which included coastal flooding.		
6/1/2003	Heavy Surf/High Surf	Tutuila (south-facing shores)		A semi-permanent ridge of high pressure, which was nearly stationary far south of the islands, produced strong trades and high surf that affected much of the south shores of Tutuila for more than a week.	0	None Reported
10/9/2003	Heavy Surf/High Surf	Tutuila (south-facing shores)	10+	Another strong ridge of high moved south of Samoa and generating heavy surf and swell in excess of 10 ft. Impacts from October 9th to October 12th. The	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				high surf created strong rip currents from Nu'uuli to Fagaalu and from Lauili'i to Cape Matatula.		
9/8/2004	Heavy Surf/High Surf	Tutuila (south-facing shores)	0	Large south swells swept an alia to shore, near the Maliu Mai beach resort at Fogagogo. 4 fishermen, ranging in age from 17 to 40, were not seriously injured. "A huge wave turned their vessel upside down and the engine dropped off", reported the Samoa News. A high surf advisory was issued due to large south swells.	0/6	\$5,000
8/20/2005	Heavy Surf/High Surf	Tutuila (south-facing shores)	4-6	A combination of south and southeast swells near 4 to 6 feet impacted south facing shores of the Islands. Corals were washed up along a few low-lying areas in Tutuila.	0	None Reported
10/17/2005	High Surf Advisory	Tutuila (south-facing shores)	10-18	An intense low-pressure area far south of Samoa generated heavy swell, which caused high surf of 10-18 feet that bounded the south shores of Tutuila for about a week. It provided excellent surfing	0	None Reported

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				conditions for the surfers but created some problems for marine patrols.		
2/7/2008	High Surf	Tutuila (south-facing shores)		High Surf Advisories were posted for all south-facing shores of the island of Tutuila for four days.	0	None Reported
5/20/2008	High Surf	Tutuila (south-facing shores)	10-20	Heavy surf impacted most of south facings shores of Tutuila but most especially from Avau to Matu'u and from Alao to Cape Matatula. Surf of 20 feet forced the closure of Avau Beach on the 24th and the 25th. Some coastal flooding was reported during high tides from Pagai to Cape Matatula. This high surf episode lasted from May 20th to the 26th.	0	None Reported
6/18/2015	High Surf	TUTUILA (ZONE)	Not reported	Not reported	0/0	0
7/22/2015	High Surf	TUTUILA (ZONE)	18-20	Large surfs of 18 to 20 feet impacted west, south and east facing reefs of American Samoa. A combined south swell and seasonal trade-wind generated swells produced hazardous surfs and dangerous rip currents.	0/0	0

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				<p>Reports of coastal erosion and debris have damaged roads, while other parts of the Islands experienced waves wash up corals on the main road. The Talane News reported residents observed waves crash on the road while other villages suffered from the horrendous heights of surfs pounding along the affected shores. A high surf warning and small crafts advisory were issued during this episode</p>		
8/30/2015	High Surf	TUTUILA (ZONE)	16	<p>A large southerly swell combined with a strong trade-wind generated seas and swells have produced dangerous surfs up to 16 feet with occasional higher sets along the east...south and west facing reefs. Reports of debris and corals swept over the main road were observed by motorists and residents.</p>	0/0	0
8/21/2018	High Surf	TUTUILA (ZONE)	8-10	<p>Moderate to fresh easterlies will continue to dominate over the forecast area as a surface ridge to</p>	0/0	0

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				the south migrate eastward through Wednesday. Current PacIOOS Aunu'u wave buoy observations show seas within 6 to 8 feet this afternoon largely due to the winds. Large surf heights of 8 to 10 feet will affect southwest through southeast facing shores.		
8/26/2018	High Surf	TUTUILA (ZONE)	Not reported	Not reported	0/0	0
9/1/2018	High Surf	TUTUILA (ZONE)	10-14	PacIOOS Aunu'u wave buoy recorded seas of 8 to 11 feet, peaking at 9 to 12 feet, which translates to surfs of translating to 10 to 14 feet throughout the Advisory period from September 1st until September 7th.	0/0	0
9/15/2018	High Surf	TUTUILA (ZONE)	8-12	PacIOOS Aunu'u wave buoy recorded seas of 7 to 9 feet, peaking at 9 to 12 feet, through this episode. The seas translate to surfs of 8 to 10 feet, peaking at 10 to 13 feet, prompting and maintaining the advisories for High Surfs.	0/0	0

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
9/26/2018	High Surf	TUTUILA (ZONE)	Not reported	Not reported	0/0	0
10/1/2018	High Surf	TUTUILA (ZONE)	10-14	PacIOOS Aunu'u wave buoy observed seas of 9 to 12 feet, translating to 10 to 14 feet of surfs, prompting and maintaining the advisory for high surfs.	0/0	0
10/12/2018	High Surf	TUTUILA (ZONE)	10-14	PacIOOS Aunu'u wave buoy observed seas of 7 to 12 feet throughout the High Surf Advisory period. These seas were mainly wind driven waves and combined with large southerly swells. They translate to surfs of 10 to 14 feet.	0/0	0
6/30/2019	High Surf	TUTUILA (ZONE)	15	Choppy seas from the strong trade winds caused seas to reach over 15 feet with periods around 11 seconds. Reports in Coconut Point, Nu'uuli of coastal inundation in front yards and graves completely underwater.	0/0	0
8/17/2019	High Surf	TUTUILA (ZONE)	14	A strong storm near New Zealand produced swell periods of 14 to 16 seconds, which generated high surfs around 14 ft. News from the talanei reported two boys (16 and	2/0	0

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				17 y/o) swept out to sea during high surf conditions due to strong rip currents.		
9/19/2019	High Surf	TUTUILA (ZONE)	14	A strong storm near New Zealand produced swell periods of 14 to 16 seconds, which generated high surfs around 14 ft. A canoe with 6 rowers capsized in Utulei due to rough seas. Rowers had a difficult time flipping canoe back to its upright position.	0/0	0
9/23/2019	High Surf	TUTUILA (ZONE)	18	Surfs up to 18 feet impacted coastal shores due to large southerly swells.	0/0	0
12/24/2019	High Surf	TUTUILA (ZONE)	10-14	Wind generated waves associated with an active trough and thunderstorms in the vicinity, have caused seas to reach 10 to 14 feet throughout this period. Two fatalities in the north west and north east shores were reported within a few days apart; both were veteran fishermen. The fisherman who sadly lost his life went out fishing during low tide in the village of Vailoa, which was	1/0	0

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Event Name, Date	Event	Location	Mag (ft)	Details and Impacts	Deaths/ Injuries	Damage
				the normal routine for him. Recent drownings reported were during low tide in combination with high surf conditions.		
12/25/2019	High Surf	TUTUILA (ZONE)	Not reported	Not reported	1/0	0
4/16/2015	Seiche	TUTUILA (ZONE)	6-9	Two traditional longboats capsized just less than 2 miles away from the mouth of Pago Pago harbor during the American Samoa Flag Day race. Seas of 6 to 9 feet have impacted the race which caused the cancellation of the longboat race. A small craft advisory was issued when this marine incident occurred. No injury or fatality reported.	0	0

Table 60 Recorded Landslide Occurrences

Event Name, Date	Number of Occurrences	Cause	Geographical Extent	Impacts	Deaths/ Injuries
Landslide October 28, 1979	60+	Rainstorms	Western portion of Tutuila. Se'etaga debris flow	Four people killed in Se'etaga debris flow. Significant structural damage.	4/0
Landslide 1985	1	Rainstorms	Nua, western Tutuila	School building destroyed.	0/0

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Event Name, Date	Number of Occurrences	Cause	Geographical Extent	Impacts	Deaths/ Injuries
Landslides 1989	23	Rain, Water Leak	Fagasa, Aua,	Information drawn from the Pacific Disaster Center GIS Shapefile (limited metadata on source)	0/0
Landslide February 2-4, 1990	10+	During Hurricane Ofa	Central ridge top, Tutuila	Most occurred along the central ridge top of Tutuila on extremely steep and largely inaccessible slopes. Most likely caused by heavy rain and contributed to by the toppling of large trees carrying soil as they fell down slope.	0/0
Landslide Almost yearly	8	Rainfall	Aua-Afono Road, Tutuila	Aua-Afono Road blocked.	0/0
Landslide May 12, 1999	1+	Flood	Tutuila	Some homes were flooded with the significant rise of water. Broken trees and gravel washed off nearby mountains blocking roads at some villages, like Nu'uuli. Landslides across Tutuila	0/0
Landslide September 12, 1999	1+	Flood	Poloa and Fagamalo	The heavy showers associated with a stationary trough flooded and overflow many of the streams. Mud and landslides occurred at Poloa and Fagamalo causing temporary blockage of the road.	0/0
Landslide 2000	1	Rainfall	Nu'uuli-Pago Pago Road	Nu'uuli-Pago Pago Road rock fall.	1/0
Rock fall February 27, 2000	1+	Flash Flooding	Laauli'i lookout	A man narrowly escaped injury as his car was smashed by a large rock at the Laauli'i lookout because of a landslide, one of the	0/0

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Event Name, Date	Number of Occurrences	Cause	Geographical Extent	Impacts	Deaths/ Injuries
				various land and mudslides being reported by TEMCO across the territory.	
Landslides and mudslides March 23, 2001	1+	Flood	West of Poloa	The police reported mud and landslides west of Poloa.	0/0
Landslides and mudslides March 27, 2001	1+	Flood	Tutuila	These heavy showers and heavy runoffs have cause flooding of low lying areas and overflow of small streams as well as causing mud and landslides across the Tutuila.	0/0
Landslide May 26, 2002	1+	Flood	Auauuli, Tau	Residences of Tau reported heavy runoffs and landslide at the Auauuli due to heavy showers.	
Landslide May 19-21, 2003	10+	Heavy rainfall	Pago Pago, Fagatogo, Nu'uuli, Fagaalu, & Utulei, Tutuila.	Heavy rainfall caused widespread debris flows, rock falls, and slumps. Deaths were a result of the landslides, while most property damage was flood related.	5/0
Landslides December 4, 2006	1+	Heavy rainfall	Tutuila	Thunderstorms and heavy rainfall were associated with an active trough near the Islands. The Weather Service Office recorded about 4.72 inches of precipitation for this event; residents reported widespread flooding and landslides across the Island of Tutuila.	0/0
Landslides	1+	Heavy rainfall		A nearly stationary trough to the southwest of the Samoan Islands has	0/0

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Event Name, Date	Number of Occurrences	Cause	Geographical Extent	Impacts	Deaths/ Injuries
November 21, 2011				triggered heavy rainfall for a couple of hours. Flash flooding, landslides, and heavy run-off were reported from across the Island of Tutuila. The Weather Service office received 2.56 inches of rainfall for this episode.	
Landslides July 29 – August 3, 2014	1+	Heavy rain	Utulei and Gataivai	A landslide destroyed at least three homes and damaged the church.	0/0
Landslides	At least annually		Mt. Alava	The road to Mt. Alava is very dangerous and is subject to frequent landslides. There is a main communication tower/antennae on top, so access is necessary.	

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Table 61 Hurricane and Tropical Storm Tracks within 75 miles of American Samoa Occurrences (1945-2012)

Date	Name	Wind Speed	Type (max within 75 miles of American Samoa based on Saffir-Simpson Scale)	Islands Traversed
Direct Hits				
1/24/1966	unnamed	Not reported	Tropical Depression	Tutuila
2/3/1957	unnamed	Not reported	Cyclone	Ta'u
12/10/1991	unnamed	103	Tropical Depression	Tutuila
Within 75 miles of American Samoa Islands				
2/9/1959	unnamed	Not reported	Tropical Depression	-
2/22/1959	unnamed	Not reported	Tropical Depression	-
3/17/1960	unnamed	Not reported	Tropical Depression	-
1/20/1964	unnamed	Not reported	Tropical Depression	-
12/14/1967	unnamed	Not reported	Tropical Depression	-
2/13/1978	Charles	74	Tropical Storm	-
3/1/1981	unnamed	57	Tropical Storm	-
2/28/1982	Isaac	Not reported	Tropical Depression	-
1/15/1987	Tusi	115	Category 3 Cyclone	-
3/1/1987	unnamed	51	Tropical Storm	-
4/24/1987	Zuman	63	Tropical Storm	-
2/3/1990	Ofa (100 west of Pago Pago)	100	Category 4 Cyclone	-
12/9/1991	Val	115	Category 4 Cyclone	-
3/15/1992	Fran	34	Tropical Depression	-
2/4/1993	unnamed	28	Tropical Depression	-
1/13/1997	Drena	74	Tropical Storm	-

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1/3/1998	Susan	74	Tropical Storm	-
1/27/1998	Tui	28	Tropical Depression	-
2/1/1998	Veli	40	Tropical Depression	-
1/13/2004	Heta (150 miles away)	160	Category 5 Cyclone	-
2/18/2005	Olaf	166	Category 5 Cyclone	-
2/27/2005	Percy	126	Category 3 Cyclone	-
1/4/2006	Tam	35	Tropical Storm	-
1/28/2010	Nisha	67	Tropical Storm	-
2/1/2010	Oli	Not reported	Tropical Storm	-
2/9/2010	Rene	Not reported	Category 1 Cyclone	-
3/9/2010	Thomas	Not reported	Not reported	-

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Table 62 Summaries of Historic Cyclone Events

Event Name, Date	Geographical Extent	Severity (Category)	Impacts	Deaths/ Injuries	Estimated Losses (\$)
Un-named hurricane January 29-30, 1966	Throughout American Samoa, Tutuila, Aunu'u, Swains Island	Category 2 100+ mph gusts	Substantial structural damage, beach erosion and flooding. Over 50,000 lost their homes. This event was prior to any hurricane structural building or retrofitting.	90/0	\$4.3 million
Hurricane Tusi January 16-20, 1987	Manu'a Islands	Category 3, Max sustained winds 110 mph, gusts to 120 mph	Tusi destroyed: 100% of structures in the villages of Faleasao, Fitiuta, and Sili; 90% of the structures in Ta'u and Ofu; 50% of those on Olosega. It left 98% of the 2,000 people in the islands homeless. Plantations were totally devastated, and the islands were denuded of forests and coconut palms. Stripped vegetation took five years to recover. There was severe storm surge on the north shores. FEMA disaster declaration.	0/0	\$5 – 10 million
Hurricane Ofa February 2-4, 1990	Islands of Tutuila, Aunu'u, Ofu, Olosega, Ta'u, and Swains	Category 2, Max sustained winds 90 mph, gusts to 100 mph, 20+ inches of rain, high surf, storm surge, 10+ landslides	Ofa caused coastal damage due to storm surge and high surf plus high tides heaviest along north shores of Ta'u and Olosega and some coastal villages on north shore of Tutuila. NW facing villages sustained the greatest damage. Fagasau roads were wiped out, and the road was destroyed at Poloa. Poloa and Amanave evacuated. Sailele lost 750	10/0	\$10 million (PPG); Public losses \$28,761,983 (FEMA); Damage to roads \$4,400,000 (FEMA); \$200,000 (ReIns:Swiss)

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Event Name, Date	Geographical Extent	Severity (Category)	Impacts	Deaths/ Injuries	Estimated Losses (\$)
			<p>feet of road, cutting off the village. Extensive wind damage to airport buildings. Office of Procurement warehouse incurred structural damage. Dept. of Agriculture building lost. Four schools badly damaged in Pologa, Aoa, Masafau, Faleasau (at Ta'u). Tafuna high school gym collapsed. Special Ed. Building in Utulei a total loss. 95% of water supply lost due to loss of power at water-well pumping stations. 10+ large landslides on Tutuila.</p>		
<p>Hurricane Val December 6-10, 1991</p>	<p>Tutuila and Manu'a Islands</p>	<p>Category 3, Max sustained winds of 100 mph, gusts to 123 mph, high surf, storm surge, 20+ inches of rain</p>	<p>Severe damage to structures (40% of housing), and utility lines. High surf and wave action washed away several sections of coastal roads on Tutuila, and the Manu'a Islands. Damage caused by high winds closed down harbor operations for a week. Containers strewn about the port, crane broken, 5-7 luxury yachts were destroyed, along with 11 long-line fishing vessels causing major impacts on the fishing industry. Cannery and airport heavily impacted by storm surge affecting the southern shore of Tutuila.</p>	<p>15/0</p>	<p>\$13 million (PPG); Public losses \$80,473,533 (FEMA); \$50-80 million overall damage to seaport, \$11 million to seaport infrastructure (AS Dir. Port Authority); \$167,700 (ReIns:Swiss)</p>

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Event Name, Date	Geographical Extent	Severity (Category)	Impacts	Deaths/ Injuries	Estimated Losses (\$)
Tropical Cyclone Heta – FEMA DR #:1506 1/13/04	High Winds, High Surf and Heavy Rainfall	Category 5	10% of inhabitants are now homeless, destroyed valuable crops	0/20	\$50-\$150 million
Tropical Cyclone Olaf – FEMA DR #: 1582 2/18/05	Tropical Cyclone Olaf, including High Winds, High Surf, and Heavy Rainfall	Category 5	Wiped out almost all homes on Manu'a Islands	0/0	\$723,000
Tropical Cyclone Tam 1/12/2006	Tutuila, Manu'a Islands	Tropical Cyclone (Saffir-Simpson)	Destroyed 70 percent of local crops; some roof tops lost; 30-35 mph sustained winds; landslides; flooding; power outages	0/0	\$10,000 - \$26,000
Tropical Cyclone Nisha 1/26/2010	Tutuila, Manu'a Islands	Tropical storm (Saffir-Simpson)	4.66 inches of rainfall reported at the weather service office; gust of 67 mph reported from the Island of Manu'a; Several homes were flooded between Pago Pago and Fagaitua villages on the Island of Tutuila. Mudslides; broken tree branches and debris; high surf of 14-16 feet	0/0	
Tropical Storm Gita 2/7/2018 – 2/12/2018	All islands	Tropical Storm	17 inches of rain across the islands; damaged 1,000 houses and multiple utility impacts	0/0	\$186million indirect/ indirect

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Table 63 Summary of Significant Tsunami Previous Events Table

Event Name, Date	Geographical Extent	Details	Severity (Run-up, Max Water Height)	Impacts
November 11, 1837	Pago Pago	A Chilean earthquake occurred.	1.9 feet (0.6 meter)	unknown
February 2, 1915	Manu'a Islands	Said to be a hurricane, earthquake and tidal wave. However, not information could be found to support seismic activity. Since it only impacts Manu'a, there is possibility it was indeed a tidal wave and not a tsunami; unprecedented damage; American gunboat Princeton provided food, clothing, assistance	7.9 feet (2.4 meters)	3 deaths, entire villages swept away, ¾ of cocoa palms destroyed, shipped damaged; 3,000 without shelter;
Local tsunami (Tonga Trench) June 26, 1917	Pago Pago Harbor, Tutuila Locations in	A magnitude 8.5 earthquake occurred 150 miles SW of Apia	7.9 feet (2.4 meters) (anecdotal reports say 8- 40 feet high)	Many houses destroyed, 2 church damaged (one in Pago Pago and one in Leone; harbor water retreated (up to 6 feet in Pago Pago)
April 30, 1919	Pago Pago	Earthquake followed by waves	7.9 feet (2.4 meters)	Harbor water receded 6 feet below the low water mark. It returned 6-8 feet above the high water mark
November 11, 1922	Pago Pago	None reported	3.0 feet (0.9 meters)	Slight damage indicated but not reported in news sources

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Event Name, Date	Geographical Extent	Details	Severity (Run-up, Max Water Height)	Impacts
Aleutian tsunami April 1, 1946	Pago Pago Harbor	None reported	2.6 feet (0.8 meter)	Pacific-wide impacts. Several huts washed away in Pago Pago; accounts of harbor water receded 5 feet.
Kamchatka, Russia tsunami November 4, 1952	Pago Pago Harbor	None reported	2.7 feet (0.9 meter)	Pacific-wide tsunami. No documented damage.
Aleutian tsunami March 9, 1957	Pago Pago Harbor, Fagasa	None reported	4 feet (1.2 meters) 4.9 feet (1.5 meters)	Road flooded that was 4 feet above mean tide. In water Pago Pago, the water receded before advancing; water oscillated for hours; Fagasa observers said water advanced and had waves of 5 feet above high tide;
Chilean tsunami May 22, 1960	Pago Pago Harbor, Tutuila Faga'alu	None reported	4.5 feet (1.4 meters) at harbor entrance, 10.7 feet (3.3 meters) at the inner end of harbor (PPG), 15.5 feet Pago Pago Village 16 feet (4.9 meters) Tutuila, 8 feet (2.4 meters) Pago	\$50,000 reported in Pago Pago village (west portion of Pago Pago Harbor), one house was reportedly moved 10 feet inland and other washed out to sea; a school constructed on concrete piers was rotated a foot

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Event Name, Date	Geographical Extent	Details	Severity (Run-up, Max Water Height)	Impacts
			Pago (NGDC website) 2.6 feet (0.8 meters) in Faga'alu	
South Pacific Tsunami September 29, 2009	Pago Pago Harbor, Tutuila	A 7.9 earthquake that occurred about 120 miles southwest of Pago Pago. The wave took 15 minutes to reach the Samoan islands. The wave went inland as far as 1 mile.	Run up 10.35 feet (314 cm); waves ranged from 15 feet at Pago Pago harbor to 40 feet at Poloa village on the Tutuila (NCDC)	Extensive damage, 32 deaths and many injuries. Widespread damage to infrastructure from flooding. Power plant, schools, business damaged. Approximately \$81 million in damages
February 27, 2010*	All Islands	An 8.5 magnitude earthquake in Chile generated a 3 to 5 feet tsunami on the Island of Tutuila. The tsunami reached half a mile inland on the village of Pago Pago	3 to 5 feet (NCDC)	See Chapter 4
March 11, 2011*	All Islands	A 9.1 magnitude earthquake near Japan generated tsunami waves across the Pacific.	peaked near 3.5 feet (NCDC)	See Chapter 4

Appendix D. Capability Assessment Supporting Material

TOFR Existence Extended, Renamed a Mouthful

TOFR existence extended, renamed a mouthful²²⁴

9/11/14 By Fili Sagapolutele

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In an executive order, dated Monday, Sept. 8, 2014, Gov. Lolo Matalasi Moliga extended the existence of the Territorial Office of Fiscal Reform (TOFR) and renamed it the Office of Disaster Assistance and Petroleum Management (ODAPM).

Extending the existence of TOFR comes amid concerns by lawmakers, who threatened not to act on TOFR's budget for fiscal year 2015 until there was an official written document from the administration showing the legal existence of this office.

It was learned during the current budget hearings that the executive order which last extended TOFR's existence expired in 2011.

In his letter to the Fono, which included the new executive order, the governor said with "regards to your request during the TOFR budget hearing that brought to light the necessary and overdue" amendments outlined in the new executive order regarding TOFR.

In the executive order's preamble, Lolo said responsibilities of TOFR have evolved significantly from its original focus on fiscal reform, general fund debt management, financial reviews and audits, along with administering the tobacco settlement loan.

Most, if not all, of the initial objectives and functions of TOFR since its inception in the year 2000 have either been fulfilled or transferred to ASG Treasury Department. Further, TOFR's current functions and responsibilities include among other things, management of the American Samoa Disaster Recovery Office (ASDRO), administration of FEMA grants, FAA airport improvement, and the remaining American Recovery and Reinvestment Act.

Therefore, Lolo says it's necessary and appropriate to extend the existence of this office, to change its name and update its functions, responsibilities, and authority to reflect its current duties and services to ASG and the people of American Samoa.

He said TOFR is changed to ODAPM, and any and all legal rights, property, entitlements and obligations previously held by and under the name TOFR shall be retained, accepted and honored by ODAPM.

Additionally all services and functions being provided by ODAPM — formerly TOFR — will continue without interruption and all ASG departments and vendors, and private entities are asked to assist in making this transition as seamless and as smooth as possible.

FUNCTIONS AND RESPONSIBILITIES

- ASG FEMA public assistance and hazard mitigation — Assist ASG and the community in the recruitment, administration and implementation of FEMA Public Assistance and Hazard Mitigation, FAA Airport improvement funds, American Recovery and Reinvestment Act and other special programs and projects.
- ASG Disaster Property Insurance Program — administer and manage in cooperation with

²²⁴ Fili Sagapolutele. Samoa News. (9/11/2014). Retrived September 30, 2014 from <http://www.samoanews.com/content/en/tofr-existence-extended-renamed-mouthful>

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the ASG Property Insurance Committee of Treasury, Procurement, ASTCA, LBJ hospital and ASCC the solicitation and maintenance of qualified, cost-effective property insurance for insuring ASG fixed assets, structures and contents funded and required by FEMA.

- Office of Petroleum Management — administer and manage, in cooperation with the American Samoa Petroleum Cooperative, the ASG fuel storage and distribution facility including the Fuel Dock, Tank Farm in Gataivai and the Tafuna Airport fuel depot to ensure American Samoa maintains an adequate and reliable supply of uniformly high quality petroleum products at reasonable and competitive prices.

BUDGET AND PERSONNEL According to the governor, ODAPM shall maintain and retain its current fiscal year 2014 budget and FY 2015 budget, including any and all accounts and personnel as established and submitted under TOFR.

ODAPM is to also remain as part of the Governor's Office and be managed by an executive director, who reports directly to the governor. Its current executive director is Alfonso Pete Galeai, who has been at the helm of TOFR since last year.

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American Samoa remembers tsunami tragedy, territory declared 'Tsunami Ready'

American Samoa remembers tsunami tragedy, territory declared 'Tsunami Ready'²²⁵

9/29/12 By Joyetter Feagaimaalii-Luamanu

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Today American Samoa marks the third-year anniversary of the disaster that claimed the lives of 34 people, causing millions of dollars in damage to homes and property. Appropriately yesterday, American Samoa received its first certification as a Tsunami Ready community by the National Oceanic Atmospheric Administration.

Details on the Tsunami Ready program were published in Friday's edition.

The ceremony held at the government's Fale Samoa at Utulei Beach Park, led off with an invocation by Rev. Dr. Fa'atauva'a Talamoni of the CCCAS in Pago Pago.

Addressing those gathered, Gov. Togiola Tulafono, said during the tsunami on September 29, 2009 the territory's preparation were not adequate, not good enough — and that makes today (Friday) just that much more special being told and being presented this blessing of readiness and preparedness — it should be comforting for all of us.

He thanked the National Oceanic & Atmospheric Administration and Federal Emergency Management Agency for being great partners and for all their efforts, which have enabled American Samoa to be certified Tsunami Ready.

The governor noted that before American Samoa was hit by the disaster, the NOAA office was trying to work with government to put in place a warning system.

"Everybody blamed everybody else in the world when the disaster struck. Unfortunately, we concentrated only on the disaster and failed to recognize the efforts of NOAA and US Army that were conducted long before the disaster, and the efforts of Department of Homeland Security prior to the disaster, to help us get ready.

"There were a lot of wonderful and great efforts that were ignored when we lost lives. "No one else cared about anything — all the criticism was focused on why the lives lost, nobody wants to lose anybody... that's very clear, and if you listened to the news at that time, it makes it sound as if we didn't care. WE DID CARE," he said.

(Togiola is referring to the community's outrage that the siren system was not in place at the time of the 2009 disaster, despite the many years the Homeland Security office, which was under the governor's office at the time, had to plan and implement the system.)

The governor said works have been in place since the disaster and resulted in a great day such as this. He quoted a message by Rev. Dr. Talamoni that knowing is only half the battle, the other half God will help us.

However, he noted that while he was walking the villages in Manu'a during his campaign for office, High Talking Chief Malaepule from Manu'a told him, "God's blessings don't come for free, you must work for it."

The other half of the work is maintaining the systems so they are always ready. Togiola urged everyone to continue to be aware and prepared and to continue with the drills in the school,

²²⁵ Joyetter Feagaimaalii-Luamanu. Samoa News. (9/29/2012). Retrived September 30, 2014 from <http://www.samoanews.com/node/9927>

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villages.

He added that we must never be a complacent community. "We have to keep up the vigilance. We can go from a tsunami ready community today and tsunami disasters tomorrow, very easily, don't let up the effort."

The governor acknowledged DHSS Director Mike Sala, Deputy Director Jacinta Brown and the DHSS employees.

He made special recognition of Brown noting that she been their brains and muscles throughout this project. Another person he acknowledged was Vinnie Atofau Jr. "These two are such hardworking smart individuals."

Togiola also received recognition — a commendation letter and Tsunami Ready street signs presented to him by Pacific Regional Director NOAA/National Weather Service Jeff Ladouce.

Ladouce told the governor that he should be proud of this accomplishment, noting that he's extremely pleased to be present to recognize the dedicated efforts of everyone, involved in achieving Tsunami Ready status. "Your demonstrated commitment to disaster preparation and to personnel safety is huge."

The regional director recognized, the US Army Corps of Engineers, DHSS, FEMA, US Geological Survey, the National Park, and the local weather office. He said that on February 2009 and later in July of that year they conducted training and outreach program that has been credited for saving thousands of lives just a couple of months later.

FEMA Region IX Administrator, Nancy Ward also gave remarks during the ceremony, noting that "while the pain of that day will be slow in receding for our fellow Americans who call Samoa home, the last 36 months have also brought some bittersweet progress that is as important to note as our collective losses."

She said that FEMA is proud to have provided funding and technical expertise.

"We are even prouder to be only one asset in the broad array of "Whole Community" organizations that have helped to reduce the tyranny of distance in American Samoa.

"So, on the third anniversary of a terrible chapter in American Samoa's history, let us share some pride along with our prayers knowing that we have truly honored the lost by making future generations safer," said Ward.

No relief for Tualauta; Boil Water Notice remains²²⁶

ASPA responds to one resident's idea for new reservoir

4/23/14 By Joyetter Feagaimaalii-Luamanu

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"The original plan to manifold the Fagaima wells is no longer feasible, due to land issues, and the majority of the wells have now been classified by the Environmental Protection Agency as GUDI (Groundwater Under the Direct Influence) of surface water," said Reno Vivao, ASPA's Chief Operation Office. Vivao was responding to concerns raised by Tualauta faipule Larry Sanitoo, who inquired on the status of ASPA & EPA's plan to address the Boil Water notice still in affect in Tualauta county. Sanitoo pointed out that when the Fono was in session they were told that new wells will be drilled in the Tafuna and Ilili areas. He also pointed out a suggestion by Tualauta resident, Lawrence French, who has advocated for years that in the bush area between Kokoland and the main highway, ASG should purchase about six acres of land. In an email sent to Sanitoo, French explained, "you dig a hole about 30+ feet deep and make a lined reservoir. All of the water coming from the two major streams by the ASCC would be diverted to that reservoir. The water would be filtered and treated and pumped into the mains as needed." "The reservoir of that size would hold 24.5 Million gallons. You could make it another 10 deep and have a 30 million gallon water reservoir. You would get about 100,000 cu yd of stone to make highways with. That equates to about the amount of aggregate for 15+ miles of road." In a response letter to both French and Sanitoo, Vivao said the reservoir proposal is a good alternative but it would be costly, and the land issues would most likely be an uphill battle. "Such an undertaking will require the collective efforts of the land owners, all government agencies that will be involved and the community," said Vivao. He further pointed out that ASPA's current plan is to drill new wells in the Tafuna and Malaeloa areas to replace seven of the nine wells in Fagaima that have been tested to be GUDI wells. "The new wells are estimated to produce about 1,000 gpm and production is estimated to be sufficient to replace 50% of the current production of the Fagaima GUDI wells. Other well sites have been identified and will be drilled as funding sources become available. ASPA's goal is to remove the Boil Water Notice in the next two years, he said, adding that ASPA has in place plans to drill new wells and set targets to reduce the water losses. Also, "ASPA will be re-commissioning the Fagatogo micro filtration plant," he said, adding that ASPA has submitted the National Environment Policy Act (NEPA) application and funding request to the United States-Environmental Protection Agency (USEPA) to drill new wells in the area and are awaiting their approval. We are planning on drilling these new wells this year and completing connection of these new wells to the system in the next couple of years." Samoa News notes the Water Boil Notice has been in effect for several years now, and continues to be one of the hot button issues of many Tualauta residents, including the flooding that occurs whenever it rains in certain Tualauta areas.

²²⁶ Joyetter Feagaimaalii-Luamanu. Samoa News. (4/23/2014). Retrieved September 30, 2014 from <http://www.samoanews.com/content/en/no-relief-tualauta-boil-water-notice-remains#sthash.nEw8zwR7.dpuf>

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Appendix E. Mitigation Strategy Supporting Material

FEMA's Four Mitigation Action Categories²²⁷

Mitigation Action Category	Description of Category	Examples of Mitigation Actions
1 Local Plans and Regulations	These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.	<ul style="list-style-type: none"> • Comprehensive plans • Land use ordinances • Building codes and enforcement • Capital improvement programs • Open space preservation • Stormwater management regulations and master plans
2 Structure and Infrastructure Projects	<p>These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure.</p> <p>This type of action also involves projects to construct manmade structures to reduce the impact of hazards.</p>	<ul style="list-style-type: none"> • Acquisitions and elevations of structures in flood prone areas • Utility undergrounding • Structural retrofits. • Floodwalls and retaining walls • Detention and retention structures • Culverts • Safe rooms
3 Natural Systems Protection	These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.	<ul style="list-style-type: none"> • Sediment and erosion control • Stream corridor restoration • Forest management • Conservation easements
4 Education and Awareness	These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential	<ul style="list-style-type: none"> • Radio or television spots • Websites with maps

²²⁷ *Local Mitigation Planning Handbook*. Washington, D.C.: U.S. Dept. of Homeland Security, FEMA, 2013. Page 6-4.

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Mitigation Action Category	Description of Category	Examples of Mitigation Actions
Programs	ways to mitigate them. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions.	and information <ul style="list-style-type: none">• Real estate disclosure• Mailings to residents in hazard-prone areas.• StormReady• Firewise Communities

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Gita Mitigation Funds

Gita hazard mitigation funds proposed as a solution to Fagaima flooding

Tue, 03/05/2019 - 10:09am



Fagaima flooding near Mormon Church. [SN file photo]

By Fili Sagapolutele

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Pago Pago, AMERICAN SAMOA — The American Samoa government is looking at federal funding under a hazard mitigation grant program to address drainage problems at Fagaima after Tropical Storm Gita. The Fagaima area is one of the most hard-hit parts of the territory during heavy rain and it was only made worse during Gita last year.

The long standing flooding problems throughout Fagaima have been discussed many times in the Fono over the years with Department of Public Works and other ASG officials. The government had also been working on ways to address drainage problems, as more homes and rock walls are built in the area.

Tualauta Rep. Larry Sanitoa is again taking up the status of ASG's mitigation plan for Fagaima, where at one point, during the heavy down-pour on Feb. 23, a young-man was captured on cell phone video padding a kayak through the flooded Fagaima road while traffic passed by slowly.

The latest development in funding for Fagaima drainage using Gita mitigation funds from the US Federal Emergency Management Agency (FEMA) was revealed during email exchanges last week between Sanitoa and Lima Fiatoa with the ASG's Office of Disaster Assistance and Petroleum Management (ODAPM).

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A Feb. 27 email from Sanitoa to Fiatoa was a follow up from previous email messages — on the latest update of the Tualauta Mitigation project, which has been on the table since 2009. “Given the numerous times the application has been submitted and denied, is the project still being considered?” he asked, noting that ASG is looking at other options and alternative plans. Sanitoa points out that the ongoing run-off water and flooding problems plaguing Tualauta County especially the Tafuna plains “for many years is becoming extremely difficult to deal with.” Fiatoa responded the same day, revealing that, “we are currently working on the Fagaima Drainage to be submitted within the coming week.” Additionally, “we have an opportunity to obtain funding” under Gita hazard mitigation funds. Furthermore, Fiatoa is working with an official at DPW, who is putting the application narrative together as well as “updating the project cost estimate as well as the Benefit Cost Analysis (BCA) to show FEMA that our project is cost effective.”

In response to Fiatoa email message, Sanitoa says he’s hopeful that the current efforts by ODAPM and DPW “will have a better outcome this time.” “Given the number of property damages - i.e. flooded homes and stalled vehicles etc. for many years should be sufficient for your BCA” to FEMA, he informed Fiatoa. Last Thursday, Sanitoa informed American Samoa Power Authority acting executive director, Wallon Young that ODAPM and DPW are working on an application for the Fagaima Drainage to be funded by Gita hazard mitigation funds. Sanitoa also recalled a House ASPA Committee hearing last month where there was mention of ASPA working on a Filtration System to support the Tafuna Wells. “In knowing that, I recommended that perhaps ASPA would consider building a catchment pit or a reservoir at the source of the run-off water as part of the mitigation plan,” Sanitoa said. “Specifically, build one by the area up at Faleniu [village] or by Vui Florence Saulo's home in Tafuna — to address the flooding problem in the Tafuna plains,” he suggested. “The water collected from the catchment or reservoir can go through the filtration system and be used by ASPA.” He also suggested a possible meeting for ASPA with ODAPM and DPW “to look at some possibilities.” In his reply the same day Young said, “We will study the proposal to install a catchment or a reservoir at the source of the run-off water.” There was no mention of Sanitoa’s suggestion for a meeting. Several ASG officials were copied in the email exchanges between Sanitoa and Fiatoa as well as Young.

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2015 Hazard Mitigation Projects Moved Forward to 2020

Rank (2015)	Project Title	Agency
2	Water Wells Mitigation	ASPA
3	Water Tanks Mitigation	ASPA
5	Runway Shoreline Protection	Port
6	#2 Landslide: Rte.6 (Afono,Masefau), Rte.1 (Matuu,Gataivai)	DPW
7	Ottoville Drainage Flood Mitigation	DPW
8	Fagaima Road Flood Mitigation	DPW
9	Fatuoaga Drainage Flood Mitigation	DPW
10	#7 Electrical Upgrades Campus Grounds Drainage 10 Schools	DPW
12	#6 Pava'ia'I Elementary	DPW
13	Faga'alu Booster Station	ASPA
14	Pago Water Booster Station Mitigation	ASPA
15	Utumoa River Flood Mitigation	ASPA
17	Afono Pass to Blue Sky Tower U/G Communications Lines	ASTCA
18	Amouli to Aoa U/G Communications Lines	ASTCA
19	Fagaitua,Masefau,Masausi,Sailele U/G Comm. Lines	ASTCA
21	Weatherproof Sewage Lift Stations	ASPA
22	Lauli'I/Breaker's Point Tower Replacement Parts	ASTCA
24	Aunu'u Tower Replacement Parts	ASTCA
25	Manu'a Islands U/G Comm. Lines	ASTCA
26	Office of Public Information Building	OPI
30	Ili'ili Drainage Flood Mitigation	DPW
31	#1 Rockfall: Rte.009 (Utumea, Poloa, Amanave)	DPW
32	Nuuuli To Mesepa U/G Lines	ASPA
33	Permanent Landslide Repair Route 005	DPW
34	Poloa To Fagamalo U/G Lines	ASPA
35	High Court and District Court Building Relocation - Change to Elevation Project	HC
36	#3 Amouli Stream Mitigation Project Ofu, Manu'a	DPW
37	Afono Culvert Improvement	DPW
38	Tago Vaitele Stream Flood Mitigation (Name Correction Passed by Council)	DPW
40	#8 Ugrading of DPW-M&O Building	DPW
41	Permanent Landslide Repair Route 11	DPW

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2015 Hazard Mitigation Projects and their Status

Rank (2015)	Project Title	Agency	Current Status	Status Description
1	Fuel Farm Relocation	Port	Completed	Funded through FAA and ASPC; Project removed from Priority Listing 2017
2	Water Wells Mitigation	ASPA	Delayed	Not yet funded but will carry forward as a very high priority action.
3	Water Tanks Mitigation	ASPA	Delayed	Not yet funded but will carry forward as a very high priority action.
4	Fagatogo Reservoir Mitigation	ASPA	Completed	Funded by DOI; Removed in 2017 update
5	Runway Shoreline Protection	Port	Partially Completed / In Progress	Funded by CDBG-DR under FEMA DR-4357 (TS Gita)
6	#2 Landslide: Rte.6 (Afono, Masefau), Rte.1 (Matuu,Gataivai)	DPW	Delayed	Not yet funded but will carry forward as a very high priority action.
7	Ottoville Drainage Flood Mitigation	DPW	Partially Completed / In Progress	Funded through DPW Local Funds
8	Fagaima Road Flood Mitigation	DPW	Partially Completed / In Progress	Submitted for HMGP funding under FEMA DR-4357 (TS Gita); Pending FEMA Review
9	Fatuoaga Drainage Flood Mitigation	DPW	Delayed	Not yet funded but will carry forward as a very high priority action.
10	#7 Electrical Upgrades Campus Grounds Drainage 10 Schools	DPW	Delayed	Not yet funded but will carry forward as a high priority action.
11	Tafuna Wastewater Treatment Plant	ASPA	Cancelled	Updated in 2017 - Removed by ASPA
12	#6 Pava'ia'I Elementary	DPW	Delayed	Not yet funded but will carry forward as a high priority action.
13	Faga'alu Booster Station	ASPA	Delayed	Not yet funded but will carry forward as a high priority action.
14	Pago Water Booster Station Mitigation	ASPA	Delayed	Not yet funded but will carry forward as a high priority action.
15	Utumoa River Flood Mitigation	ASPA	Delayed	Not yet funded but will carry forward as a high priority action.

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Rank (2015)	Project Title	Agency	Current Status	Status Description
16	Leone to Poloa U/G Communications Lines 7	ASTCA	Cancelled	Updated in 2017; Removed by ASTCA
17	Afono Pass to Blue Sky Tower U/G Communications Lines	ASTCA	Delayed	Not yet funded but will carry forward as a high priority action.
18	Amouli to Aoa U/G Communications Lines	ASTCA	Partially Completed / In Progress	Funded by CDBG-DR under FEMA DR-4357 (TS Gita)
19	Fagaitua, Masefau, Masausi, Sailele U/G Comm. Lines	ASTCA	Delayed	Not yet funded but will carry forward as a high priority action.
20	Mapping Project	DOC		Project was re-ranked in 2017 (from #20 to #38), but not included in revised list for 2018. Has this been removed? Also not a complete description (doesn't list the 3 components)
21	Weatherproof Sewage Lift Stations	ASPA	Delayed	Not yet funded but will carry forward as a high priority action.
22	Lauli'i/Breaker's Point Tower Replacement Parts	ASTCA	Partially Completed / In Progress	Funded by Public Assistance under FEMA DR-4357 (TS Gita)
23	Landslide Early Warning System - Faga'alu Pilot Project	EPA	Cancelled	ASEPA requested to remove project from 2018 update
24	Aunu'u Tower Replacement Parts	ASTCA	Partially Completed / In Progress	Funded by Public Assistance under FEMA DR-4357 (TS Gita)
25	Manu'a Islands U/G Comm. Lines	ASTCA	Delayed	Not yet funded but will carry forward as a medium priority action.
26	Office of Public Information Building	OPI	Delayed	Not yet funded but will carry forward as a low priority action.
27	#5 Happy Valley Road Drainage	DPW	Completed	Funded by DPW in 2018; Removed from 2018 update.
28	Vaipito Stream Revetment	DPR		Project was re-ranked in 2017 (from #28 to #1), but not included in revised list for 2018. Has this been removed?
29	Wind Shutters EOC Project	DHS	Completed	Funded by PDM; Removed in 2017

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Rank (2015)	Project Title	Agency	Current Status	Status Description
30	Ili'ili Drainage Flood Mitigation	DPW	Delayed	Not yet funded but will carry forward as a medium priority action.
31	#1 Rockfall: Rte.009 (Utumea, Poloa, Amanave)	DPW	Delayed	Not yet funded but will carry forward as a high priority action.
32	Nuuuli To Mesepa U/G Lines	ASPA	Delayed	Not yet funded but will carry forward as a medium priority action.
33	Permanent Landslide Repair Route 005	DPW	Delayed	Not yet funded but will carry forward as a high priority action.
34	Poloa To Fagamalo U/G Lines	ASPA	Delayed	Not yet funded but will carry forward as a medium priority action.
35	High Court and District Court Building Relocation - Change to Elevation Project	HC	Delayed	Not yet funded but will carry forward as a low priority action.
36	#3 Amouli Stream Mitigation Project Ofu, Manu'a	DPW	Delayed	Not yet funded but will carry forward as a medium priority action.
37	Afono Culvert Improvement	DPW	Delayed	Not yet funded but will carry forward as a high priority action.
38	Tago Vaitele Stream Flood Mitigation (Name Correction Passed by Council)	DPW	Delayed	Not yet funded but will carry forward as a medium priority action.
39	#4 Leone Village Road	DPW	Completed	Funded by DPW in 2018; Removed from 2018 update
40	#8 Upgrading of DPW-M&O Building	DPW	Delayed	Not yet funded but will carry forward as a low priority action.
41	Permanent Landslide Repair Route 11	DPW	Delayed	Not yet funded but will carry forward as a high priority action.