

#### **Appendix A – Attachment 1**

Guam Final Watershed Plan

## **Agency Coordination Letters**





### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

January 14, 2021

Civil and Public Works Branch
Programs and Project Management Division

Ms. Rita Chong-Dela Cruz Saipan Historic Preservation Officer Division of Historic Preservation Department of Community and Cultural Affairs Caller Box 10007 Saipan, MP 96950, USA

Dear Ms. Chong-Dela Cruz:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential future involvement by the Corps, other federal agencies, or non-federal interests. In response to typhoons and tropical cyclones striking the territories in 2018, the Corps received disaster relief funds in January 2020. The assessments are fully federally funded and expected to be complete by 2022.

Pursuant to Planning Bulletin 2019-01 Watershed Studies, we are consulting our agency partners to gather data necessary to develop the Shared Vision among stakeholders. One of our goals at this time is to determine the baseline conditions and existing environment within the study area to assist in the development of recommendations to be described in the assessment. We invite you and other federal and state agencies, cultural organizations, local agencies, interested parties, and individuals interested in providing comments and identifying any issues or concerns to participate in this collaborative effort.

We recognize that the Saipan Historic Preservation Officer's responsibilities and expertise in preserving the places that matter will be beneficial towards addressing cultural resources within our Watershed Assessments. Your agency's technical expertise on identifying any natural or cultural resources, as well as resources considered to be of traditional, cultural, or religious importance to the citizens and communities of Saipan would help create a holistic Shared Vision that can properly

address cultural resources. We understand many culturally sensitive sites, including areas of ceremonial significance, exist throughout the three territories. Any comments and information received by your agency will be fully considered in a confidential and respectful manner pursuant to 36 CFR § 800.11(c) throughout the development of the final Watershed Assessment. Additional study background information is below:

#### Problems by U.S. Territory

American Samoa has a history of chronic riverine and coastal flooding from convective storms, cyclones and tsunamis. Problems associated with these floods include damages resulting from run off and ponding of water, shoreline erosion, water quality and water supply contamination, and landslides. These problems pose a threat to public health and safety and the health of the environment.

Guam has two distinct geographic landscapes; Northern Guam is comprised of limestone plateau while Southern Guam contains ridgelines from volcanic rises. Problems identified in Northern Guam include threats to the Northern Lens Aquifer (main source of drinking water) from exposure to nitrates from septic tanks and land use practices, poor storm water management and infrastructure allowing point-source pollution to flow into the near shore waters. Problems identified in Southern Guam include heavy conveyance of water that carries sediments and pollutants to the river deltas, resulting in algal blooms and coral reef decline, severe riverbank erosion resulting in loss of property and exacerbating water quality issues, lack of forested lands due to prescribed fires for development, and reforestation plans that are missing diversity of native species to reduce erosion and promote biodiversity.

The CNMI is comprised of 14 islands, of which, five are inhabited. The assessment is focused on the villages on the islands of Saipan, Tinian, and Rota. The following problems were identified through prior studies and input from CNMI stakeholders/agencies: Frequent intense rainfall events trigger flooding along watercourses and in low lying areas, causing life safety risks and economic damages, including effects to critical infrastructure (Saipan). Storms and high wave events contribute to coastal erosion, endangering critical infrastructure (Saipan and Rota). Flooding reduces water quality and water supply, leading to contaminated drinking water (Saipan, Tinian, and Rota). Wildfires exacerbated by drought and invasive species threaten the ecology (Tinian and Rota).

Stakeholder meetings were held virtually in July 2020. The team will continue to collaborate with stakeholders and review existing resiliency projects to identify the problems and develop community-based mitigation strategies for flood risk. The assessments are still in the early data gathering phase; no specific decisions have been made. The next major milestone is the Shared Vision Milestone, scheduled for January 2021.

We appreciate your cooperation on this matter and respectfully request a response within 30 days. We will continue to coordinate this effort with you as the study progresses and the assessment is developed. Should you have any questions, comments, or wish to request either an extension for response or a meeting to discuss this request, please contact Ms. Jessie K. Paahana, Environmental Coordinator, Civil and Public Works Branch, Honolulu District at (808) 835-4042 or e-mail: jessie.k.paahana@usace.army.mil.

Sincerely,

Soune M. Chin

Florence M. Ching, P.E. Acting Deputy District Engineer Programs and Project Management

## USACE FY 19 Emergency Supplemental Watershed Study Area Maps



Figure 1. American Samoa Study Area

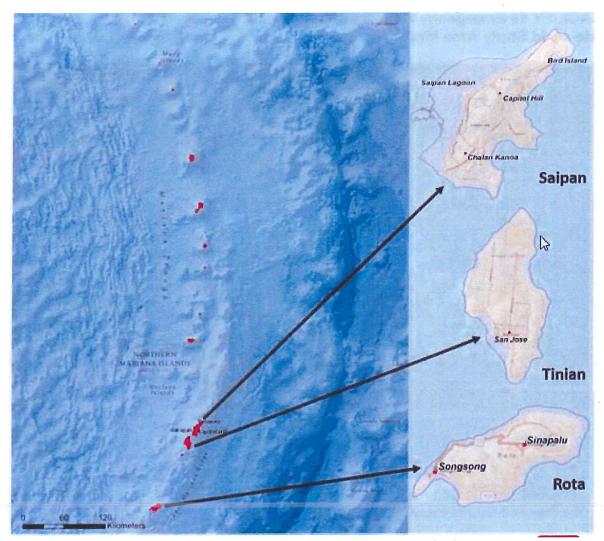


Figure 2. Commonwealth of the Northern Mariana Islands Study Area



Guam Watershed Assessment
Figure 3. Guam Study Area



## DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII.96858-5440

January 14, 2021

Civil and Public Works Branch Programs and Project Management Division

Dr. Eric Brown, National Park Service Kalaupapa National Historic Park National Park Service PO Box 2222 Kalaupapa, HI 96742

Dear Dr. Brown:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential future involvement by the Corps, other federal agencies, or non-federal interests. In response to typhoons and tropical cyclones striking the territories in 2018, the Corps received disaster relief funds in January 2020. The assessments are fully federally funded and expected to be complete by 2022.

Pursuant to Planning Bulletin 2019-01 Watershed Studies, we are consulting our agency partners to gather data necessary to develop the Shared Vision among stakeholders. One of our goals at this time is to determine the baseline conditions and existing environment within the study area to assist in the development of recommendations to be described in the assessment. We invite the National Park Service (NPS) and other federal and state agencies, cultural organizations, local agencies, interested parties, and individuals interested in providing comments and identifying any issues or concerns to participate in this collaborative effort. We request your technical assistance in identifying any natural resources or other resources of concern subject to the NPS purview occurring within the study area. Any comments received will be fully considered in the development of the final Watershed Assessment. Additional study background information is provided below:

#### Problems by U.S. Territory

American Samoa has a history of chronic riverine and coastal flooding from convective storms, cyclones and tsunamis. Problems associated with these floods include damages resulting from run off and ponding of water, shoreline erosion, water quality and water supply contamination, and landslides. These problems pose a threat to public health and safety and the health of the environment.

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Sincerely.

Florence Ching, P.E.

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Acting Deputy District Engineer
Programs and Project Management

## USACE FY 19 Emergency Supplemental Watershed Study Area Maps



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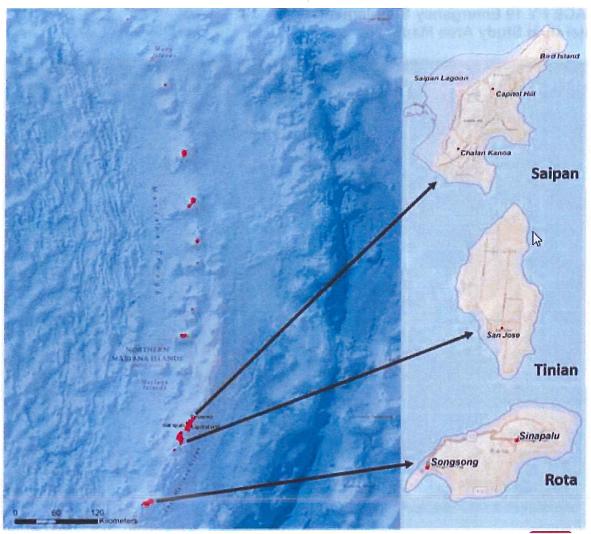
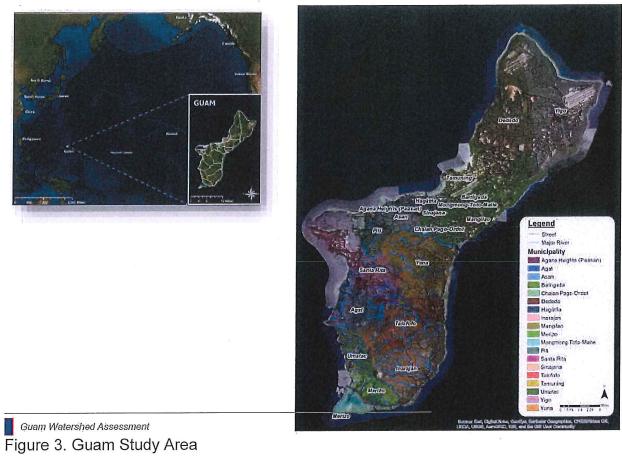


Figure 2. Commonwealth of the Northern Mariana Islands Study Area





### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

January 14, 2021

Civil and Public Works Branch
Programs and Project Management Division

Patrick Lujan, Historic Preservation Officer Historic Resources Division Department of Parks & Recreation, Government of Guam 490 Chalan Palasyo Agana Heights, Guam 96910, USA

Dear Mr. Lujan:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential involvement by the Corps, other federal agencies, or non-federal interests. In response to typhoons and tropical cyclones striking the territories in 2018, the Corps received disaster relief funds in January 2020. The assessments are fully federally funded and expected to be complete by 2022.

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We recognize that the Guam Historic Preservation Officer's responsibilities and expertise in preserving the places that matter will be beneficial towards addressing cultural resources within our Watershed Assessments. Your agency's technical expertise on identifying any natural or cultural resources, as well as resources considered to be of traditional, cultural, or religious importance to the citizens and communities of Guam would help create a holistic Shared Vision that can properly address cultural resources. We understand many culturally sensitive sites, including

areas of ceremonial significance, exist throughout the three territories. Any comments and information received by your agency will be fully considered in a confidential and respectful manner pursuant to 36 CFR § 800.11(c) throughout the development of the final Watershed Assessment. Additional study background information is below:

#### Problems by U.S. Territory

American Samoa has a history of chronic riverine and coastal flooding from convective storms, cyclones and tsunamis. Problems associated with these floods include damages resulting from run off and ponding of water, shoreline erosion, water quality and water supply contamination, and landslides. These problems pose a threat to public health and safety and the health of the environment.

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Sincerely,

Florence Ching, P.E.

Acting Deputy District Engineer
Programs and Project Management

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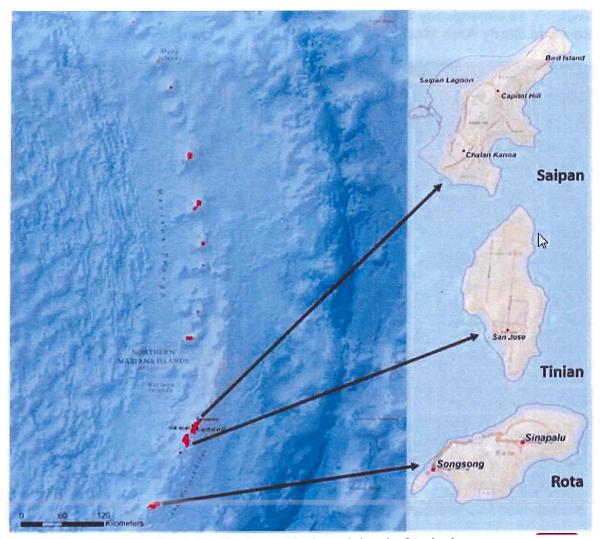


Figure 2. Commonwealth of the Northern Mariana Islands Study Area





Guam Watershed Assessment
Figure 3. Guam Study Area



## DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

January 14, 2021

Civil and Public Works Branch Programs and Project Management Division

Ms. Tish Folau
Ms. Letitia Peau
Executive Offices of the Governor
American Samoa Government
Historic Preservation Office
Pago Pago, American Samoa 96799

Dear Ms. Folau and Ms. Peau:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential involvement by the Corps, other federal agencies, or non-federal interests. In response to typhoons and tropical cyclones striking the territories in 2018, the Corps received disaster relief funds in January 2020. The assessments are fully federally funded and expected to be complete by 2022.

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We recognize that the American Samoa State Historic Preservation Officer's responsibilities and expertise in preserving the places that matter will be beneficial towards addressing cultural resources within our Watershed Assessments. Your agency's technical expertise on identifying any natural or cultural resources, as well as resources considered to be of traditional, cultural, or religious importance to the citizens and communities of the American Samoa would help create a holistic Shared Vision

that can properly address cultural resources. We understand many culturally sensitive sites, including areas of ceremonial significance, exist throughout the three territories. Any comments and information received by your agency will be fully considered in a confidential and respectful manner pursuant to 36 CFR § 800.11(c) throughout the development of the final Watershed Assessment. Additional study background information is below:

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Sincerely,

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Florence Ching, P.E.
Acting Deputy District Engineer
Programs and Project Management

### USACE FY 19 Emergency Supplemental Watershed Study Area Maps

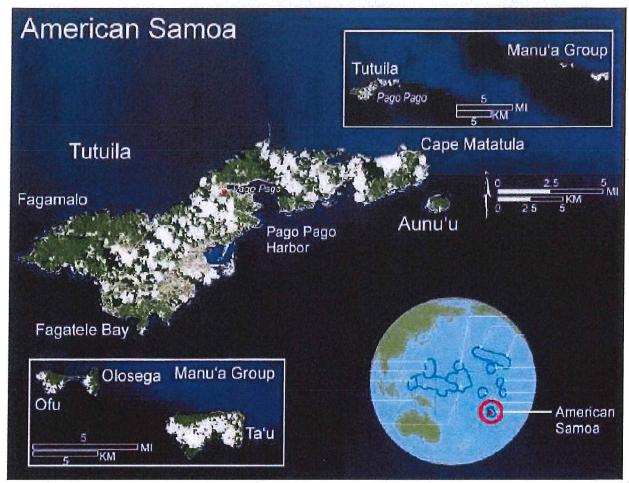


Figure 1. American Samoa Study Area

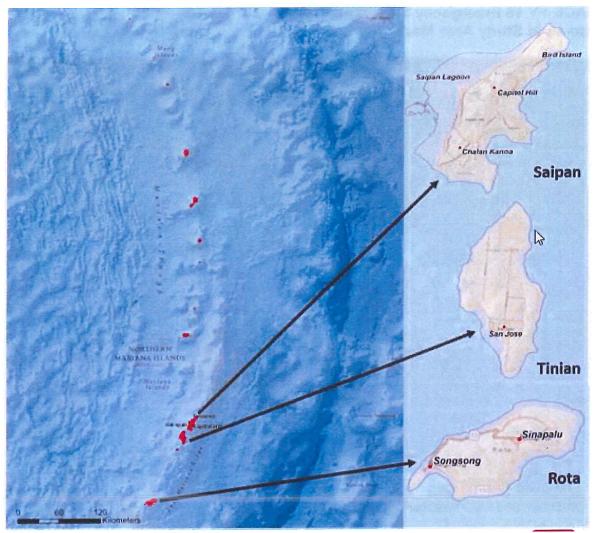


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Guam Watershed Assessment
Figure 3. Guam Study Area



### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

January 14, 2021

Civil and Public Works Branch Programs and Project Management Division

Ms. Chelsa Muña-Brecht, Director Department of Agriculture 163 Dairy Road Mangilao, Guam 96913

Dear Director Muña-Brecht:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential involvement by the Corps, other federal agencies, or non-federal interests. In response to typhoons and tropical cyclones striking the territories in 2018, the Corps received disaster relief funds in January 2020. The assessments are fully federally funded and expected to be complete by 2022.

We appreciate the Department of Agriculture's (DOA) participation during the virtual stakeholder meetings held in July and November 2020. The team will continue to collaborate with stakeholders and review existing resiliency projects to identify the problems and develop community-based mitigation strategies for flood risk. The assessments are still in the early data gathering phase; no specific decisions have been made. The next major milestone is the Shared Vision Milestone, scheduled for January 2021.

Pursuant to Planning Bulletin 2019-01 Watershed Studies, we are consulting our agency partners to gather data necessary to develop the Shared Vision among stakeholders. One of our goals at this time is to determine the baseline conditions and existing environment within the study area to assist in the development of recommendations to be described in the Watershed Assessment. We invite you and other federal and state agencies, cultural organizations, local agencies, interested parties, and individuals interested in providing comments and identifying any issues or concerns to participate in this collaborative effort. We request your technical assistance in identifying any natural resources or other resources of concern subject to DOAs' purview, occurring within the study area. Any comments received will be fully considered in the development of the final Watershed Assessment. Additional study background information is provided below:

#### Problems by U.S. Territory

American Samoa has a history of chronic riverine and coastal flooding from convective storms, cyclones and tsunamis. Problems associated with these floods include damages resulting from run off and ponding of water, shoreline erosion, water quality and water supply contamination, and

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Sincerely,

Florence Ching, P.E.

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Acting Deputy District Engineer

Programs and Project Management

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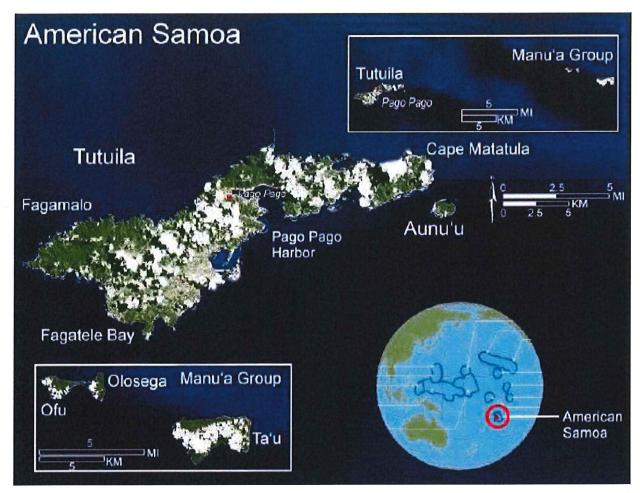


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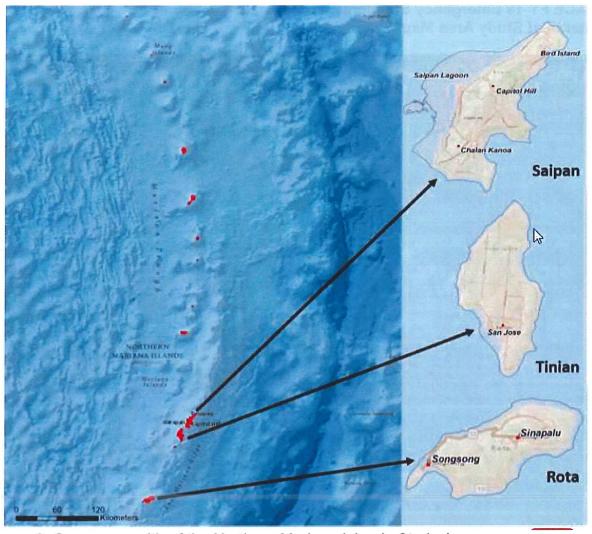
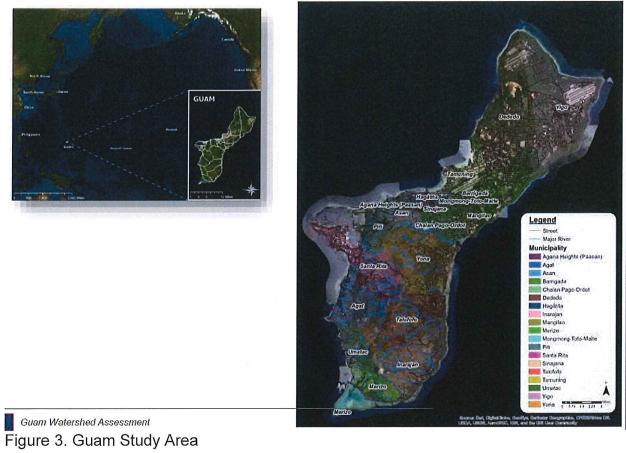


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### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

November 13, 2020

Civil and Public Works Branch
Programs and Project Management Division

Ms. Elena Vaouli U.S. Environmental Protection Agency Region 9, TIP-1 75 Hawthorne Street San Francisco, CA 94105

Dear Ms. Vaouli:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential involvement by the Corps, other federal agencies, or non-federal interests.

The study area encompasses the entire territories of American Samoa, Guam, and CNMI. The purpose of these assessments is to identify, and address community needs in each territory and increase resiliency. Typhoons and Tropical Cyclones striking the territories in 2018 led to the appropriation of disaster relief funds, received in January 2020, by the Corps. The assessments are fully federally funded and expected to be complete by 2022.

#### Problems by Territory

American Samoa has a history of chronic riverine and coastal flooding from convective storms, cyclones and tsunamis. Problems associated with these floods include damages resulting from run off and ponding of water, shoreline erosion, water quality and water supply contamination, and landslides. These problems pose a threat to public health and safety and the health of the environment.

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Stakeholder meetings were held virtually in July (participants included American Samoa and Guam U.S. Environmental Protection Agency (EPA)). The team will continue to collaborate with stakeholders and review existing resiliency projects to identify the problems and develop community-based mitigation strategies for flood risk. The assessments are still in the early data gathering phase; no specific decisions have been made. The next major milestone is the Shared Vision Milestone, scheduled for January 2021.

Pursuant to Planning Bulletin 2019-01 Watershed Studies, we are beginning to gather data necessary through collaboration with agency partners and stakeholders to inform preparation of the Shared Vision Milestone. One of our goals at this time is to determine the baseline conditions and existing environment within the study area. Determining the existing conditions and objectives collaboratively will assist in the development of recommendations described in the Watershed Assessment. We invite you and other Federal and State agencies, cultural organizations, local agencies, interested parties, and individuals interested in providing comments and identifying any issues or concerns to participate in this collaborative effort. We request your assistance in identifying any natural resources or other resources of concern occurring within the study area. Additionally, we welcome any information you may possess regarding the existing environment within the study area. Any comments received will be fully considered in the development of the final Watershed Assessment.

We appreciate your cooperation on this matter and respectfully request a response within 30 days. We will continue to coordinate this effort with you as the study

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Jennifer Moore, PMP Deputy District Engineer

Programs and Project Management

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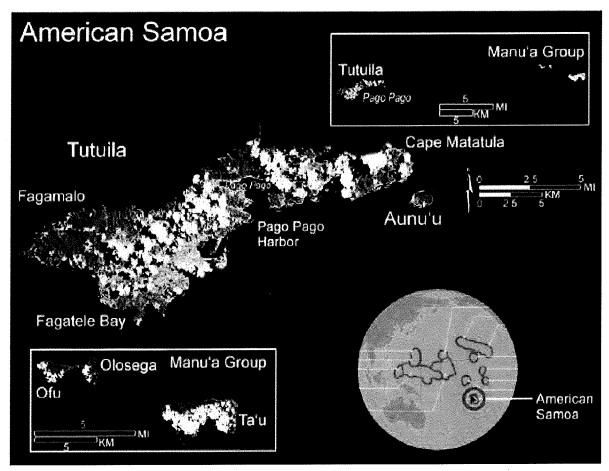


Figure 1. American Samoa Study Area

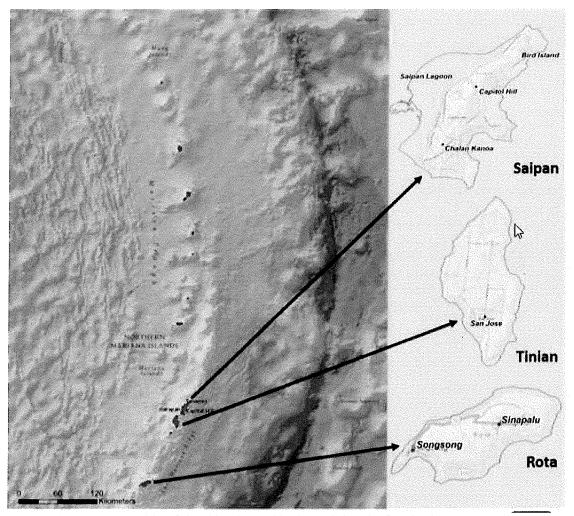
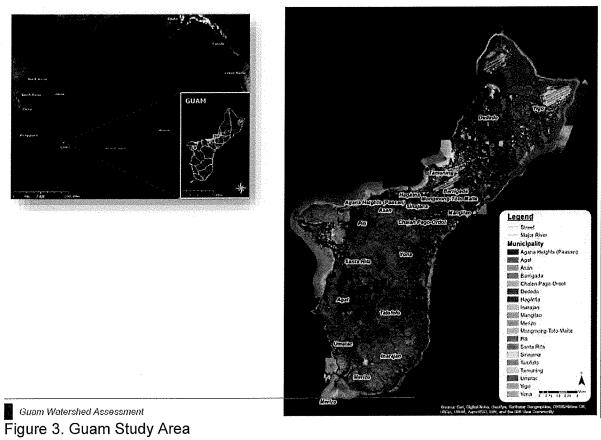


Figure 2. Commonwealth of the Northern Mariana Islands Study Area





#### DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

December 8, 2020

Civil and Public Works Branch
Programs and Project Management Division

Mr. Aaron Nadig Island Team Manager Pacific Islands Fish and Wildlife Service 300 Ala Moana Boulevard, Room 3-122 Honolulu, HI 96850

Dear Mr. Nadig:

The Honolulu District, U.S. Army Corps of Engineers (Corps) is conducting Post-Disaster Watershed Assessments (assessments) for the territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), (see Enclosure). The assessments are being conducted pursuant to Section 729 of the Water Resources Development Act of 1986, as amended, and funded under the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Public Law 116-20), enacted on June 6, 2019. As authorized, these assessments will address identified water resources needs, provide a shared vision of a desired end state, and provide recommendations for potential involvement by the Corps, other federal agencies, or non-federal interests.

The study area encompasses the entire territories of American Samoa, Guam, and CNMI. The purpose of these assessments is to identify, and address community needs in each territory and increase resiliency. In response to typhoons and tropical cyclones striking the territories in 2018, the Corps received disaster relief funds in January 2020. The assessments are fully federally funded and expected to be complete by 2022.

#### Problems by Territory

American Samoa has a history of chronic riverine and coastal flooding from convective storms, cyclones and tsunamis. Problems associated with these floods include damages resulting from run off and ponding of water, shoreline erosion, water quality and water supply contamination, and landslides. These problems pose a threat to public health and safety and the health of the environment.

Guam has two distinct geographic landscapes; Northern Guam is comprised of limestone plateau while Southern Guam contains ridgelines from volcanic rises. Problems identified in Northern Guam include threats to the Northern Lens Aquifer (main source of drinking water) from exposure to nitrates from septic tanks and land use practices, poor storm water management and infrastructure allowing point-source pollution to flow into the near shore waters. Problems identified in Southern Guam include heavy conveyance of water that carries sedimentation and pollutants to the river deltas resulting in algal blooms and coral reef decline, severe riverbank erosion resulting in loss of property and exacerbating water quality issues, lack

of forested lands due to prescribed fires for development, and reforestation plans that are missing diversity of native species to reduce erosion and promote biodiversity.

The CNMI contains 14 islands, of which, five are inhabited. The assessment is focused on the villages inhabiting the islands of Saipan, Tinian, and Rota. The following problems were identified through prior studies and input from CNMI stakeholders/ agencies: Frequent intense rainfall events trigger flooding along watercourses and in low lying areas, causing life safety risks and economic damages, including effects to critical infrastructure (Saipan). Storms and high wave events contribute to coastal erosion, endangering critical infrastructure (Saipan and Rota). Flooding reduces water quality and water supply, leading to contaminated drinking water (Saipan, Tinian, and Rota). Wildfires exacerbated by drought and invasive species threaten the ecology (Tinian and Rota).

Stakeholder meetings were held virtually in July (participants included American Samoa, CNMI and Guam FWS personnel). The team will continue to collaborate with stakeholders and review existing resiliency projects to identify the problems and develop community-based mitigation strategies for flood risk. The assessments are still in the early data gathering phase; no specific decisions have been made. The next major milestone is the Shared Vision Milestone, scheduled for January 2021.

Pursuant to Planning Bulletin 2019-01 Watershed Studies, we are consulting our agency partners to gather data necessary to develop the Shared Vision among stakeholders. One of our goals at this time is to determine the baseline conditions and existing environment within the study area to assist in the development of recommendations to be described in the assessment. We invite you and other federal and state agencies, cultural organizations, local agencies, interested parties, and individuals interested in providing comments and identifying any issues or concerns to participate in this collaborative effort. In particular, we request your technical assistance in identifying any natural resources or other resources of concern subject to USFWS' purview, occurring within the study area. Any comments received will be fully considered in the development of the final Watershed Assessment.

We appreciate your cooperation on this matter and respectfully request a response within 30 days. We will continue to coordinate this effort with you as the study progresses and the assessment is developed. Should you have any questions, comments, or wish to request either an extension for response or a meeting to discuss this request, please contact Ms. Jessie K. Paahana, Environmental Coordinator, Civil and Public Works Branch, Honolulu District at (808) 835-4042 or

e-mail: jessie.k.paahana@usace.army.mil.

Sincerely,

Jennifer Moore, PMP Deputy District Engineer

**Programs and Project Management** 

### USACE FY 19 Emergency Supplemental Watershed Study Area Maps

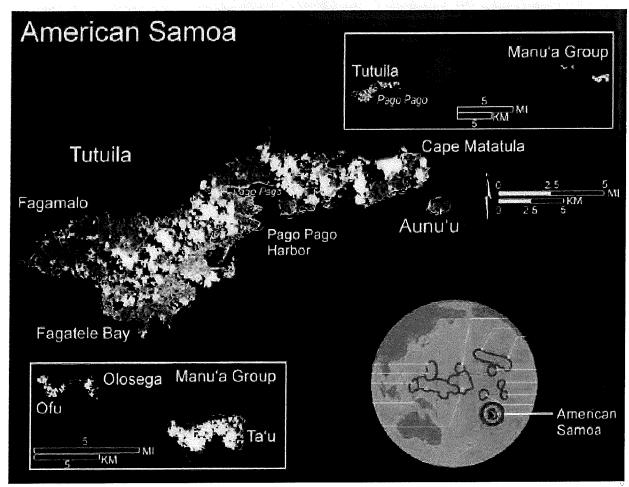


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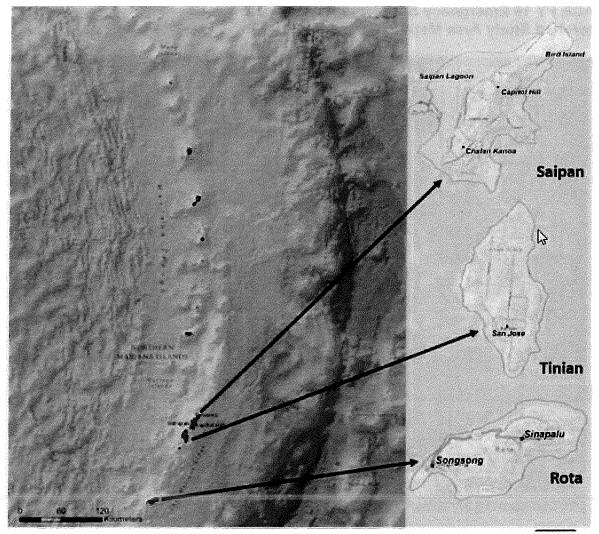
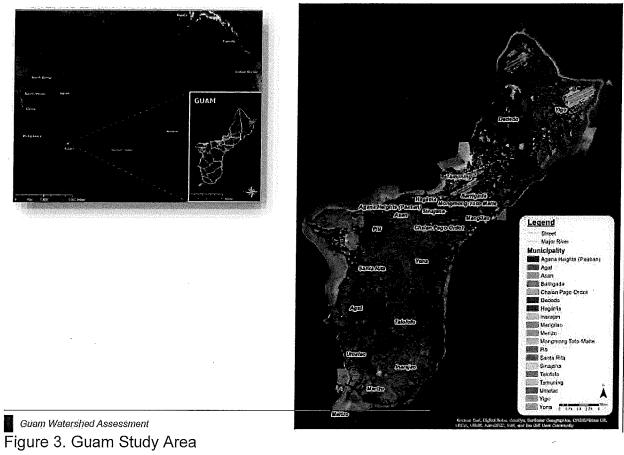


Figure 2. Commonwealth of the Northern Mariana Islands Study Area





### DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT FORT SHAFTER, HAWAII 96858-5440

December 10, 2020

Civil and Public Works Branch
Programs and Project Management Division

Ms. Ann Garrett, Protected Resources Division Mr. Gerry Davis, Habitat Conservation Division

Pacific Islands Regional Office National Marine Fisheries Service 1845 Wasp Boulevard, Building 176 Honolulu, HI 96818

Dear Ms. Garrett and Mr. Davis:

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Problems identified in Northern Guam include threats to the Northern Lens Aquifer (main source of drinking water) from exposure to nitrates from septic tanks and land use practices, poor storm water management and infrastructure allowing point-source pollution to flow into the near shore waters. Problems identified in Southern Guam include heavy conveyance of water that carries sediment and pollutants to the river deltas, resulting in algal blooms and coral reef decline, severe riverbank erosion resulting in loss of property and exacerbating water quality issues, lack of forested lands due to prescribed fires for development, and reforestation plans that are missing diversity of native species to reduce erosion and promote biodiversity.

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Sincerely,

Jennifer Moore, PMP Deputy District Engineer

Programs and Project Management

## **USACE FY 19 Emergency Supplemental Watershed Study Area Maps**

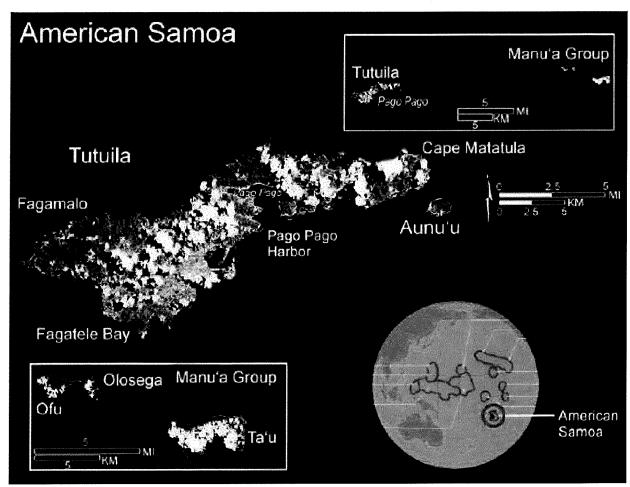


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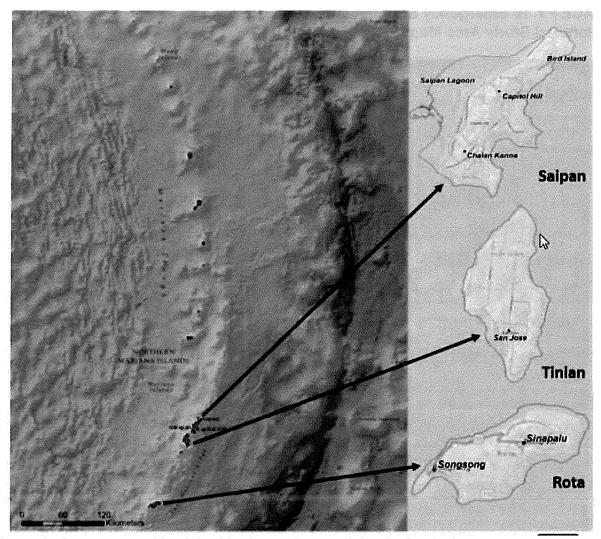


Figure 2. Commonwealth of the Northern Mariana Islands Study Area

