NOTICE OF FINDING OF NO SIGNIFICANT IMPACT AND NOTICE OF INTENT TO REQUEST A RELEASE OF FUNDS FOR TIERED PROJECTS AND PROGRAMS

Date of Publication: January 17, 2024
Commonwealth of the Northern Mariana Islands
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These notices shall satisfy two separate but related procedural requirements for activities to be undertaken by the Commonwealth of the Northern Mariana Islands.

REQUEST FOR RELEASE OF FUNDS

On or after February 5, 2024, Commonwealth of the Northern Mariana Islands will authorize the Northern Marianas Housing Corporation to submit a request to the HUD Office of Disaster Recovery for the release of Community Development Block Grant Disaster Recovery (CDBG-DR) funds under Division I–Supplemental Appropriations for Disaster Relief Act, 2018 (P.L. 115-254) and Title XI of the Additional Supplemental Appropriations for Disaster Relief Act, 2019 (P.L. 116-20) as amended, to undertake the following project:

Tier 1 Broad Review Project/Program Title: Homeowner Rehabilitation/Reconstruction, Homebuyer/Acquisition+Rehabilitation, and New Construction of Single-family Homes for Typhoon Yutu and Typhoon Mangkhut Disaster Recovery.

Purpose: This program will assist eligible homeowners whose primary residence was damaged by Super Typhoon Yutu or Typhoon Mangkhut and for first-time homeowners who have been severely by affected by the typhoons to acquire properties to construct new sustainable, habitable homes.

Location: Throughout the Commonwealth of the Northern Mariana Islands, mainly the islands of Saipan, Tinian, and Rota.

Project/Program Description: The rehabilitation activities will mainly include, but not be limited to, replacement/repair of windows, roofs (using concrete instead of tin), doors, and floors/tiles/drywall in the case of water damage. To assist the maximum number of households, rehabilitation work and materials will be limited to those items necessary to make a home livable, and the home will not be restored to pre-storm conditions where luxury materials may have been used. Also, all rehab activities will occur within the original footprint of the home. Tier 2 site specific reviews will be completed for those laws and authorities not addressed in the tier 1 broad review for each address under this program when addresses become known. Reconstruction may be necessary for homes that sustained severe damage. The project will also include the construction of new homes as prescribed by NMHC, where the number of rooms depends on the number of household members and other special features may be included to accommodate the needs of challenged applicants. For all project types, typhoon shutters and other HUD standards are required to ensure the sustainability and resilience of the homes during future natural disasters, like typhoons.

Level of Environmental Review Citation: 24 CFR Part 58.35(a)(3)(i) (rehab); 24 CFR Part 58.35(a)(4) (scattered-site reconstruction, acquisition, and new construction); and environmental assessment for reconstruction, acquisition, and new construction that does not meet 58.35(a)(4).

Tier 2 Site-Specific Review: All site-specific reviews will cover the following laws and authorities not addressed in the Tier 1 broad review: Airport hazards (24 CFR Part 51 Subpart D), Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994, Coastal Zone Management Act, contamination and toxic substances (58.5(i)(2)), Endangered Species Act, floodplain management (24 CFR 55 and Executive Order 11988), National Historic Preservation Act, and environmental justice (Executive Order 12898). In addition, the site-specific reviews for new construction activities will cover the following: Explosive and flammable hazards (24 CFR Part 51 Subpart C), Farmland Protection Policy Act of 1981, and wetlands protection (Executive Order 11990).

Mitigation Measures/Conditions/Permits (if any): Each unit considered for assistance will be checked for its location relative to airport hazards, FEMA-designated special flood hazard areas, and hazardous waste facilities through online mapping tools. The Division of Coastal Resources Management will be contacted regarding coastal zones, and a One-Start permit (covering coastal zones, endangered species, and historic preservation) will be obtained. The Historic Preservation Office and Division of Fish and Wildlife will be contacted as well. A site visit will be conducted for every unit, and the Bureau of Environmental and Coastal Quality (BECQ) may be contacted to confirm the presence or absence of hazardous sites and unexploded ordnances near each property. For new construction activities, each site will be checked for the presence or absence of wetlands and prime/unique farmland and the proximity to aboveground storage tanks through a combination of online tools and consultation with applicable agencies. The existing house structure and construction site will be inspected by a certified architectural and environmental engineer firm to assess the needs in meeting/adhering with federal standards and regulations for a suitable and sustainable home. All sites will be fenced in for safety purposes prior to any construction work. Approval from the Division of Environmental Quality for the construction of septic systems will be obtained as necessary.

Estimated Project Cost: $39,407,033 is allocated for rehabilitation and reconstruction work, and $59,009,534 is allocated for acquisition and rehabilitation.

FINDING OF NO SIGNIFICANT IMPACT

The Commonwealth of the Northern Mariana Islands has determined that the project will have no significant impact on the human environment. Therefore, an Environmental Impact Statement under the National Environmental Policy Act of 1969 (NEPA) is not required. Additional project information is contained in the Environmental Review Record (ERR) on file at the CDBD-DR office located on the 3rd Floor of Ladera Building, Beach Road, Chalan Laulau and may be examined during the weekdays 8:00A.M. to 4:00 P.M.

PUBLIC COMMENTS

Any individual, group, or agency may submit written comments on the ERR to Mr. Jesse Palacios, Corporate Director of the Northern Marianas Housing Corporation at P.O. Box 500514, Saipan, MP, 96950. All comments received by February 4, 2024, will be considered by the Commonwealth of the

Northern Mariana Islands prior to authorizing submission of a request for release of funds. Comments should specify which Notice they are addressing.

ENVIRONMENTAL CERTIFICATION

The Commonwealth of the Northern Mariana Islands certifies to HUD that Arnold I Palacios, Certifying Officer, in his capacity as Governor consents to accept the jurisdiction of the Federal Courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. HUD's approval of the certification satisfies its responsibilities under NEPA and related laws and authorities and allows the Northern Marianas Housing Corporation to use HUD program funds.

OBJECTIONS TO RELEASE OF FUNDS

HUD will accept objections to its release of fund and the Commonwealth of the Northern Mariana Islands' certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later) only if they are on one of the following bases: (a) the certification was not executed by the Certifying Officer of the Commonwealth of the Northern Mariana Islands; (b) the Commonwealth of the Northern Mariana Islands has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR part 58; (c) the grant recipient or other participants in the development process have committed funds, incurred costs or undertaken activities not authorized by 24 CFR Part 58 before approval of a release of funds by HUD; or (d) another Federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality. Objections must be prepared and submitted in accordance with the required procedures (24 CFR Part 58, Sec. 58.76) and shall be addressed Tennile S. Parker, Director, Office of Disaster Recovery, Office of Community Planning and Development, Department of Housing and Urban Development, at disasterrecovery@hud.gov or 451 Seventh Street SW, Room 7282, Washington, DC 20410. Potential objectors should contact HUD to verify the actual last day of the objection period.

David M. Apatang, Certifying Officer
Acting Governor, Commonwealth of the Northern Marianas

Broad-Level Tiered Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: Homeowner Rehabilitation/Reconstruction, Homebuyer Acquisition/ Rehabilitation, and New Construction of Single-family Homes for Super Typhoon Yutu and Typhoon Mangkhut Disaster Recovery

Responsible Entity: Commonwealth of the Northern Mariana Islands

Grant Recipient (if different than Responsible Entity): Northern Marianas Housing Corporation (NMHC)

State/Local Identifier: N/A

Preparer: Magdalena C. Camacho, Loan Supervisor, CDBG-DR, NMHC

Certifying Officer Name and Title: Arnold I. Palacios, Governor

Consultant (if applicable): Kathryn Au, ICF

Direct Comments to: Jesse S. Palacios, Corporate Director of NMHC, P. O. Box 500514, Saipan, MP 96950

Project Location: Islands of Saipan, Tinian, and Rota

Approximate size of the project area: Approximately 118 square miles

Length of time covered by this review: 5 years

Maximum number of dwelling units or lots addressed by this tiered review: 380

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The Northern Marianas Housing Corporation (NMHC) has developed homeowner rehabilitation, reconstruction and homebuyer rehabilitation programs to assist eligible homeowners whose primary residence was damaged by Super Typhoon Yutu and Typhoon Mangkhut. The programs are designed to create a habitable and resilient living environment for homeowners whose primary residences were fully destroyed or sustained severe or substantial damage by the typhoons by rehabilitating/reconstructing homes or constructing new homes to address the homeless situation in the Commonwealth. The programs are to ensure that HUD's standards are adhered to, including the Green Standards in building of homes, appliances, etc.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

The Northern Marianas Housing Corporation (NMHC) recognizes the need for housing for low-income to moderate-income families struggling from the damage sustained from Super Typhoon Yutu and Typhoon Mangkhut. The CNMI has not been able to recover from this disaster fast enough to meet the needs of housing for the community. This project will help satisfy some of the market demands our islands are now facing on shortages for housing and affordable housing.

Existing Conditions and Trends [24 CFR 58.40(a)]:
Super Typhoon Yutu struck Tinian and Saipan on October 24, 2018 as a category 5-equivalent super typhoon, and it was the strongest tropical cyclone to ever impact the Mariana Islands. Typhoon Mangkhut struck the island of Rota about a month before. The islands have been recovering in terms of new buildings, new homes, repaired houses, and currently undergoing road repairs and expansion. The islands are still seeing some dilapidated, substandard homes which may be affected greatly come another natural disaster like typhoons. We will be seeing more new homes and rehabilitated homes within the next few years as we continue with the CDBG-DR projects.

Funding Information

Grant Number	HUD Program	Program Name	Funding Amount
B-19-DV-69-0001/2	CPD	CDBG-DR	$98,416,567.00

Estimated Total HUD Funded Amount: $39,407,033 is allocated towards rehabilitation/reconstruction, and $59,009,534 is allocated towards homebuyer acquisition and new construction.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]:
$250,000 per home

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities
Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Was compliance achieved at the broad level of review?	**If Yes:** Describe compliance determinations made at the broad level. **If No:** Describe the policy, standard, or process to be followed in the site-specific review.

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	**All activities:** Each unit will be checked for its distance from an airport during the tier 2 site-specific environmental analysis. Any units within 2,500 feet of a civil airport or 15,000 feet of a military airport will be further checked for its location in relation to airport hazards (runway protection zones, clear zones, accident potential zones, etc.). Any unit within a runway protection zone or clear zone will not be assisted.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☒ No ☐	**All activities:** The Commonwealth of the Northern Mariana Islands has no Coastal Barrier Resource units. Therefore, this project is in compliance with this section. See FAQ from U.S. Fish and Wildlife Service on the locations of Coastal Barrier Resource units.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	**All activities:** A FEMA flood map will be checked for the unit's location in relation to a special flood hazard area during the tier 2 site-specific environmental analysis. Flood insurance must be purchased for units in a special flood hazard area (Zone A, 100-year floodplain; or Zone V, coastal high hazard area), or the application will be rejected.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176© & (d); 40 CFR Parts 6, 51, 93	Yes ☒ No ☐	**Rehabilitation, acquisition, and reconstruction:** This project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units. Therefore, this project is in compliance with the Clean Air Act. **New construction:** No areas in CNMI are currently designated as nonattainment areas by the EPA. See https://www3.epa.gov/airquality/urbanair/sipstatus/reports/mp_areabypoll.html

Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	**All activities:** The Division of Coastal Resources Management will be contacted for each unit during the tier 2 site-specific environmental analysis to determine whether the unit/property is wholly or partially within designated areas of particular concern. If so, a CRM permit will be required. At any rate, submission of a consistency determination certifying that the project is consistent with the CNMI Coastal Management Program may be necessary to the extent that federal permitting/licensing requiring a consistency review is required. Furthermore, a One-Start permit from the Division of Environmental Quality will be required.
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	**All activities:** An inspection will be performed for every home, and it will include indoor hazards such as mold (and lead-based paint for homes older than 1978). A checklist will be used to document the presence or absence of contamination and other hazards on the property and on adjoining properties. In addition, a NEPAssist database search will be conducted to search for EPA-regulated facilities and leaking underground storage tanks (LUSTs) within 3,000 feet of the home. Any units within 3,000 feet of an EPA-regulated facility or leaking underground storage tank will be evaluated more closely to determine whether the site is safe for occupancy. Given the small scale of the project, little can be done to remediate for toxics or contamination within the scope of the action. If a site is not safe for occupancy and rehab actions to mitigate the threat are not feasible, then assistance will not be provided for that site. The Bureau of Environmental and Coastal Quality (BECQ) may also be contacted to confirm the presence or absence of contaminated sites in the vicinity of each unit if warranted. If lead-based paint is found, HUD's policy on lead-based paint requirements at 24 CFR 35 will be followed.

Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	**Rehabilitation, acquisition, and reconstruction:** Twenty-nine threatened or endangered species are listed for CNMI. Critical habitat for 3 species (green sea turtle, Mariana crow, and Rota bridled white-eye) is also found in the CNMI. See official species list from the U.S. Fish and Wildlife Service. As the project is limited to rehab/reconstruction activities and the homes themselves are not suitable habitat for the listed species, this project will have No Effect on endangered species. However, The Division of Fish and Wildlife may still be contacted on a per-project basis. **New construction:** New construction activities may affect, but are unlikely to adversely affect, threatened and endangered species. The Division of Fish and Wildlife will be contacted for every project, and U.S. Fish and Wildlife Service will be contacted as well if necessary.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☒ No ☐ Yes ☐ No ☒	**Rehabilitation, acquisition, and reconstruction:** This project does not include the following activities: development, construction, rehabilitation that will increase residential densities, or conversion. Therefore, this project is in compliance with 24 CFR Part 51 Subpart C. **New construction:** Each unit to be constructed will be checked for nearby aboveground storage tanks (ASTs). The distance to ASTs will be checked against the acceptable separation distance. If any individual projects do not meet the acceptable separation distance, then the project will be modified or cancelled.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☒ No ☐	**Rehabilitation, acquisition, and reconstruction:** This project does not include new construction, acquisition of undeveloped land, or conversion that could potentially

	Yes ☐ No ☒	convert one land use to another. Therefore, this project is compliant with the Farmland Protection Policy Act. **New construction:** Each individual project will be checked for the presence of prime or unique farmland. If prime or unique farmland exists at the site, then coordination with the USDA-NRCS will occur (for form AD-1006), or the project will be cancelled.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	**All activities:** Each unit will be checked for its location relative to floodplains as designated by FEMA during the tier 2 site-specific environmental analysis. For units in a special flood hazard area where the assistance for rehab to be provided exceeds 50% of the market value of the property or where demolition, reconstruction, or new construction will occur, an 8-step decision-making process will be performed.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	**All activities:** The CNMI Historic Preservation Office (Division of Historic Preservation within the Department of Community and Cultural Affairs) will be consulted for every unit during the tier 2 site-specific environmental analysis.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	**All activities:** 24 CFR Part 51 Subpart B does not apply to disaster recovery allocations (see 24 CFR 51.101(a)(3)).
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424€; 40 CFR Part 149	Yes ☐ No ☒	**All activities:** CNMI has no sole source aquifers. See EPA's map of sole source aquifers. Therefore, this project is in compliance.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	**Rehabilitation, acquisition, and reconstruction:** This project does not involve new construction, the expansion of a footprint, ground disturbance or any other activity that

	Yes ☐ No ☒	could affect an onsite or offsite wetland. Therefore, this project is in compliance with EO 11990. **New construction:** Each site will be checked for the presence of onsite or offsite wetlands that could be disturbed by construction activities.
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	**All activities:** CNMI has no designated wild and scenic rivers. Furthermore, the project is limited to rehabilitation of an existing structure. Therefore, this project will have no effect on designated wild and scenic rivers.
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	**All activities:** If adverse environmental effects are identified by any other compliance topic within the Tier 2/site-specific review for a unit, then the project will be analyzed for its potential to cause disproportionate adverse environmental impacts to a low-income/minority community.

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.
(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation

LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	**All activities:** This program will assist existing residential properties and have no impact on zoning or urban design.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	**All activities:** The existing house structure and construction site will be inspected by a certified architectural and environmental engineer firm to assess the needs in meeting/adhering with federal standards and regulations for a suitable and sustainable home.
Hazards and Nuisances including Site Safety and Noise	2	**All activities:** The Division of Environmental Quality will determine the impact, if any, on this factor for every property location. It is a requirement that all sites be fenced in for safety purposes prior to any construction work.
Energy Consumption	2	**All activities:** The utilities of the islands are all serviced by an autonomous agency, Commonwealth Utilities Corporation. Solar energy alternatives are also popular in the island of Saipan.

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	2	**All activities:** Forms of income are from employment by the government and private sector; meanwhile, some are on retirement pension and social security pension.
Demographic Character Changes, Displacement	1	**All activities:** This project will not involve any displacement. It will enable existing community members to stay within the community following Super Typhoon Yutu and Typhoon Mangkhut.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	**All activities:** While some educational facilities were severely damaged, some are still intact. Reconstructions are in progress to replace the FEMA temporary classrooms and rebuilding of some public facilities. This project will not impact such facilities.

Commercial Facilities	2	**All activities:** Fortunately, the islands' business sectors have been restoring on their own, while most structures fared pretty good with very minor fixings to do. This project will not impact such facilities.
Health Care and Social Services	2	**All activities:** The main health facility is the Commonwealth Health Center Corporation, and it has been restored. Private clinics are available throughout the island of Saipan as well. This project will not impact health care services.
Solid Waste Disposal / Recycling	2	**All activities:** There are a few private companies collecting trash; the government has facilities for individuals to dispose of their debris/trash.
Waste Water / Sanitary Sewers	2	**All activities:** A portion on the island of Saipan is connected to the island sewage system under the care of CUC. However, most of the islands need to have individual sewer systems by having a septic and leaching field on the property. Each property will be evaluated for the need for a septic tank. If a septic tank is needed, approval from the Division of Environmental Quality will be obtained.
Water Supply	2	**All activities:** Water distribution on the islands is provided by CUC. However, potable water is not readily available in the islands for consumption. The community relies on distilled/purified water for their consumption.
Public Safety - Police, Fire and Emergency Medical	2	**All activities:** The Commonwealth does have departments of public safety, fire stations, EMTs, police stations throughout the islands.
Parks, Open Space and Recreation	2	**All activities:** There are parks and open spaces around all the islands for recreational purposes, including pavilions by the beach areas.
Transportation and Accessibility	2	**All activities:** Most of the population relies much on personal vehicles to go around the islands. There is, however, a government public transportation available on Saipan.

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	**All activities:** All the projects will take place at locations where significant natural features have been marked and

		identified. Therefore, there will be no impact on water resources and unique natural features to be affected.
Vegetation, Wildlife	2	**All activities:** The USFW and the Division of Fish & Wildlife will make their determinations on the protected fauna and flora on the islands.
Other Factors	1	**All activities:** Our programs do not approve properties in wetland areas or within very close proximity of hazardous area. Each project will be checked for proximity to unexploded ordinances (UXOs). Assistance may be rejected (or the project may be modified) if UXOs are identified in the area.
Climate Change	2	**All activities:** This project will improve the resiliency of homes to future events through the installation of storm shutters and other design features such as concrete roofs rather than tin roofs.
Environmental Justice	2	**All activities:** The programs are available to all peoples meeting the basic criteria: low income, U.S. citizen, etc. The program will not result in an adverse environmental impact to low-income, minority, or other environmental justice communities.

Additional Studies Performed:
Historical and archaeological review will be performed as necessary during the Tier 2 site-specific analysis.

Field Inspection (Date and completed by)**:** This will be done during the Tier 2 site-specific environmental analysis.

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]**:**
U.S. Fish and Wildlife Service - https://fwsprimary.wim.usgs.gov/cbrs-mapper-v2/
U.S. Fish and Wildlife Service - https://ipac.ecosphere.fws.gov/
EPA – Sole source aquifers
https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b
EPA - https://www3.epa.gov/airquality/urbanair/sipstatus/reports/mp_areabypoll.html

Consultation to Occur at the Tier 2 Level:
Division of Fish and Wildlife
Historic Preservation Office
CNMI Historic Preservation Office (Division of Historic Preservation within the Department of Community and Cultural Affairs)
Division of Coastal Resources Management

List of Permits Obtained:
All necessary permits, including the One Start Permit, will be obtained during the Tier 2 site-specific environmental analysis.

Public Outreach [24 CFR 50.23 & 58.43]:

We will publish the public notice (Notice of Finding of No Significant Impact/Notice of Intent to Request a Release of Funds) in the local newspapers, Marianas Variety and Tribune, and send it to HUD's Honolulu Field Office, the EPA regional office, and social media outlets to allow the public to make comments.

Cumulative Impact Analysis [24 CFR 58.32]: This project will allow applicants whose primary residence was destroyed by Super Typhoon Yutu in 2018 to remain in the community in more storm-resilient housing, and this will contribute to overall disaster recovery efforts following the typhoon event.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]: Relocation of residents was rejected as an alternative. Moving away from home is difficult for the islanders, most especially when some low-income population has never travelled outside the Commonwealth. To relocate to a place not affected by the typhoons is too costly for many of the affected residents.

No Action Alternative [24 CFR 58.40(e)]: FEMA programs are available to assist the community in terms of building homes and providing sustenance for well being to some. SBA low interest loans are on hand to help. "One community, one voice, one island" is a slogan for resiliency in the Commonwealth.

Summary of Findings and Conclusions: This project will overall result in more resilient housing for residents of CNMI who were affected by Super Typhoon Yutu and Typhoon Mangkhut and allow the community to recover and address homelessness. The environmental impacts of specific sites will be analyzed and addressed at the Tier 2 level. No significant environmental impacts are anticipated for this program.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]
Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Soil suitability, erosion, slope, stormwater runoff, drainage	The existing house structure and construction site will be inspected by a certified architectural and environmental engineer firm to assess the needs in meeting/adhering with federal standards and regulations for a suitable and sustainable home.

Hazards and nuisances including site safety and noise	It is a requirement that all sites be fenced in for safety purposes prior to any construction work.
Other factors	Each project will be checked for proximity to unexploded ordinances (UXOs). Assistance may be rejected (or the project may be modified) if UXOs are identified in the area.
Wastewater/sanitary systems	Approval from the Division of Environmental Quality for the construction of septic systems will be obtained as necessary.

Determination:

☒ **Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]
The project will not result in a significant impact on the quality of the human environment.

☐ **Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]
The project may significantly affect the quality of the human environment.

Preparer Signature: _____ Date: 1.8.24

Reviewed and Concurred: _____ Date: 1/9/2024
Jesse S Palacios, Corporate Director, NMHC

Certifying Officer: _____ Date: 1/11/24
Arnold I Palacios, Governor, CNMI

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Airport Hazards (CEST and EA)

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D
References		
https://www.hudexchange.info/environmental-review/airport-hazards		

1. **To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**

   ☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

   ☐Yes → *Continue to Question 2.*

2. **Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

   ☐Yes, project is in an APZ → *Continue to Question 3.*

   ☐Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

   ☐No, project is not within an APZ or RPZ/CZ

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

3. **Is the project in conformance with DOD guidelines for APZ?**

   ☐Yes, project is consistent with DOD guidelines without further action.

   Explain how you determined that the project is consistent:

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

☐No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

☐Project is not consistent with DOD guidelines, but it has been approved by Certifying Officer or HUD Approving Official.

Explain approval process:

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

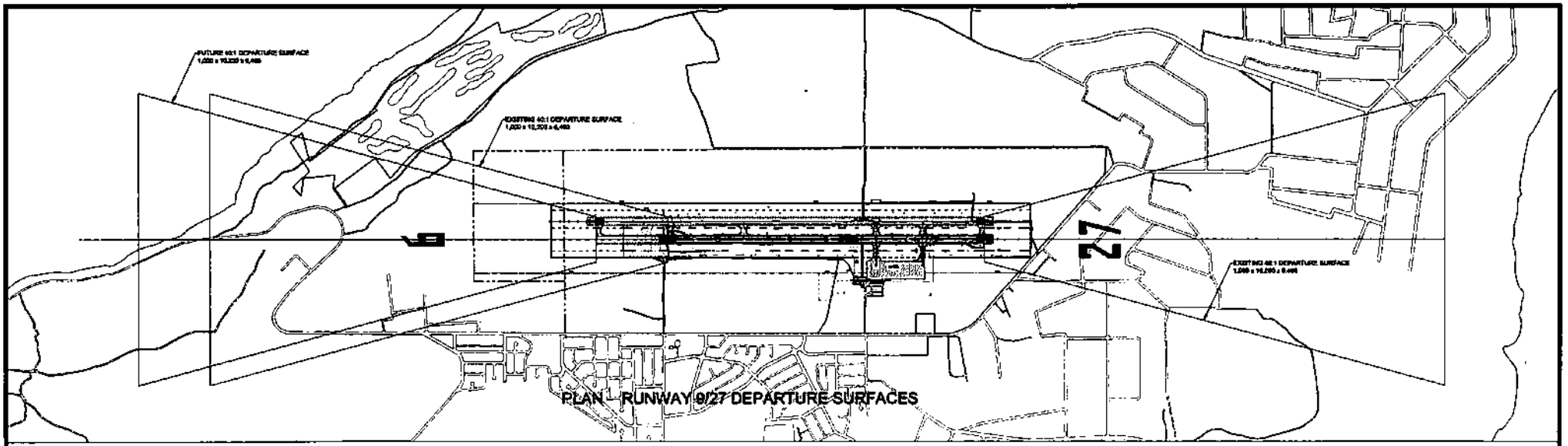
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Please see attachment herewith for all airplane airspace for all islands. Determination will be requested from the Commonwealth Airport Authority for each identified property.

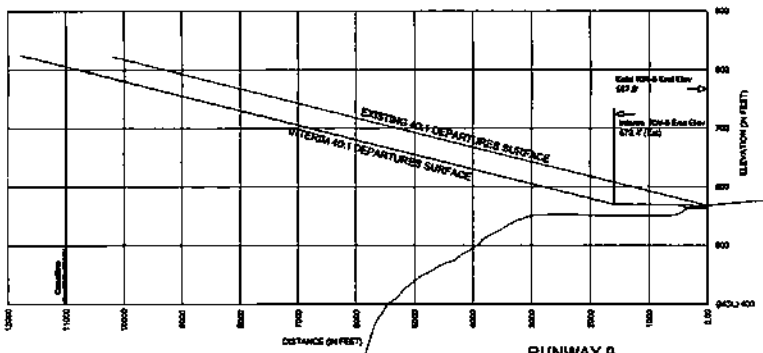
Are formal compliance steps or mitigation required?

☐ Yes

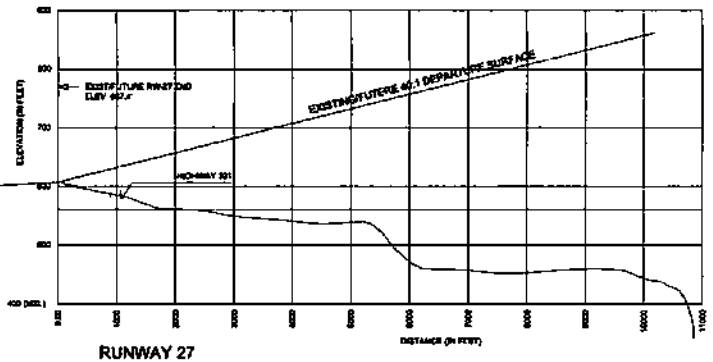
☒ No



PLAN - RUNWAY 9/27 DEPARTURE SURFACES



RUNWAY 9



RUNWAY 27

PROFILE - RUNWAY 9/27 DEPARTURE SURFACES

EXISTING RUNWAY 9 OBSTRUCTION TABLE

OBJECT NO. & IDENTIFICATION	OBJECT ELEVATION	DESCRIPTION OF OBJECT	AMOUNT OF PENETRATION	DISPOSITION OF OBJECT
NONE	NONE	NONE	NONE	NONE

EXISTING RUNWAY 27 OBSTRUCTION TABLE

OBJECT NO. & IDENTIFICATION	OBJECT ELEVATION	DESCRIPTION OF OBJECT	AMOUNT OF PENETRATION	DISPOSITION OF OBJECT
NONE	NONE	NONE	NONE	NONE

GRAPHIC SCALE (FEET)
0 500 1000 2000 3000
HORIZONTAL SCALE: 1" = 1000'
0 50 100 200 300
VERTICAL SCALE: 1" = 100'

TRUE NORTH
DECLINATION
1° 29' 11.76" E
JULY 2003
ANNUAL RATE OF CHANGE
48' 23.56" W

FAA APPROVAL

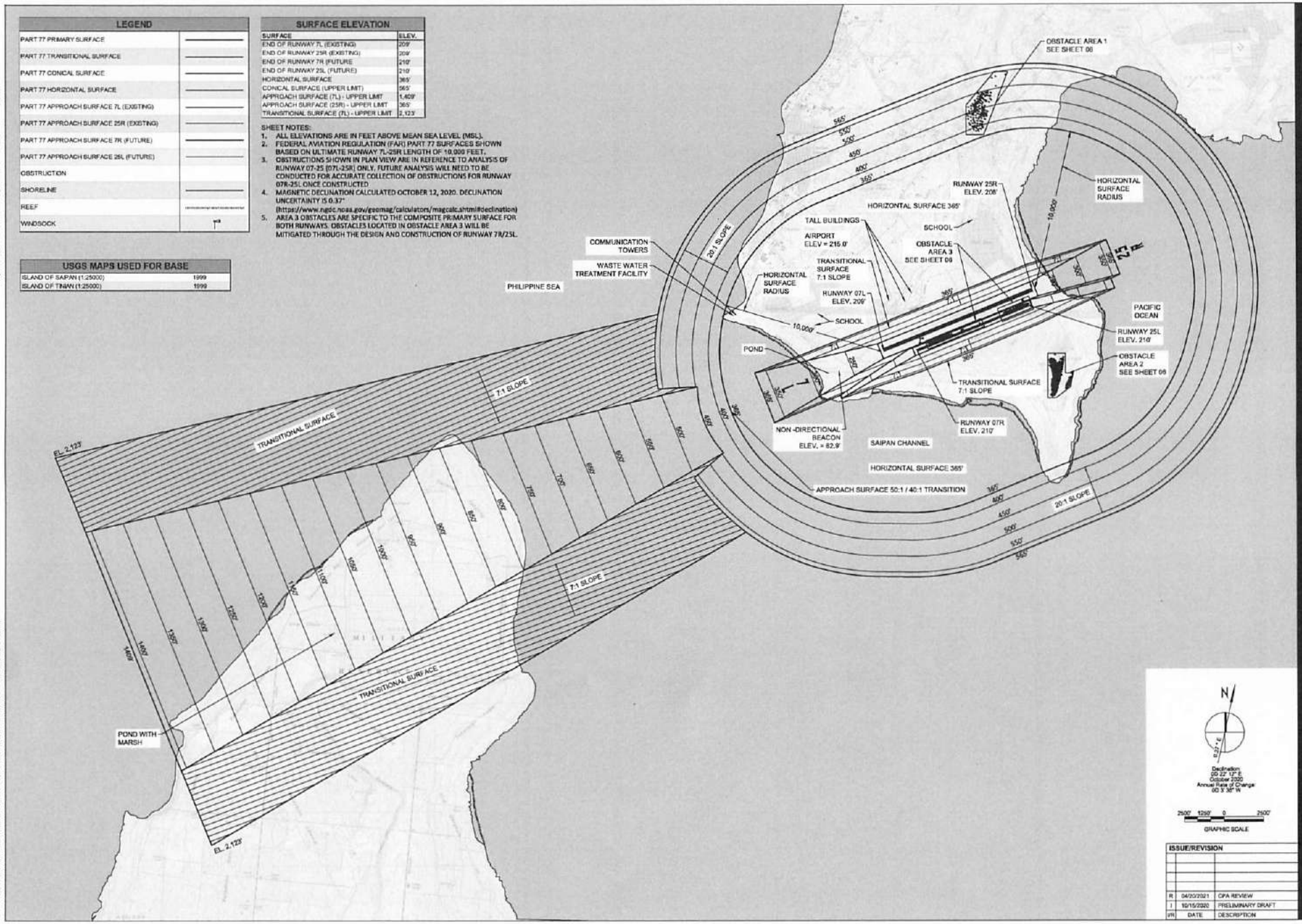
BENJAMIN TAISACAN MANGLONA INTERNATIONAL AIRPORT
COMMONWEALTH PORTS AUTHORITY
ROTA, CNMI

EXISTING DEPARTURE SURFACES- RUNWAY 9/27

COMMONWEALTH PORTS AUTHORITY

E. M. CHEN & ASSOCIATES (CNMI), INC.
ARCHITECTURE • ENGINEERING • PLANNING
CONSTRUCTION MANAGEMENT
TEL. NO. (670) 235-2436

NO.	DATE	REVISION	BY	CK	APPROVALS



LEGEND	
PART 77 PRIMARY SURFACE	
PART 77 TRANSITIONAL SURFACE	
PART 77 CONICAL SURFACE	
PART 77 HORIZONTAL SURFACE	
PART 77 APPROACH SURFACE 7L (EXISTING)	
PART 77 APPROACH SURFACE 25R (EXISTING)	
PART 77 APPROACH SURFACE 7R (FUTURE)	
PART 77 APPROACH SURFACE 25L (FUTURE)	
OBSTRUCTION	
SHORELINE	
REEF	
WINDSOCK	

SURFACE ELEVATION	ELEV.
END OF RUNWAY 7L (EXISTING)	209'
END OF RUNWAY 25R (EXISTING)	208'
END OF RUNWAY 7R (FUTURE	210'
END OF RUNWAY 25L (FUTURE)	210'
HORIZONTAL SURFACE	365'
CONICAL SURFACE (UPPER LIMIT)	565'
APPROACH SURFACE (7L) - UPPER LIMIT	1,409'
APPROACH SURFACE (25R) - UPPER LIMIT	365'
TRANSITIONAL SURFACE (7L) - UPPER LIMIT	2,123'

SHEET NOTES:
1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL).
2. FEDERAL AVIATION REGULATION (FAR) PART 77 SURFACES SHOWN BASED ON ULTIMATE RUNWAY 7L-25R LENGTH OF 10,000 FEET.
3. OBSTRUCTIONS SHOWN IN PLAN VIEW ARE IN REFERENCE TO ANALYSIS OF RUNWAY 07-25 [07L-25R] ONLY. FUTURE ANALYSIS WILL NEED TO BE CONDUCTED FOR ACCURATE COLLECTION OF OBSTRUCTIONS FOR RUNWAY 07R-25L ONCE CONSTRUCTED
4. MAGNETIC DECLINATION CALCULATED OCTOBER 12, 2020. DECLINATION UNCERTAINTY IS 0.37° (https://www.ngdc.noaa.gov/geomag/calculators/magcalc.shtml#declination)
5. AREA 3 OBSTACLES ARE SPECIFIC TO THE COMPOSITE PRIMARY SURFACE FOR BOTH RUNWAYS. OBSTACLES LOCATED IN OBSTACLE AREA 3 WILL BE MITIGATED THROUGH THE DESIGN AND CONSTRUCTION OF RUNWAY 7R/25L.

USGS MAPS USED FOR BASE	
ISLAND OF SAIPAN (1:25000)	1999
ISLAND OF TINIAN (1:25000)	1999

ISSUE/REVISION		
R	04/20/2021	CPA REVIEW
1	10/15/2020	PRELIMINARY DRAFT
I/R	DATE	DESCRIPTION

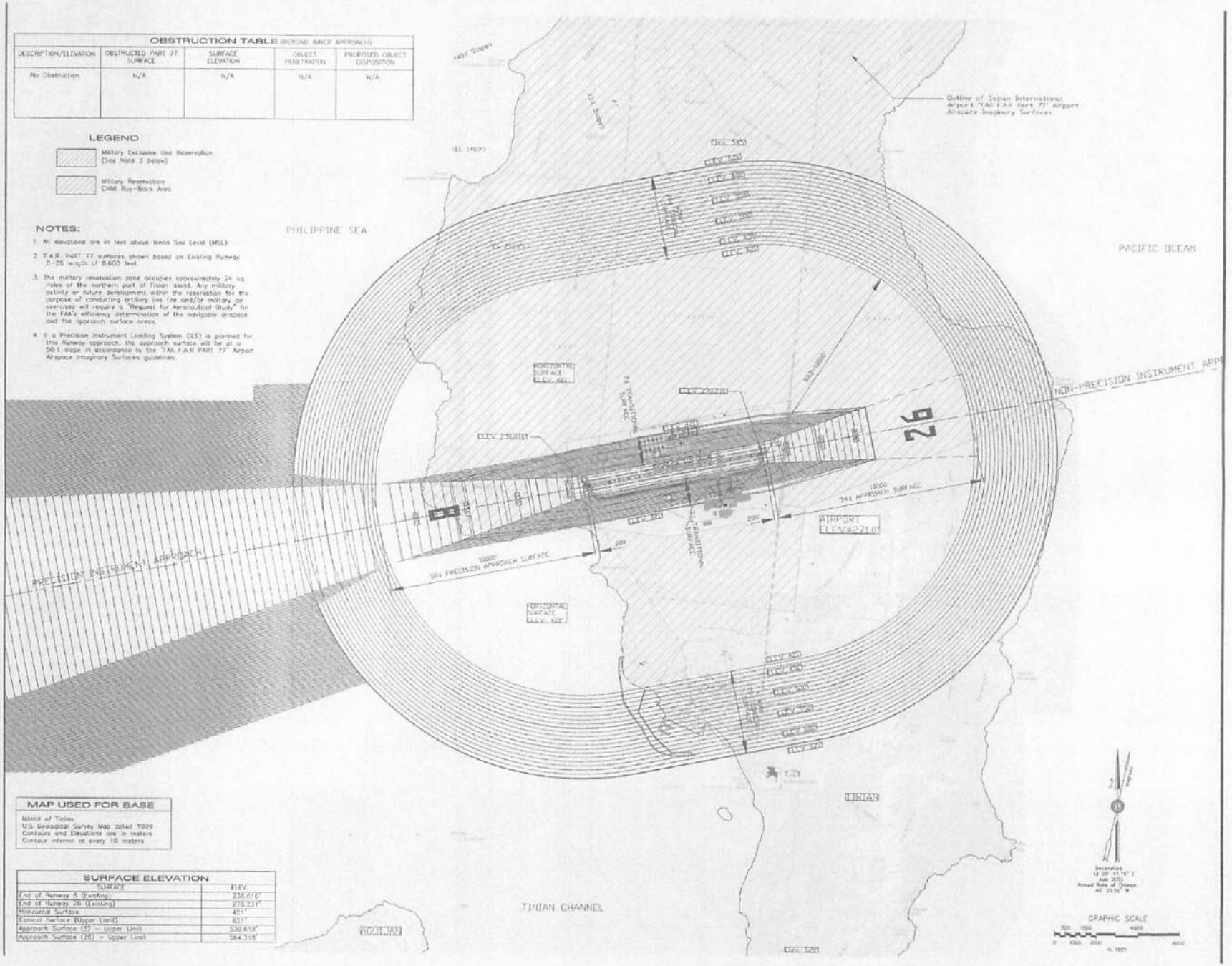
AECOM

AIRPORT AIRSPACE PLAN VIEW

Francisco C. Ada / Saipan International Airport
AIRPORT MASTER PLAN
Commonwealth of the Northern Mariana Islands
Project No. 60570574 Date: 2021.04.21

Last saved by WAYNE.SAUNDERS on 2021-04-20 Last Plotted: 2021-04-20
Filename: C:\USERS\WAYNE.SAUNDERS\DESKTOP\GUAM LATEST CAD\04-AIRPORT AIRSPACE DRAWING-1.DWG

Project Manager: PH Designer: WS Checked: JS Approved: PH



CONSULTANT:

N15 ARCHITECTS
ARCHITECTURE • INTERIOR DESIGN • PROJECT MANAGEMENT

CONSULTANT:

ARUP

NOTES

REVISIONS:

Rev	Date	Description	Issued by
1	01/10/12		CPA
2	09/28/18		N15/ARUP

CPA APPROVAL:

4/23/19

FAA APPROVAL STAMP:

PROJECT STATUS:

PROJECT TITLE:

TINIAN INT'L. AIRPORT MASTER PLAN

WEST TINIAN, MP 96952, USA

CLIENT:

DRAWING TITLE:

AIRPORT AIRSPACE

DESIGNED:	ARUP/N15	DRAWN:	CPA/RCE
CHECKED:	RF/CPA	APPROVED:	
DATE:	04/05/19	SCALE:	1"=2500'-0"

SHEET NO.: ALP-500

REVISION:

Coastal Barrier Resources (CEST and EA)

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	
References		
https://www.hudexchange.info/environmental-review/coastal-barrier-resources		

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

☐Yes → *Continue to Question 2.*

> Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see 16 USC 3505 for exceptions to limitations on expenditures).

2. Indicate your selected course of action.

☐ After consultation with the FWS the project was given approval to continue

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map and documentation of a FWS approval.*

☐ Project was not given approval

Project cannot proceed at this location.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

There are no Coastal Barrier Resources System in the islands of the Commonwealth of the Northern Mariana Islands. See attachment herewith.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

What is the Coastal Barrier Resources System?

The Coastal Barrier Resources Act (CBRA) of 1982 established the John H. Chafee Coastal Barrier Resources System (CBRS), a defined set of relatively undeveloped coastal barrier units located along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. These areas are delineated on a set of maps that are enacted into law by Congress and maintained by the Department of the Interior through the U.S. Fish and Wildlife Service (Service). Most new federal expenditures and financial assistance are prohibited within the CBRS. The prohibition that is most significant to property owners is the denial of federal flood insurance through the National Flood Insurance Program (NFIP) for structures constructed or substantially improved after designation within the CBRS. CBRA does not prohibit development, and it imposes no restrictions on development conducted with non-Federal funds. Congress enacted CBRA to minimize the loss of human life, wasteful federal expenditures, and damage to the natural resources associated with coastal barriers .

BACK TO TOP

Where are the CBRS units located?

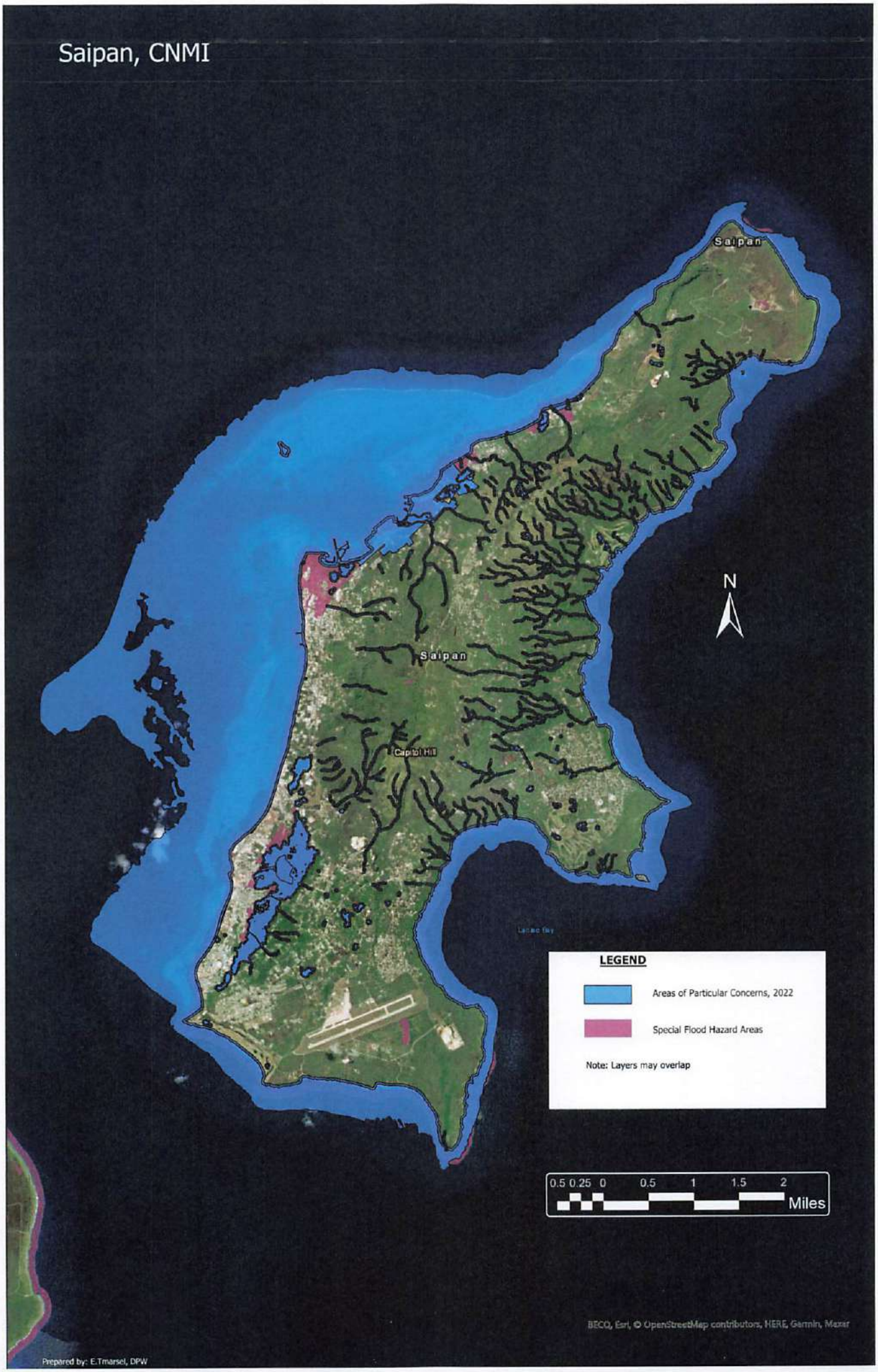
CBRS units are located in 23 states and territories along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. There are no CBRS units along the Pacific coast. View the official CBRS maps.

BACK TO TOP

What are the differences between System Units and Otherwise Protected Areas?

The CBRS contains two types of units, System Units and Otherwise Protected Areas (OPAs). OPAs are denoted with a "P" at the end of the unit number (e.g., FL-64P, P10P).

System Units are generally comprised of private lands that were relatively undeveloped at the time of their designation within the CBRS. The boundaries of these units are generally intended to follow geomorphic, development, or cultural features. Most new federal expenditures and financial assistance, including flood insurance, are prohibited within System Units.


Saipan, CNMI
Saipan
N
Saipan
Capitol Hill
LEGEND
Areas of Particular Concerns, 2022
Special Flood Hazard Areas
Note: Layers may overlap
0.5 0.25 0 0.5 1 1.5 2
Miles
BECO, Esri, © OpenStreetMap contributors, HERE, Garmin, Maxar
Prepared by: E.Tmarsel, DPW


ROTA

Tinian

Flood Insurance (CEST and EA)

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).
Reference		
https://www.hudexchange.info/environmental-review/flood-insurance		

1. **Does this project involve mortgage insurance, refinance, acquisition, repairs, construction, or rehabilitation of a structure, mobile home, or insurable personal property?**

   ☐No. This project does not require flood insurance or is excepted from flood insurance. → *Continue to the Worksheet Summary.*

   ☒Yes → *Continue to Question 2.*

2. **Provide a FEMA/FIRM map showing the site.**

   The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

   Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

   ☒No → *Continue to the Worksheet Summary.*

   ☐Yes → *Continue to Question 3.*

3. **Is the community participating in the National Flood Insurance Program *or* has less than one year passed since FEMA notification of Special Flood Hazards?**

   ☐Yes, the community is participating in the National Flood Insurance Program.

   For loans, loan insurance or loan guarantees, flood insurance coverage must be continued for the term of the loan. For grants and other non-loan forms of financial assistance, flood insurance coverage must be continued for the life of the building irrespective of the transfer of ownership. The amount of coverage must equal the total project cost or the maximum coverage limit of the National Flood Insurance Program, whichever is less

   Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

   → *Continue to the Worksheet Summary.*

☐Yes, less than one year has passed since FEMA notification of Special Flood Hazards.
If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ *Continue to the Worksheet Summary.*

☒No. The community is not participating, or its participation has been suspended.
Federal assistance may not be used at this location. Cancel the project at this location.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

This program will not do any projects on FEMA designated floodplains.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Air Quality (CEST and EA)

General Requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93
Reference		
https://www.hudexchange.info/environmental-review/air-quality		

Scope of Work

1. **Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

   ☐ Yes

   → *Continue to Question 2.*

   ☒ No

   Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Air Quality Attainment Status of Project's County or Air Quality Management District

2. **Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**
   Follow the link below to determine compliance status of project county or air quality management district:
   http://www.epa.gov/oaqps001/greenbk/

   ☐ No, project's county or air quality management district is in attainment status for all criteria pollutants

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐ Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants.

Describe the findings:

→ *Continue to Question 3.*

3. **Determine the <u>estimated emissions levels of your project for each of those criteria pollutants</u> that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis or threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

   ☐ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Explain how you determined that the project would not exceed de minimis or threshold emissions.*

   ☐ Yes, the project exceeds *de minimis* emissions levels or screening levels.

   → *Continue to Question 4. Explain how you determined that the project would not exceed de minimis or threshold emissions in the Worksheet Summary.*

4. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The islands are rather small in size, and therefore no pollution remains in the areas.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Coastal Zone Management Act (CEST and EA)

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930
References		
https://www.onecpd.info/environmental-review/coastal-zone-management		

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samona	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

1. **Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?**

   ☐Yes → *Continue to Question 2.*

   ☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.*

2. **Does this project include activities that are subject to state review?**

   ☐Yes → *Continue to Question 3.*

   ☐No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.*

3. **Has this project been determined to be consistent with the State Coastal Management Program?**

   ☐Yes, with mitigation. → *Continue to Question 4.*

   ☐Yes, without mitigation. → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.*

☐No, project must be canceled.

Project cannot proceed at this location.

4. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the State Coastal Management Program letter of consistency) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Consultation and determination of this subject matter will be requested from the office of the CNMI Division of Coastal Resources Management for each identified property.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

SAIPAN

Coastal Hazards

TINIAN

Coastal Hazards

ROTA

- Coastal Hazards

BECQ 2017 SLR Map Layer Updates: Methodology for Coastal Flood Geoprocessing

This paper summarizes the local and regional sea level data used to develop coastal flooding scenarios for the island of Saipan, CNMI, and outlines the basic geospatial processing steps used to derive spatial data for six of those scenarios. This document is an update to the original "Saipan SLR Mapping Methodology", which was appended to the Saipan Climate Vulnerability Assessment (2014).

Since the publication of the Saipan Climate Vulnerability Assessment in 2014, the primary means of assessing Saipan's exposure to changes in sea level has been through a simple coastal flooding mapping approach. Inundation and flood mapping required data processing and analysis using Geographic Information Systems (GIS). Geospatial data layers for sea level change (SLC) and rise (SLR) scenarios, in the form of raster and vector data types, have been developed using ESRI ArcGIS 10.x software. Geoprocessing methods were originally developed by NOAA Coastal Services Center (see document "Detailed Methodology for Mapping Sea Level Rise Inundation" NOAA CSC, 2011). The NOAA methods were modified and applied to sea level data specific to the Mariana Islands.

It should be noted that several elements of the mapping approach introduce significant limitations and caveats to exposure analysis. While these limitations present obstacles to visualizing accurate representations of future conditions, they also offer opportunities for enhanced modeling as inundation scenarios on Saipan continue to be studied. Enhanced efforts could integrate more detailed hydrologic features, updated elevation and shoreline positions, or adopt numerical models that incorporate wave run-up and other coastal processes.

For the 2017 SLR Mapping update, a modified bathtub model has been utilized, which allows for mapping of changes in still-water levels over a high-resolution, conditioned digital elevation model. The bathtub approach does not consider future changes in shoreline due to coastal processes such as erosion and accretion, nor does it account for wave run-up or the influence of certain hydraulic features such as stormwater/sewer infrastructure. A detailed comparison of the bathtub approach to a dynamic, numerical wave run-up model is provided in USGS Open Report 2013-1069 (Storlazzi, et al. 2013).

Sea Level Scenarios and Data Sources

The 2017 updates to the Saipan SLR & Coastal Flooding maps resulted in 6 new spatial data layers reflecting increased future sea levels due to both climate change-driven processes (referred to as SLR), as well as seasonal extremes estimated for a 100-year return period (referred to as SLC). Both drivers of sea level rise/change were analyzed using local and regional data, primarily from Saipan & Guam tide gauges. These scenarios are detailed on the following pages.

SLC Scenarios Due to Seasonal Sea Level Extremes (Chowdury et al, 2010)

SLC scenarios based on seasonal sea level extremes were derived from Chowdhury et al.'s (2010) statistical modeling of 20 and 100-year return periods & monthly maximum data from 1978-2003 on Saipan. This study leveraged a more robust and locally relevant set of input data than the USACE Typhoon Surface Water Analysis for Saipan Lagoon (Chou, L. 1989), which was used as a data source in BECQ's previous flood mapping efforts. For BECQ's purposes of mapping sea level changes and extremes for Saipan, the 1989 USACE modeling can be considered superseded by Chowdhury et. al's analysis (see table below).

Stations	Sea level extremes (mm) at 20year Return Period				Sea level extremes (mm) at 100year Return Period			
	JFM	AMJ	JAS	OND	JFM	AMJ	JAS	OND
Marianas (Guam)	119~159	110~168	96~228	120~203	138~202	138~243	151~441	155~299
Saipan	98~188	79~152	122~214	93~228 **(127~675)**[a]	127~285	97~214	166~333	57~628 **(395~1846)**[a]
Malakal (Palau)	170~301	127~194	163~230	108~220	243~479	162~278	204~311	111~306
Yap	129~329 **(210~624)**[a]	45~170 **(138~624)**[a]	163~244	132~285	45~170 **(299~1394)**[a]	70~315 **(186~1687)**[a]	213~341	163~425
Pohnpei	108~179	106~186	102~178	146~289	126~244	132~278	117~240	179~411
Kapingamarangi	112~243	70~184	54~127	84~193	135~350	79~265	60~177	90~250
Majuro	71~122	80~128	84~167	119~195	88~163	93~164	105~243	149~269
Kwajalein	96~129	79~128	81~119	101~149	122~176	98~175	101~157	117~192
Pago-Pago	69~131	121~166	72~131	57~93	88~194	143~211	92~190	71~120

[a] Results with typhoon-affected data are bold (in parenthesis). JFM, AMJ, JAS, and OND stand for January-February-March, April-May-June, July-August-September, and October-November-December

Table from Chowdhury, et. al, 2010

Sea level extremes for the months of October, November, and December (OND) at the 100-year return period were used in BECQ's 2017 mapping updates. This resulted in a base sea level of +0.628 meters above datum.

BECQ's "extreme scenario" utilized the same return period with OND values during years in which typhoons skewed the sea level values on Saipan (bold in table above). While this data is technically "skewed", it is also representative of what Saipan could expect during a year in which a typhoon passes in close proximity to the island or makes landfall. The OND sea levels during an "extreme" or "typhoon year" could reach +1.846 meters.

Additional information regarding these seasonal extreme values can be found in the paper:

Chowdhury, Md. R., Chu, P., Zhao, X., Schroeder, T.A., and Marra, J.J. (2010). Sea level extremes in the U.S.-Affiliated Pacific Islands—a coastal hazard scenario to aid in decision analyses. *Journal of Coastal Conservation. 14:1, pp 53-62.*

SLR Scenarios Due to Climate Change

Sea level rise projections for Saipan were based on revisions to two primary resources: 2017 updates to NOAA sea level trend analyses (Sweet, W.V. et. al. (2017).Global and Regional Sea Level Rise Scenarios for the United States. *NOAA Technical Report NOS CO-OPS 083.*) and the 2017 update to the U.S. Army Corps' *Sea Level Curve Calculator* (http://corpsclimate.us/ccaceslcurves.cfm).

Future sea levels were calculated using the "NOAA High" curve as the projection basis for the USACE Curve Calculator. The NOAA High Curve assumes a "business-as-usual" greenhouse gas emissions scenario through the end of the century (Representative Concentration Pathway 8.5 from the International Panel on Climate Change 5th Assessment Report, 2014) in which carbon emissions are not substantially curbed, and initial contributions of Antarctic ice melt are factored in. Details concerning these computations and associated probabilities are available in Sweet et al., 2017.

The USACE Curve Calculator further refines these calculations by factoring in local vertical land movement at tide gauges with complete records for the current tidal epoch. The Apra Harbor tide gauge on Guam contains the most thorough sea level records for the Marianas, and was therefore used as a proxy for Saipan in these calculations.

A table and graph illustrating the lower and upper bounds of Marianas sea level projections are included on the following page. NOAA guidance suggests selection of scenarios for coastal planning and decision making based on the relative risk of the systems that are being planned for (e.g. development on Saipan's western coastal plain), the risk aversion of decision makers and stakeholders (e.g. developers' relative comfort level with certain probabilities of a hazard), and the flexibility or adaptive capacity of the system within a given time frame.

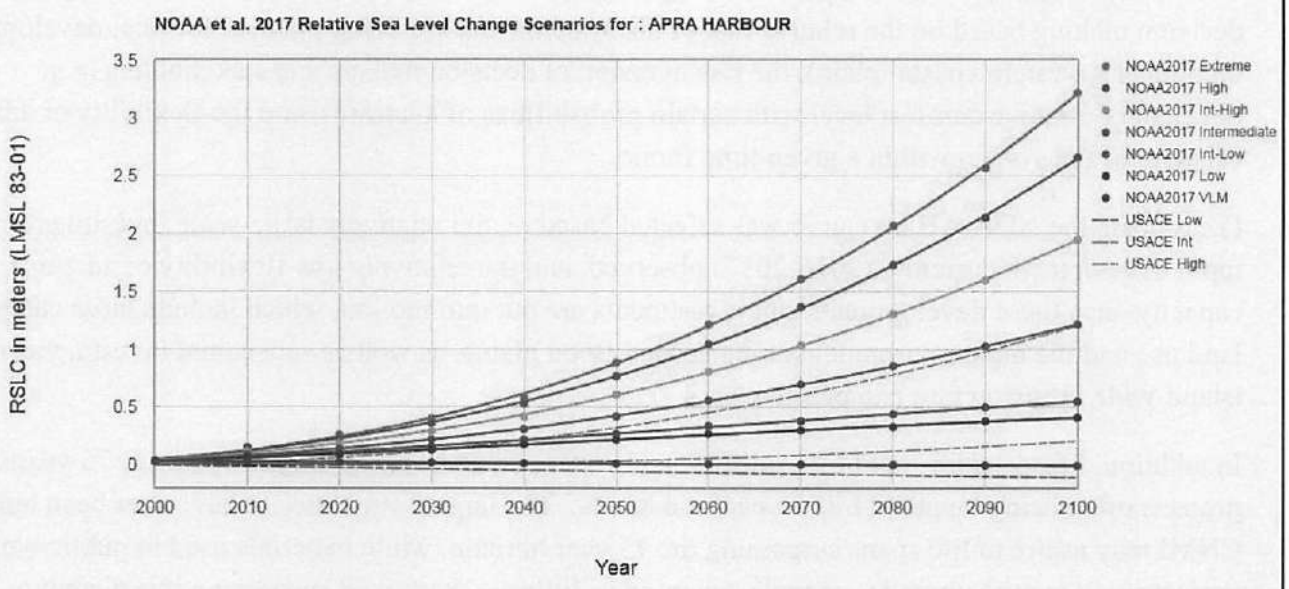
For Saipan, the NOAA High Curve was selected based on the relatively large-scale investments and rapid development currently (2016-2017) observed, and the relatively low flexibility or adaptive capacity once these developments and investments are put into motion, which include large changes to land use and the built environment along coastal flood plains, as well as substantial investments in island-wide infrastructure and public works.

In addition, lifespans for buildings, utilities, and water resources range from 30 years to 75 years, with projects often being bounded by 55 year land leases. The largest structures to have ever been built in the CNMI may aspire to life spans surpassing the 75 year horizon, while materials used in public works projects may require upgrades or replacement in as little as 25 years. Considering this planning envelope, mapping scenarios were built off of 30, 50, and 75 year projections.

CNMI Sea Level Rise Mapping Updates (2017)
Scenarios for APRA HARBOUR
NOAA2017 VLM: -0.00037 meters/yr
All values are expressed in meters

Year	NOAA2017 VLM	NOAA2017 Low	NOAA2017 Int-Low	NOAA2017 Intermediate	NOAA2017 Int-High	NOAA2017 High	NOAA2017 Extreme	USACE Low	USACE Int	USACE High
2000	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.01	-0.01	-0.00
2010	0.02	0.06	0.07	0.09	0.12	0.15	0.15	-0.02	-0.01	0.02
2020	0.02	0.09	0.11	0.14	0.19	0.23	0.26	-0.03	-0.01	0.06
2030	0.02	0.13	0.16	0.22	0.29	0.36	0.40	-0.04	-0.00	0.12
2040	0.01	0.18	0.22	0.31	0.42	0.53	0.58	-0.05	0.01	0.21
2050	0.01	0.22	0.27	0.42	0.61	0.77	0.89	-0.06	0.03	0.32
2060	0.00	0.27	0.34	0.56	0.81	1.05	1.22	-0.07	0.05	0.45
2070	0.00	0.30	0.38	0.70	1.04	1.37	1.61	-0.08	0.08	0.61
2080	-0.00	0.33	0.44	0.86	1.31	1.73	2.07	-0.09	0.12	0.78
2090	-0.01	0.38	0.50	1.03	1.60	2.14	2.57	-0.10	0.16	0.98
2100	-0.01	0.41	0.55	1.22	1.95	2.66	3.22	-0.11	0.20	1.20

Project: CNMI Sea Level Rise Mapping Updates (2017)
Gauge/Grid Selected: APRA HARBOUR
NOAA2017 VLM: -0.00037 meters/yr
Adjustment to MSL(83-01) Datum: 0.027 meters applied
All values expressed in meters
Lines shown are the result of a best fit polynomial trend
USACE SLC Curves are show as dashed lines using the 2006 published SLC rate of -0.0011 meters/yr



Detailed documentation concerning these calculations can be found in USACE Circular 1165-2-2012 (http://corpsclimate.us/docs/EC_1165-2-212%20-Final_10_Nov_2011.pdf) and on the USACE Sea Level Change website: http://corpsclimate.us/ccacesl.cfm .

Combining the October-November seasonal sea level extreme estimates for 100-year recurrence at Saipan Harbor with the USACE Sea Level Curve Calculator/NOAA 2017 Projections, the following scenarios were computed and mapped:

2017 Saipan Coastal Flood Mapping Updates: Scenario Descriptions

Scenario	Data Code	Seasonal Extreme (meters)	Seasonal Extreme Description*	Sea Level Rise (m.)	Sea Level Rise Description**	Cumulative Sea Level Change (m.)
OND Seasonal Extreme (Typhoon Year)	OND_TY	1.85	Historically derived (1978-2003) maximum sea level for 100-year recurrence at Saipan Harbor, during the months of October - December including data from years with typhoon passage.	0	Climate change-related sea level rise not factored into this scenario.	1.85
50 years SLR	SLR50	0	No seasonal extreme estimates factored into this scenario.	1.31	Sea level rise projection for 2067 based on NOAA 2017 "High" curve and U.S. Army Corps sea level curve calculator for Apra Harbor tide gauge (local vertical land movement)	1.31
30 years SLR + OND Seasonal Extreme	SLR30_OND	0.63	Historically derived (1978-2003) maximum sea level estimate for 100-year recurrence at Saipan Harbor for months Oct.-Dec., with Typhoon-affected data removed.	0.74	Sea level rise projection for 2047 based on NOAA 2017 "High" curve and U.S. Army Corps sea level curve calculator for Apra Harbor tide gauge (local vertical land movement)	1.37
50 years SLR + OND Seasonal Extreme	SLR50_OND	0.63	Historically derived (1978-2003) maximum sea level estimate for 100-year recurrence at Saipan Harbor for months Oct.-Dec., with Typhoon-affected data removed.	1.31	Sea level rise projection for 2067 based on NOAA 2017 "High" curve and U.S. Army Corps sea level curve calculator for Apra Harbor tide gauge (local vertical land movement)	1.94
75 years SLR + OND Seasonal Extreme	SLR75_OND	0.63	Historically derived (1978-2003) maximum sea level estimate for 100-year recurrence at Saipan Harbor for months Oct.-Dec., with Typhoon-affected data removed.	2.14	Sea level rise projection for 2093 based on NOAA 2017 "High" curve and U.S. Army Corps sea level curve calculator for Apra Harbor tide gauge (local vertical land movement)	2.77
50 years SLR + OND Seasonal Typhoon Year	SLR50_ONDTY	1.85	Historically derived (1978-2003) maximum sea level for 100 year recurrence interval at Saipan Harbor, during the months of October - December including data from years with typhoon passage.	1.31	Sea level rise projection for 2067 based on NOAA 2017 "High" curve and U.S. Army Corps sea level curve calculator for Apra Harbor tide gauge (local vertical land movement)	3.16

* See Chowdhury, Md. R., Chu, P., Zhao, X., Schroeder, T.A., and Marra, J.J. (2010). Sea level extremes in the U.S.-Affiliated Pacific Islands—a coastal hazard scenario to aid in decision analyses. *Journal of Coastal Conservation. 14*:1, pp 53-62.

** See http://corpsclimate.us/ccaceslcurves.cfm (Revised 2017) and *U.S. Army Corps of Engineers. (2011). Sea Level Change Considerations for Civil Works Programs. U.S. Army Corps Circular 1065-2-212. http://corpsclimate.us/docs/EC_1165-2-212%20-Final_10_Nov_2011.pdf*

Mapping Methods

Inputs:

• Digital Elevation Model (DEM)

- The DEM for Saipan is based on 2007 USACE high-resolution lidar data. Hydrographic breaklines in the DEM were derived from lidar intensity images, and the DEM is hydro-flattened so that water elevations are set to 0 meters.
- Source lidar has a horizontal accuracy of 1 meter, and vertical accuracy root mean square error of 20 cm. DEM resolution is 2.69 meters. The source data meets FEMA standards for flood hazard mapping.
- DEM was conditioned and distributed by NOAA CSC. Metadata for the DEM, including process steps and software used is available upon request to CNMI Coastal Resources Management Office.

• Tidal surface in NAVD88 values

- NOAA methodology suggests the use of VDATUM software to develop a tidal surface that captures spatial variation in water levels. The VDATUM tool and associated data packages did not include coverage of the CNMI at the time that SLC layers were developed, and therefore was not used. The alternative recommended method for creating a tidal surface involves interpolation of sea level values at different tide gauges within the area of interest. Saipan has only one tide gauge, therefore a single value tidal surface was generated.

• Sea level change values

- Values (in meters) for each of the SLC scenarios are described on the previous page of this document.

Workflow in ESRI ArcGIS Desktop

(as detailed by NOAA CSC SLR Inundation Mapping Whitepaper)

Note: While the following workflow was completed for the six coastal flooding scenarios, only the *connected depth grid* (step 7) and an associated polygon for each scenario was exported and published in a file geodatabase to the BECQ Server. The polygons for each scenario were also merged into a single feature, and published to the BECQ online data portal, providing the primary means of public access to visualize and download the data as a single file.

1. Add SLC value to the tidal surface grid

Spatial Analyst > Math > Plus
- Input raster or constant value 1 = tidal surface
- Input raster or constant value 2 = SLC value for OND_TY
- Output raster = **surface_OND_TY**

2. Subtract DEM values from water surface to derive initial inundation depth grid

Spatial Analyst > Single Ouput Map Algebra
- Map Algebra expression: con(DEM <= surface_OND_TY, surface_OND_TY – DEM)
- Output raster = **depth_ OND_TY**

3. In preparation for evaluating connectivity, create single value DEM to show inundation extent

Spatial Analyst > Single Output Map Algebra
- Map Algebra expression: con(DEM <= surface_OND_TY, 1)

- Output raster = **single_ OND_TY**

4. Evaluate connectivity of extent raster

Spatial Analyst > Generalization > Region Group
- Input raster = single_OND_TY
- Number of neighbors to use = 8
- Zone grouping method = Within
- Output raster = **clumped_OND_TY**

5. Extract connected inundation surface to be used as a mask for the original depth grid

Spatial Analyst > Extraction > Extract by Attributes
- Input raster = clumped_OND_TY
- Where clause: "Count" = maximum value
- Output raster = **connect_OND_TY**

6. Derive low-lying areas greater than an acre

Spatial Analyst > Extraction > Extract by Attributes
- Input raster = clumped_OND_TY
- Where clause: "Count" > 40
- Output raster = **lowlying_OND_TY**

For Saipan

- The value of 40 is based on the use of 10 meter grid cells (1 acre = 4046.85m2, 4046.85 m2 / 100 m2 = 40.46).

- The DEM has ~3 meter cells, therefore 'Count' value was 450 (1 acre = 4046.85m2, 4046.85 m2 / 9 m2 = 449.65)

7. Create depth grid for connected areas

Spatial Analyst > Extraction > Extract by Mask
- Input raster = depth_OND_TY
- Input raster or feature mask data = connect_OND_TY
- Output raster = **con_depth_OND_TY**

Additional steps for Saipan

To derive polygons with "con_depth_OND_TY" values (for additional analysis using feature-based queries, etc...)

Convert from floating point raster to polygon without losing significant figures (to the third decimal)

Spatial Analyst -> Map Algebra
- Int([con_depth_OND_TY]*1000) *or* Int([Susupe_OND_TY]*1000)
- New Raster has whole integer values that are 1000 times larger than original depths
- Output Raster = **integer_OND_TY**

Conversion Tools -> From Raster -> Raster to Polygon
- Input raster: integer_OND_TY
- Field = 'value'
- New Polygon = **OND_TY_Poly**

- In OND_TY_Poly: Create new depth field to match original floating raster values
- In attribute table for OND_TY_Poly, Create new field "depth", field type 'double'
- Field Calculator: "depth" = 'grid_code'/1000

To create single polygons for quick display of inundation extend, excluding flood depth values

Cartography Tools -> Generalization -> Aggregate Polygons OR 'Dissolve' based on new field with single value
- Input: OND_TY_Poly
- Distance: 0.5 meters (other search distances will work, but must be less than original raster cell resolution to avoid aggregation across areas that are not inundated) OR Dissolve based on attribute field with single value
- Output: **OND_TY_Aggregate OR Dissolve**

References

Chou, L.W. (1989). Typhoon Water Surface Analysis for West Coast of Saipan, Mariana Islands. U.S. Army Corps Paper CERC-89-12.

Chowdhury, Md. R., Chu, P., Zhao, X., Schroeder, T.A., and Marra, J.J. (2010). Sea level extremes in the U.S.-Affiliated Pacific Islands—a coastal hazard scenario to aid in decision analyses. *Journal of Coastal Conservation. 14:1, pp 53-62.*

NOAA Coastal Services Center. (2011). Frequent Questions: Digital Coast Sea Level Rise and Coastal Flooding Impacts Viewer. www.coast.noaa.gov/digitalcoast .

NOAA Coastal Services Center. (2010). Detailed Methodology for Mapping Sea Level Rise Inundation. www.coast.noaa.gov/digitalcoast .

Sweet, W.V. et. al. (2017).Global and Regional Sea Level Rise Scenarios for the United States. *NOAA Technical Report NOS CO-OPS 083.*

Storlazzi, C.D., Berkowitz, P., Reynolds, M.H., and Logan, J.B. (2013). Forecasting the impact of storm waves and sea-level rise on Midway Atoll and Laysan Island within the Papahānaumokuākea Marine National Monument—a comparison of passive versus dynamic inundation models: U.S. Geological Survey Open-File Report 2013-1069, 78 p.

U.S. Army Corps of Engineers. (2011). Sea Level Change Considerations for Civil Works Programs. U.S. Army Corps Circular 1065-2-212. http://corpsclimate.us/docs/EC_1165-2-212%20-Final_10_Nov_2011.pdf .

Contamination and Toxic Substances (Single Family Properties)

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
Reference		
https://www.hudexchange.info/programs/environmental-review/site-contamination		

1. **Evaluate the site for contamination. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property?**
   Provide a map or other documentation of absence or presence of contamination[1] and explain evaluation of site contamination in the Worksheet below.

   ☒ No

   Explain:

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☐ Yes

[1] Utilize EPA's Enviromapper and state/tribal databases to identify nearby dumps, junk yards, landfills, hazardous waste sites, and industrial sites, including EPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. Additional supporting documentation may include other inspections and reports.

→ *Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 2.*

Check here if an ASTM Phase I Environmental Site Assessment (ESA) report was utilized. [Note: HUD regulations does not require an ASTM Phase I ESA report for single family homes]

2. Mitigation

Document the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental mitigation cannot be mitigated, then HUD assistance may not be used for the project at this site.

Can adverse environmental impacts be mitigated?

☐ Adverse environmental impacts cannot feasibly be mitigated

→ Project cannot proceed at this location.

☐ Yes, adverse environmental impacts can be eliminated through mitigation.

→ *Provide all mitigation requirements[2] and documents. Continue to Question 3.*

3. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls[3], or use of institutional controls[4].

[2] Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

[3] Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

[4] Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

If a remediation plan or clean-up program was necessary, which standard does it follow?

☐ Complete removal
☐ Risk-based corrective action (RBCA)
☐ Other

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The Bureau of Environmental Control Quality determines each property for this subject matter.

Are formal compliance steps or mitigation required?

☐ Yes
☒ No

Endangered Species Act (CEST and EA)

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").	The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*); particularly section 7 (16 USC 1536).	50 CFR Part 402
References		
https://www.hudexchange.info/environmental-review/endangered-species		

1. **Does the project involve any activities that have the potential to affect species or habitats?**

☐No, the project will have No Effect due to the nature of the activities involved in the project.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☒Yes, the activities involved in the project have the potential to affect species and/or habitats. → *Continue to Question 2.*

2. **Are federally listed species or designated critical habitats present in the action area?**

Obtain a list of protected species from the Services. This information is available on the FWS Website or you may contact your local FWS and/or NMFS offices directly.

☐No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation*

may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.

☒Yes, there are federally listed species or designated critical habitats present in the action area. → *Continue to Question 3.*

3. What effects, if any, will your project have on federally listed species or designated critical habitat?

☐No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

☒May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ *Continue to Question 4, Informal Consultation.*

☐Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ *Continue to Question 5, Formal Consultation.*

4. Informal Consultation is required

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?

☒Yes, the Service(s) concurred with the finding.

→ *Based on the response, the review is in compliance with this section. Continue to Question 6 and provide the following:*

(1) A biological evaluation or equivalent document
(2) Concurrence(s) from FWS and/or NMFS
(3) Any other documentation of informal consultation

Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.

☐No, the Service(s) did not concur with the finding. → *Continue to Question 5.*

5. Formal consultation is required

Section 7 of ESA (16 USC 1536) mandates consultation to resolve potential impacts to federally listed endangered and threatened species and critical habitats. If a HUD assisted project may affect any endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

→ *Once consultation is complete, the review is in compliance with this section. Continue to Question 6 and provide the following:*

(1) A biological assessment, evaluation, or equivalent document
(2) Biological opinion(s) issued by FWS and/or NMFS
(3) Any other documentation of formal consultation

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that will be implemented to mitigate for the impact or effect, including the timeline for implementation.

☒Mitigation as follows will be implemented:

Consultation and clearances will be obtained for the properties identified to have sightings of endangered species with the CNMI Division of Fish and Wildlife together with the U.S. Fish & Wildlife biologist. Mitigation in the form of purchasing credits in the Saipan Upland Mitigation Bank is usually implemented.

☐No mitigation is necessary.

Explain why mitigation will not be made here:

<u>Worksheet Summary</u>

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Each identified property will be determined by the CNMI Division of Fish and Wildlife with request from our office.

Are formal compliance steps or mitigation required?

☒ Yes

☐ No

Endangered Species

Many birds in the Mariana Islands, including Guam and CNMI, are already vulnerable simply because they are restricted to small islands and thus have a small range. The inclusion of so many of CNMI's birds on the IUCN Red List is both a factor of this small range, but more recently, is a factor of the possible introduction of the Brown Tree snake on Saipan and possibly on Rota. The Brown Tree snake is responsible for the decline in birds in Guam where it has been present for more than 40 years, and is now expected to contribute to declines in bird species in the CNMI. Other invasive species, such as the Black Drongo, and have also been suggested as reasons for the decline in bird populations. Habitat loss and pesticide use combined with restricted and small ranges are also attributed to species declines.

The International Union for the Conservation of Nature (IUCN) Red List of Globally Threatened Birds lists birds according to 6 categories: Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern, and Data Deficient. Of the CNMI's resident native birds, 10 are on the IUCN Red List, including:

IUCN Red List			
Golden White-Eye	*Cleptornis marchei*	*Kanario*	CR
Mariana Crow	*Corvus kubaryi*	*Aga*	EN
Mariana Fruit-Dove	*Ptilinopus roseicapilla*	*Totot*	EN
Micronesian Megapode	*Megapodius laperouse*	*Sasngat*	EN
Nightengale Reed-Warbler	*Acrocephalus syrinx*	*Ga'ga' Karisu*	EN
Mariana Swiftlet	*Aerodramus bartschi*	*Yayaguak*	EN
Bridled White-Eye	*Zosterops conspicillatus*	*Nosa*	EN
Tinian Monarch	*Monarcha takatsukasae*	*Chuchurikan Tinian*	VU
White-throated Ground-Dove	*Gallicolumba xanthonura*	*Paluman Apaka*	NT

Golden White-Eye

Marianas Crow

Marianas Fruit Dove

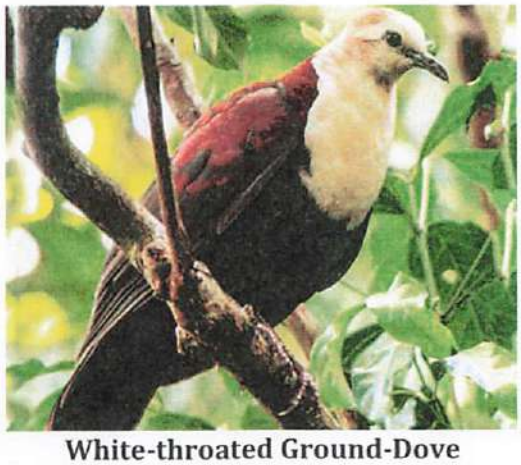
Micronesian Megapode

Nightengale Reed-Warbler

Mariana Swiftlet

Bridled White-Eye

Tinian Monarch



White-throated Ground-Dove

Additional IUCN-listed birds visit the CNMI as regular or irregular migrants or vagrants, including:

Bristle-thighed Curlew	*Numenius tahitiensis*	VU
Matsudaira's Storm-Petrel	*Oceanodroma matsudairae*	DD
Laysan Albatross	*Phoebastria immutabilis*	VU
White-necked Petrel	*Pterodroma cervicalis*	VU

Bristle-thighed Curlew

Matsudaira's Storm-Petrel

Laysan Albatross

White-necked Petrel

Birds of Local Concern

The US Fish and Wildlife Service (USFWS, 2005) lists several birds on the US Endangered Species List:

Mariana Common Moorhen	*Gallinula chloropus*
Mariana Crow	*Corvus kubaryi*
Micronesian Megapode	*Megapodius laperouse*
Nightengale Reed-Warbler	*Acrocephalus syrinx*
Mariana Swiftlet	*Aerodramus bartschi*

Marianas Crow

Micronesian Megapode

Nightengale Reed-Warbler

Mariana Swiftlet

U.S. Fish and Wildlife Mitigation Policy

Apply Mitigation in the form of:

1. Conservation Measures voluntarily included as part of a proposed Federal action that avoid, minimize, rectify, reduce, or compensate for unavoidable (also known as residual) impacts to a listed species.

"Mitigation" means actions that shall be required or recommended to avoid or compensate for impacts to fish, wildlife, or habitat from the proposed project activity. The type(s) of mitigation required shall be considered and implemented, where feasible, in the following sequential order of preference:

A. Avoiding the impact altogether by not taking a certain action or parts of an action.
B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
C. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

D. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
E. Compensating for the impact by replacing or providing substitute resources or environments.
F. Monitoring the impact and taking appropriate corrective measures to achieve the identified goal.

2. Components of reasonable and prudent alternative to avoid jeopardizing the continued existence of listed species or destroying or adversely modifying designated critical habitat.

3. Reasonable and prudent measures within an incidental take statement to minimize the impacts of taking on the affected listed species. Under section 10(a)(2), a non-Federal applicant is required to "minimize and mitigate" such impacts "to the maximum extent practicable," among other requirements, to receive an incidental take permit. This Policy serves as an over-arching Service guidance applicable to all actions for which the Service has specific authority to recommend or require the mitigation of impacts to fish, wildlife, plants and their habitats.

Table of Listed Species (U.S. Fish and Wildlife Service)

Threatened or endangered species	**Habitat requirements**
Mariana fruit bat (*Pteropus mariannus mariannus*)	"This species typically roosts diurnally in colonies in undisturbed native forests and forages widely at night on nectar, fruit, and leaves of at least 22 plant species (Wiles 1983). During the day, Mariana fruit bats roost in native and non-native trees alone or in groups or colonies of a few to over 800 animals (Wiles 1987, Pierson and Rainey 1992, Worthington and Taisacan 1995). Roosting bats sleep during much of the day but also perform other activities, such as grooming, breeding, and defending roosting territories within the colony (USFWS 1990a). Several hours after sunset, bats depart their roost sites to forage for fruit and other native and non-native plant materials such as leaves and nectar (USFWS 1990a). Little is known about their nightly movements, but fruit bats have been observed foraging as far as 12 km (7 mi) from known roosting sites on Guam (Wiles et al. 1995). Mariana fruit bat forages and roosts primarily in native limestone forest, but coconut plantations and coastal forest are occasionally used as well." https://ecos.fws.gov/ecp/species/2415
Pacific sheath-tailed bat (Emballonura semicaudata rotensis) **Aguiguan only**	"Currently, subspecies rotensis is known only from the island of Aguiguan, also known as Goat Island (Engbring et al. 1986, p. 8). The limestone cave ecosystem on Aguiguan has a constant temperature, high relative humidity, and no major air movement (O Shea and Valdez 2009, pp. 77 78). Food Habits The Mariana subspecies rotenisis forages almost entirely in forests (native and nonnative) near their roosting caves (Esselstyn et al. 2004, p. 307). The Pacific sheath-tailed bats consume a diverse array of small-sized (0.078 0.314 in (2 8 mm)) insects, including ants, bees, and wasps (Hymenoptera), moths (Lepidoptera), and beetles (Coleoptera), as their primary prey (O Shea and Valdez 2009, pp. 63 65; Valdez et al. 2011, pp. 301 307)." https://ecos.fws.gov/ecp/species/1919
Mariana crow (Corvus kubaryi) **Rota only**	"On Guam, the crow historically was widely distributed in forest habitats, but densities were highest in limestone forests and lowest in grasslands and areas with human settlement (Jenkins 1983, Michael 1987). Similar to other Guam forest birds, the crow disappeared from most of the island with the spread of the brown treesnake, and was restricted to the northern cliff forests by the mid 1970s. Mariana crows have large territories and require relatively large tracts of limestone forest that have low levels of human activity or disturbance (Morton 1996, Morton et al. 1999). More forest is necessary to maintain a genetically viable population of crows than for other forest birds on Guam because each pair of crows requires more space than do smaller species. On Rota the birds live in a variety of habitats across the island, but they only nest in the native limestone forests."

	https://ecos.fws.gov/ecp/species/4744
Mariana common moorhen (Gallinula chloropus guami)	"The Mariana common moorhen inhabits tropical freshwater lakes, marshes swamps, and wet rice paddies. It prefers open water fringed by emergent aquatic plants. Food Habits The Mariana common moorhen is a non-migratory bird. It feeds on aquatic plants and invertebrates, which are obtained by swimming and sticking the head under the surface to grasp plants or insect prey. It also forages while walking along shorelines. Movement / Home Range Only Guam, Tinian, Saipan, & Pagan historically had permanent freshwater wetlands capable of supporting this species (USFWS 1991). Currently, Mariana common moorhen populations occur on Guam, Rota, Tinian, & Saipan, having been extirpated from Pagan (USFWS 1991). The population on Rota is relatively small & occurs in artificial ponds on the Rota Resort Country Club golf course. The most recent range-wide counts of the Mariana common moorhen estimated 133 birds on Saipan, 10 on Tinian, 3 on Rota, & 75 on Guam for a total of 221 in September of 2018. It is likely that this is an underestimate as a more recent survey on Saipan during the dry season in May 2019 found 185 birds. It is likely the numbers on Guam may be larger as well, but surveys were not conducted." https://ecos.fws.gov/ecp/species/8011
Mariana swiftlet (Aerodramus bartschi)	Extirpated from Tinian and Rota (2020). "This species has been reported to forage over a wide variety of habitats including grasslands, limestone forest, ravine forest, and coconut groves. This species roosts exclusively in caves. They inhabit natural and man-made caves, such as abandoned Second World War gun emplacements on Micronesia. Caves used by A. v. bartschi for roosting and nesting are formed from limestone rock and occur in limestone forest and ravine forest. Colonies of swiftlets are also known to roost in at least three limestone sinkholes." https://ecos.fws.gov/ecp/species/8166 No effect for rehab/reconstruction/acquisition because construction to occur on existing footprints.
Micronesian megapode (Megapodius laperouse)	"The Micronesian megapode is generally a bird of the forest, particularly limestone forest which probably typifies the vegetation of the southern Marianas before widespread historical destruction." https://ecos.fws.gov/ecp/species/629
Nightingale reed warbler (Acrocephalus luscinia)	"The Nightingale Reed-warbler is common in upland and wetland habitats over most of Saipan (Reichel et al. 1992; USFWS 1998b). Upland habitats include tangantagan forests, tall elephant grass (Pennisetum polystachyon), bamboo, secondary forests, forest edges, and mosaics of these habitats (Craig 1992; Reichel et al. 1992, USFWS 1998b). USFWS (1998c) found reed- warbler densities highest in mixed secondary and tangatangan habitats in a survey of the Marpi Commonwealth Forest. Wetland habitats include native reed (Phragmites karka) marshes, marsh edges, mangroves, and

	wetland/upland econtones (Craig 1992; Reichel et al. 1992; USFWS 1998; Mosher 2006). Marshall (1949) reported reed-warblers in dense populations in marsh lands surrounding Lake Susupe, and marshes at Tanapag Harbor. Across Saipan, the reed-warbler tends to be absent from native limestone forest, mature secondary forests, beach strand, and swordgrass savannahs (Craig 1992; Reichel et al. 1992; USFWS 1998)." https://ecos.fws.gov/ecp/species/6586
Rota bridled white-eye (Zosterops rotensis) **Rota only**	"Since the late 1970s and 1980s until today the Rota white-eye has been regularly reported only at high elevations (greater than 150 meters [490 feet]) in the Sabana region of Rota. Sightings have been recorded in limestone forest, introduced Acacia confusa forest, introduced Leucaena leucocephala forest, and secondary vegetation (Craig and Taisacan 1994; Amidon 2000; Fancy and Snetsinger 2001; F. Amidon, unpubl. data). However, the majority of the sightings have been recorded in limestone forest." https://ecos.fws.gov/ecp/species/3092
Short-tailed albatross (Phoebastria albatrus)	Nests/breeds only on Torishima and Senkaku Islands. "These birds nest in open, treeless areas with low or no vegetation. Short-tailed albatross spend much of their time feeding in continental shelf-break areas (200-1000 m depth, where the continental shelf ends and depths begin to increase markedly) east of Honshu, Japan during breeding, and in shelf (0-200 m depth) and shelf break areas of the Bering Sea, Aleutian chain and in other Alaskan, Japanese and Russian waters." https://ecos.fws.gov/docs/recovery_plan/090520.pdf
Green sea turtle (Chelonia mydas)	Potential impacts if construction (or vehicles) on or in the vicinity of beaches and dunes or if project lighting can be seen from beaches. https://ipac.ecosphere.fws.gov/project/IMKVYAPJKBBQBJ764OIYVRZHSA/documents/generated/6929.pdf
Hawksbill sea turtle (Eretmochelys imbricata)	https://ipac.ecosphere.fws.gov/project/IMKVYAPJKBBQBJ764OIYVRZHSA/documents/generated/6929.pdf Potential impacts if construction (or vehicles) on or in the vicinity of beaches and dunes or if project lighting can be seen from beaches.
Fragile tree snail (Samoana fragilis) **Rota only**	"The fragile tree snail needs cool, shaded forest habitat with high humidity and reduced air movement that prevents excessive water loss. The snails do not appear to require specific host plants but can be found on many different species of large-leaved plants (trees, shrubs, herbaceous plants, and even ferns) both native and introduced." "The original site from where this species was discovered and described on Rota was converted to agricultural fields, & no living snails were found there in 1995. In 1996, a new colony was discovered on Rota in a different location (Bauman 1996). At this site along the mountain slope of the Talakhaya region, the fragile tree snail co-occurs with another endemic Partula spp. (Fiedler 2019)." https://ecos.fws.gov/ecp/species/4835
Humped tree snail (Partula gibba)	"Generally, the humped tree snail needs cool, shaded forest habitat with high humidity and reduced air movement that prevents excessive water loss. The snails do not appear to require specific host plants but can be found on many different species of large-leaved plants (trees, shrubs, herbaceous plants, and even ferns) both native and introduced. Stability of environmental factors (temperature, relative humidity and light) are critical factors for juvenile survival. Excess light and unstable temperatures and humidity had detrimental impacts on the survival of juvenile humped tree snails bred in captivity (Gouveia 2011). They need live and decaying plant material, as their diet consists of fungi and microalgae."

	https://ecos.fws.gov/ecp/species/61
Langford's tree snail (Partula langfordi)	"Habitat Requirements The Langford's tree snail needs cool, shaded forest habitat with high humidity and reduced air movement that prevents excessive water loss. All partulids including the Langford's tree snail need live and decaying plant material, as their diet consists of fungus and /or microalgae. Little information is available about vegetation that this species is most associated with; however, it has been observed on Aglaia sp. and Guamia mariannae (Smith 1995) Food Habits All partulids including the Langford's tree snail need live and decaying plant material, as their diet consists of fungus and /or microalgae. Little information is available about vegetation that this species is most associated with; however, it has been observed on Aglaia sp. and Guamia mariannae (Smith 1995) Movement / Home Range The species has only ever been recorded from the island of Aguigan. The species was first detected in 1952 and has not been found since 1992. However, when first collected, the Langford's tree snail was assumed to be a variant of the humped tree snail (Partula gibba), with which it was often found. The species has been found or was suspected to be found because of co-occurrence with the humped tree snail in at least seven forested sites in the northwest of Aguiguan (Smith 2013). In 2013, only dead shells were found at two of seven established survey sites and the condition of the shells indicated that they were very old (Smith 2013). The Langford's tree snail spatial distribution likely decreased long before its discovery in 1952 and the last observation in 1992." https://ecos.fws.gov/ecp/species/326
Marianna eight-spot butterfly (Hypolimnas octocula marianensis)	"The majority of limestone forest habitat and known host plant populations of the butterfly occur in northern Guam on undeveloped, rugged karst terrain or the cliff-edges of limestone plateaus (Taborosi 2013, pp. 14 16; Demeulenaere et al. 2018, p. 9). The larvae of this butterfly feed on two native plants, Procris pedunculata (no common name) and Elatostema calcareum (tapun ayuyu)(Schreiner and Nafus, 1996, p. 1). Both of these forest herbs (family Urticaceae) are found only on karst substrate within the forest ecosystem, draped over boulders and small cliffs (Schreiner and Nafus 1996, p. 1; Rubinoff 2013, in litt.). Based upon consistent observations of the species over time at a few survey sites containing larger aggregations of host plants, researchers have identified either the presence of pinnacle karst terrain or a relative absence of feral ungulates as a population need of the Mariana eight-spot butterfly (Rubinoff and Holland 2018, p. 224; and Demeulenaere et al. 2018, p. 21)." https://ecos.fws.gov/ecp/species/6540
Mariana wandering butterfly (Vagrans egistina)	"Habitat requirements consist of native limestone forests with Maytenus thompsonii, its host food." "On Rota, Schreiner and Nafus (1996, p.8) found small numbers of this species in the Chenchon Bird Sanctuary on the eastern side of the island, the only locality this species has been found on the island. Based on the population trend and lack of detections in recent surveys, the Mariana wandering butterfly is likely extirpated on Guam, but may still exist on

Rota only	Rota in small numbers." https://ecos.fws.gov/ecp/species/7121
Rota blue damselfly (Ischnura luta) **Rota only**	"The damselfly is a stream-obligate insect that inhabits one confirmed stream system on the island of Rota. This stream occurs within a forested portion of an area known as Talakhaya that contains the entirety of available stream habitat on Rota." "The damselfly is a stream-obligate insect that inhabits one confirmed stream system on the island of Rota. This stream occurs within a forested portion of an area known as Talakhaya that contains the entirety of available stream habitat on Rota. A few individuals were observed and one male & one female specimen were collected outside the Talakhaya Water Cave (also known as Sonson Water Cave) located below the Sabana plateau (Camacho et al. 1997, p. 4; Polhemus et al. 2000, pp. 1 8). The size of the population at the time of discovery was estimated to be small and limited to the stream area near the mouth of the cave. The primary source of the stream is spring water emerging at the limestone-basalt interface below the highly permeable limestone of the Sabana plateau (Polhemus et al. 2000, pp. 1 8; Keel et al. 2011, p. 1). This spring also serves as the main source of fresh water supply for the population of Rota (Polhemus et al. 2000, pp. 1 8; Keel et al. 2011, p. 1). In January 2014, 2 males were observed flying above a portion of the stream located at approximately 770 ft (235 m) in elevation, and below the Talakhaya (Sonson) Water Cave (Richardson 2014, in litt.). In November 2015, Zarones et al. (2015b, in litt.)found one individual along a stream 744 yards (680 m) to the west of Water Cave area, not connected to the stream at the Water Cave." https://ecos.fws.gov/ecp/species/3087
Berenghenas Halomtano (Solanum guamense)	"Habitat Requirements The habitat type for the last observed individual of Solanum guamense was forest with limestone soils and limestone karst. Herbarium records document S.guamense inhabiting areas with volcanic substrate in the northern islands; however, few details exist beyond that. There are three confirmed locations from herbarium vouchers; two are from limestone cliffs (128 m, 420 ft) and one on a limestone outcrop on a narrow peninsula at 12.2 m (< 40 ft), all on Guam. Movement / Home Range Historically, Solanum guamense occurred on the islands of Guam, Rota, Saipan, Tinian, Asuncion, Guguan, and Maug. Currently, there are no known individuals of S. guamense. While it is thought to be extirpated, populations of S. guamense may persist on the northern islands, but there have not been recent surveys completed due to their remoteness and difficulty in getting to the islands. The last known population of S. guamense was at Pati point on Guam." https://ecos.fws.gov/ecp/species/9761
Cebello halumtano (Bulbophyllum	"Bulbophyllum guamense occurs on native trees and tall shrubs in native limestone forest and mixed introduced forest subtypes; however, B. guamense has also been observed growing on nonnative trees and tall shrubs. Occasionally, B. guamense is observed growing on unidentified dead trees. Native host tree species include Hernandia labyrinthica,

guamense) **Rota only**	Elaeocarpus joga, and Pisonia umbellifera. Nonnative host tree species include Persea americana (avocado) and Areca catechu (betelnut). On Rota, B. guamense was primarily found on H. labyrinthica, E. joga and A. catechu." https://ecos.fws.gov/ecp/species/9753
Dendrobium guamense	"Dendrobium guamense occurs on native trees and tall shrubs in native limestone forest and in mixed introduced forest subtypes. The orchid is typically found on tree branches and takes advantage of the microclimates of the trunk, lower branches, and under the canopy, in shade or moderate light as well as along forest edges, where there are high light levels. The orchids obtain moisture and nutrients from symbiotic mycorrhizal fungi, which are often species specific in their host associations." https://ecos.fws.gov/ecp/species/9754
Serianthes nelsonii **Rota only**	"Serianthes nelsonii occurs on limestone substrates, although some historical collections are known from volcanic substrate in ravine forest at 120 to 175 m (400 to 575 ft) on Guam, and at 150 to 420 m (490 to 1,385 ft) on Rota. Associated native species include Aglaia mariannensis (mapunyao), Guamia mariannae (paipai), Ficus prolixa (nunu), Neisosperma oppositifiolia (fagot), Hernandia nymphaeifolia (nonak), Mammea odorata (chopak), and Pisonia grandis (omumu). Understory species include Cycas circinalis (cyad), Morinda citrifolia (Indian mulberry), Cycas micronesica (cyad), Wikstroemia elliptica (capit atayaki), Eugenia spp., Flagellaria indica (bejuco halum-tano), and Asplenium nidus (galak). A large number of epiphytic plants grow on S. nelsonii, including many species of ferns, orchids, with species of Dischidia, Ficus, Freycinetia, and Peperomia growing in the crowns of the trees." https://ecos.fws.gov/ecp/species/8521
Maesa walker **Rota only**	"Maesa walkeri occurs in forest edge habitats with limestone substrate. The most common microhabitat types for this species are edges of and outcroppings of Pandanus forest, near grasslands, limestone soils to limestone karst, ranging from partially shaded to full sun. The elevation is typically between 200 to 400 m (656 and 1,312 ft)." https://ecos.fws.gov/ecp/species/9756
Nervilia jacksoniae **Rota only**	"Nervilia jacksoniae occurs in shady, moist, leaf-littered ground (humus or sand) within the forest habitat. Although populations of N. jacksoniae are most often observed in native limestone and mixed limestone forest (e.g., Pandanus) subtypes, it has also been recorded in native volcanic forest (ravine forest) on southern Guam. Additionally, many orchids, including numerous terrestrial orchids and at least one Nervilia species, require the presence of a microbial partner (e.g., mycorrhizal fungi) for seed germination so presence of specific mutualists may also be an important biotic habitat feature. Nervilia jacksoniae occurs only in the Mariana Islands. Historically, N. jacksoniae occurred on the islands of Guam and Rota, in the forest ecosystem, and ranged from northern to southern Guam and on the Sabana region of Rota. Currently found on Guam and Rota." https://ecos.fws.gov/ecp/species/9757
Nesogenes rotensis **Rota only**	"Nesogenes rotensis occurs on exposed, dry raised limestone, at 100 m (328 ft) elevation. It was growing in association with Scaevola sericea (nanaso), Terminalia samoensis (talisai ganu), Hedyotis strigulosa (paodedo), Pogonatherum paniceum, Cassytha filiformis, and Bikkia tetrandra (gausali). Currently, the habitat is heavily disturbed and invaded by

	Casuarina equisetifolia." https://ecos.fws.gov/ecp/species/7381
Osmoxylon mariannense **Rota only**	"Osmoxylon mariannense occurs in limestone forests at 425 m (1,400 ft) and higher, where moisture and humidity levels are high, and often near cliffs. Associated native species include Pisonia umbellifera (umumum) and Hernandia labyrinthica (nonak)." https://ecos.fws.gov/ecp/species/6738
Tabernaemontana rotensis **Rota only**	"Tabernaemontana rotensis occurs in native limestone forest on Guam and Rota characterized by a closed canopy of broadleaf trees with an understory of younger trees, vines, epiphytic ferns, and orchids. Trees >10 m (>33 ft) comprise the upper canopy, small to mid-size trees (3 to 10 m, 3 to 33 ft) the mid-story, and shrubs and herbs form the understory. Tabernaemontana rotensis is edge tolerant, occupying open patches within limestone forest and forest edges, most often co-occurring with Cycas micronesica." https://ecos.fws.gov/ecp/species/2542
Tuberolabium guamense **Rota only**	"Epiphytic orchids like Tuberolabium guamense occur in the forest canopy and sub-canopy and use the tree only as a physical substrate upon which to grow (they are not parasites). They obtain moisture and nutrients from mutually symbiotic relationships with mycorrhizal fungi that are often species-specific in their host associations. Tuberolabium guamense was known to occur low in the canopy, on tree trunks or shrubs in low sunlight. However, recent surveys have documented T. guamense at heights up to 15 m (50 ft) and exposed to higher amounts of sunlight." https://ecos.fws.gov/ecp/species/9762
Ufa-halomtano (Heritiera longipetiolata)	"Heritiera longipetiolata is restricted to limestone cliffs and plateaus, never riverine or coastal; often wind-stunted. Limestone forest contains a canopy dominated by native tree species which, in most areas, is not regenerating due to ungulate impacts to plant survival and reproduction, brown treesnake impacts to seed dispersal, and habitat loss due to agricultural and urban development. Native forest covers 47 percent of Rota, less than 17 percent of Guam, less than 5 percent of Tinian and 2 percent of Saipan. Heritiera longipetiolata is known only from the islands of Guam, Tinian, Saipan, and Rota." https://ecos.fws.gov/ecp/species/2526
Fadang (Cycas micronesica)	"Cycas micronesica occurs in forest and coastal habitat. Forest in the Mariana islands is characterized by a closed canopy of broadleaf trees with an understory of younger trees, vines, epiphytic ferns, and orchids. Coastal habitat across the Mariana islands consists of coastal strand vegetation, mangroves, and bare sand, rock, and karst (landscape formed by the dissolution of soluble limestone rock)." https://ecos.fws.gov/ecp/species/9763

Explosive and Flammable Hazards (CEST and EA)

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C
Reference		
https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities		

1. **Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

   ☒ No

   → *Continue to Question 2.*

   ☐ Yes

   Explain:

   → *Go directly to Question 5.*

2. **Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

   ☒ No

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☐ Yes

   → *Continue to Question 3.*

3. **Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:**
   - **Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR**
   - **Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 version of National Fire Protection Association (NFPA) Code 58.**

   If all containers within the search area fit the above criteria, answer "no." For any other type of aboveground storage container within the search area that holds one of the

flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "yes."

☐ No

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.*

☐ Yes

→ *Continue to Question 4.*

4. **Visit HUD's website to identify the appropriate tank or tanks to assess and to calculate the required separation distance using the electronic assessment tool. To document this step in the analysis, please attach the following supporting documents to this screen:**
   - **Map identifying the tank selected for assessment, and showing the distance from the tank to the proposed HUD-assisted project site; and**
   - **Electronic assessment tool calculation of the required separation distance.**

   Based on the analysis, is the proposed HUD-assisted project site located at or beyond the required separation distance from all covered tanks?

   ☐ Yes

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☐ No

   → *Go directly to Question 6.*

5. **Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

   Please visit HUD's website for information on calculating Acceptable Separation Distance.

   ☐ Yes

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*

   ☐ No

   → *Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*
   Continue to Question 6.

6. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Mitigation measures may include both natural and manmade barriers, modification of the project design, burial or removal of the hazard, or other engineered solutions. Describe selected mitigation measures, including the timeline for implementation, and attach an implementation plan. If negative effects cannot be mitigated, cancel the project at this location.**
   Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Consultation and determination from the Division of the CNMI BECQ is obtained. No project continues should there be any detectable hazard issue in the area.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Farmlands Protection (CEST and EA)

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658
Reference		
https://www.hudexchange.info/environmental-review/farmlands-protection		

1. **Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?**

   ☐Yes → *Continue to Question 2.*

   ☒No

   Explain how you determined that agricultural land would not be converted:

   Most of the so-called agricultural land are not being utilized as such; rather residential homes are being built.

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting your determination.*

2. **Does "important farmland," including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?**

   You may use the links below to determine important farmland occurs on the project site:

   - Utilize USDA Natural Resources Conservation Service's (NRCS) Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
   - Check with your city or county's planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
   - Contact NRCS at the local USDA service center http://offices.sc.egov.usda.gov/locator/app?agency=nrcs or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

   ☐No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

   ☐Yes → *Continue to Question 3.*

3. **Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.**
   - Complete form **AD-1006**, "Farmland Conversion Impact Rating" http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf and contact the state soil scientist before sending it to the local NRCS District Conservationist.
     (NOTE: for corridor type projects, use instead form **NRCS-CPA-106**, "Farmland Conversion Impact Rating for Corridor Type Projects: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf.)
   - Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 (or form NRCS-CPA-106 if applicable) to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Document your conclusion:

☐Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

☐Project will proceed without mitigation.

Explain why mitigation will not be made here:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Consultation and determination are being obtained from the office of the USDA Natural Resources Conservation Service.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Floodplain Management (CEST and EA)

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55
Reference		
https://www.hudexchange.info/environmental-review/floodplain-management		

1. **Does 24 CFR 55.12(c) exempt this project from compliance with HUD's floodplain management regulations in Part 55?**

   ☐ Yes

   Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(7) or (8), provide supporting documentation.

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒ No → *Continue to Question 2.*

2. **Provide a FEMA/FIRM or ABFE map showing the site.**

   The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs) or Advisory Base Flood Elevations (ABFEs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

   Does your project occur in a floodplain?

   ☒ No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☐ Yes

   Select the applicable floodplain using the FEMA map or the best available information:

   ☐ Floodway → *Continue to Question 3, Floodways*

☐ Coastal High Hazard Area (V Zone) → *Continue to Question 4, Coastal High Hazard Areas*

☐ 500-year floodplain (B Zone or shaded X Zone) → *Continue to Question 5, 500-year Floodplains*

☐ 100-year floodplain (A Zone) → *The 8-Step Process is required. Continue to Question 6, 8-Step Process*

3. **Floodways**

Is this a functionally dependent use?

☐ Yes

The 8-Step Process is required. Work with your HUD FEO to determine a way to satisfactorily continue with this project. Provide a completed 8-Step Process, including the early public notice and the final notice.

→*Continue to Question 6, 8-Step Process*

☐ No

Federal assistance may not be used at this location *unless a 55.12(c) exception applies.* You must either choose an alternate site or cancel the project at this location.

4. **Coastal High Hazard Area**

Is this a critical action?

☐ Yes

Critical actions are prohibited in coastal high hazard areas. Federal assistance may not be used at this location. Unless the action is excepted at 24 CFR 55.12(c), you must either choose an alternate site or cancel the project.

☐ No

Does this action include construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

☐ Yes, there is new construction.

New construction is prohibited in V Zones ((24 CFR 55.1(c)(3)).

☐ No, this action concerns only a functionally dependent use, existing construction(including improvements), or reconstruction following destruction caused by a disaster.

This construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ *Continue to Question 6, 8-Step Process*

5. **500-year Floodplain**

Is this a critical action?

☐ No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☐Yes → *Continue to Question 6, 8-Step Process*

6. **8-Step Process**.

Does the 8-Step Process apply? Select one of the following options:

☐ 8-Step Process applies.

Provide a completed 8-Step Process, including the early public notice and the final notice.

→ *Continue to Question 7, Mitigation*

☐ 5-Step Process is applicable per 55.12(a)(1-3).

Provide documentation of 5-Step Process.

Select the applicable citation:

- ☐ *55.12(a)(1)* HUD actions involving the disposition of HUD-acquired multifamily housing projects or "bulk sales" of HUD-acquired one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24).
- ☐ *55.12(a)(2)* HUD's actions under the National Housing Act (12 U.S.C. 1701) for the purchase or refinancing of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, and intermediate care facilities, in communities that are in good standing under the NFIP.
- ☐ *55.12(a)(3)* HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, intermediate care facilities, and one- to four-family properties, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the number of units is not increased more than 20 percent, the action does not involve a conversion from nonresidential to residential land use, the action does not meet the thresholds for "substantial improvement" under § 55.2(b)(10), and the footprint of the structure and paved areas is not significantly increased.
- ☐ *55.12(a)(4)* HUD's (or the recipient's) actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing nonresidential buildings and structures, in communities that are in the

Regular Program of the NFIP and are in good standing, provided that the action does not meet the thresholds for "substantial improvement" under § 55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased.

→ *Continue to Question 7, Mitigation*

☐ 8-Step Process is inapplicable per 55.12(b)(1-4).

Select the applicable citation:

☐ *55.12(b)(1)* HUD's mortgage insurance actions and other financial assistance for the purchasing, mortgaging or refinancing of existing one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24), where the action is not a critical action and the property is not located in a floodway or coastal high hazard area.

☐ *55.12(b)(2)* Financial assistance for minor repairs or improvements on one- to four-family properties that do not meet the thresholds for "substantial improvement" under § 55.2(b)(10)

☐ *55.12(b)(3)* HUD actions involving the disposition of individual HUD-acquired, one-to four-family properties.

☐ *55.12(b)(4)* HUD guarantees under the Loan Guarantee Recovery Fund Program (24 CFR part 573) of loans that refinance existing loans and mortgages, where any new construction or rehabilitation financed by the existing loan or mortgage has been completed prior to the filing of an application under the program, and the refinancing will not allow further construction or rehabilitation, nor result in any physical impacts or changes except for routine maintenance.

☐ *55.12(b)(5)* The approval of financial assistance to lease an existing structure located within the floodplain, but only if—

(i) The structure is located outside the floodway or Coastal High Hazard Area, and is in a community that is in the Regular Program of the NFIP and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24);

(ii) The project is not a critical action; and

(iii) The entire structure is or will be fully insured or insured to the maximum under the NFIP for at least the term of the lease.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

7. <u>Mitigation</u>

For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Which of the following mitigation/minimization measures have been identified for this project in the 8-Step or 5-Step Process? Select all that apply.

- ☐ Permeable surfaces
- ☐ Natural landscape enhancements that maintain or restore natural hydrology
- ☐ Planting or restoring native plant species
- ☐ Bioswales
- ☐ Evapotranspiration
- ☐ Stormwater capture and reuse
- ☐ Green or vegetative roofs with drainage provisions
- ☐ Natural Resources Conservation Service conservation easements or similar easements
- ☐ Floodproofing of structures
- ☐ Elevating structures including freeboarding above the required base flood elevations
- ☐ Other

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Consultation and determination are obtained from the Department of Public Works for every identified property. No property is accepted in the program located in any floodplain.

Are formal compliance steps or mitigation required?

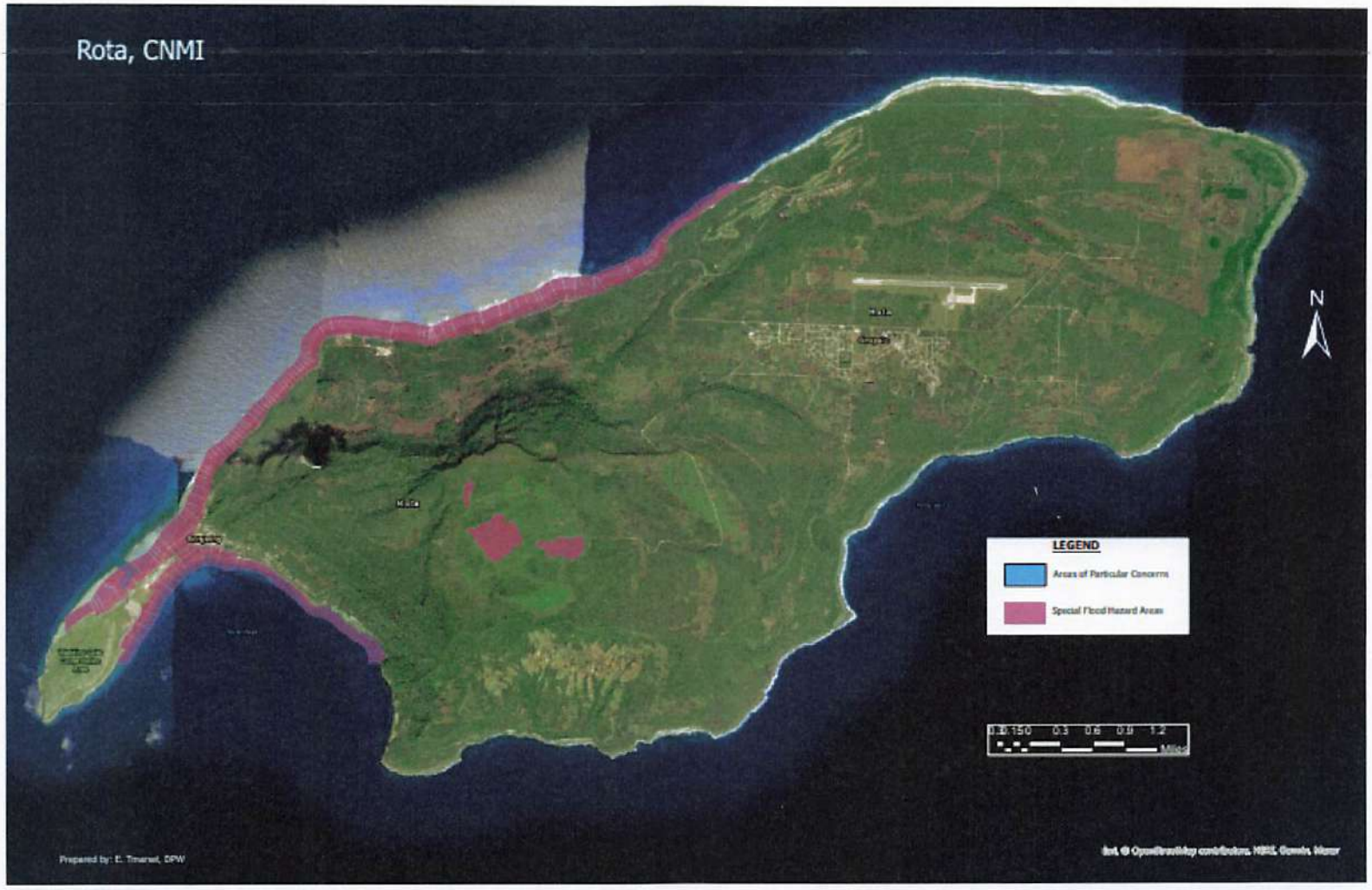
☐ Yes

☒ No

Saipan, CNMI


Saipan
Saipan
Capitol Hill
N
LEGEND
Areas of Particular Concerns, 2022
Special Flood Hazard Areas
Note: Layers may overlap
0.5 0.25 0 0.5 1 1.5 2
Miles
Prepared by: E.Tmarsel, DPW
BECQ, Esri, © OpenStreetMap contributors, HERE, Garmin, Maxar


Tinian, CNMI
North East
Tinian Island
San Jose
N
LEGEND
Areas of Particular Concerns, 2022
Special Flood Hazard Areas
0.5 0.25 0 0.5 1 1.5 2
Miles


Rota, CNMI
N
LEGEND
Areas of Particular Concern
Special Flood Hazard Areas
0 0.15 0.3 0.6 0.9 1.2
Miles
Prepared by: E. Tmarsel, DPW

Historic Preservation (CEST and EA)

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties"
References		
https://www.hudexchange.info/environmental-review/historic-preservation		

Threshold

Is Section 106 review required for your project?

☐ No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the PA Database to find applicable PAs.)
Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

→ *Continue to the Worksheet Summary.*

☐ No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].
Either provide the memo itself or a link to it here. Explain and justify the other determination here:

→ *Continue to the Worksheet Summary.*

☒Yes, because the project includes activities with potential to cause effects (direct or indirect). → *Continue to Step 1.*

The Section 106 Process
After determining the need to do a Section 106 review, initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.
Note that consultation continues through all phases of the review.
Step 1: Initiate consultation
Step 2: Identify and evaluate historic properties
Step 3: Assess effects of the project on historic properties
Step 4: Resolve any adverse effects

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the When To Consult With Tribes checklist within Notice CPD-12-006: Process for Tribal Consultation to determine if you should invite tribes to consult on a particular project. Use the Tribal Directory Assessment Tool (TDAT) to identify tribes that may have an interest in the area where the project is located. Note that consultants may not initiate consultation with Tribes.

Select all consulting parties below (check all that apply):

☒State Historic Preservation Officer (SHPO)
☐Advisory Council on Historic Preservation
☐Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native
☐Hawaiian Organizations (NHOs)

List all tribes that were consulted here and their status of consultation:

☐Other Consulting Parties

List all consulting parties that were consulted here and their status of consultation:

Describe the process of selecting consulting parties and initiating consultation here:

Provide all correspondence, notices, and notes (including comments and objections received) and continue to Step 2.

Step 2 - Identify and Evaluate Historic Properties

Define the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.

All identified properties are surveyed/inspected by archaeologist to ascertain the no affects, potential to affect, surfacing monitoring evaluations.

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register.
Refer to HUD's website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.
Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

Maps of Sensitive Areas are attached.

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?
If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, Guidance on Archeological Investigations in HUD Projects.

☐ Yes → *Provide survey(s) and report(s) and continue to Step 3.*
Additional notes:

☐ No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

☐ No Historic Properties Affected
Document reason for finding:

☐ No historic properties present. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

☐ Historic properties present, but project will have no effect upon them. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to (36 CFR 800.4(d)(1)) and consult further to try to resolve objection(s).

Notify the Advisory Council on Historic Preservation of the Adverse Effect and provide the documentation outlined in 36 CFR 800.11(e). The Council has 15 days to decide whether to enter the consultation (Not required for projects covered by a Programmatic Agreement).

→ *Continue to Step 4.*

Step 4 - Resolve Adverse Effects

Work with consulting parties to try to avoid, minimize or mitigate adverse effects. Refer to HUD guidance and 36 CFR 800.6 and 800.7.

Were the Adverse Effects resolved?

☐ Yes

Describe the resolution of Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation:

For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Provide signed Memorandum of Agreement (MOA) or Standard Mitigation Measures Agreement (SMMA). Continue to the Worksheet Summary.*

☐ No Adverse Effect

Document reason for finding:

Does the No Adverse Effect finding contain conditions?

☐ Yes

Check all that apply: (check all that apply)

- ☐ Avoidance
- ☐ Modification of project
- ☐ Other

Describe conditions here:

→ *Monitor satisfactory implementation of conditions. Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

☐ No → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to (36 CFR 800.5(c)(2)) and consult further to try to resolve objection(s).

☐ Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.
Criteria of Adverse Effect: 36 CFR 800.5]

☐ No

The project must be cancelled unless the "Head of Agency" approves it. Either provide approval from the "Head of Agency" or cancel the project at this location.

Describe the failure to resolve Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation and "Head of the Agency":

Explain in detail the exact conditions or measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Provide correspondence, comments, documentation of decision, and "Head of Agency" approval. Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

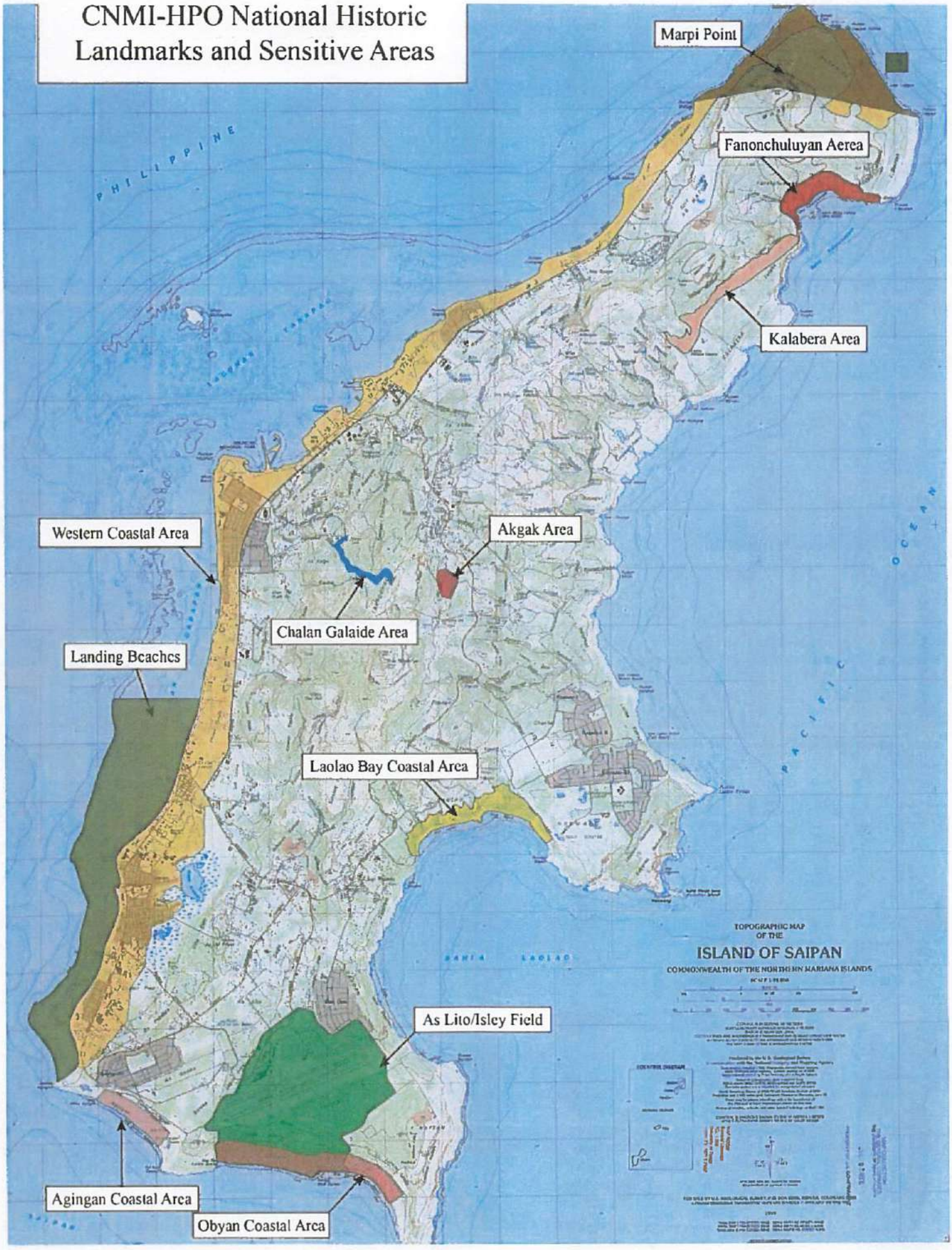
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The islands have undergone the identifications of most historical/archaeological items. For all archaeological reports specifying "potential to affect", "monitoring", "sub-surfacing monitoring" and other findings are recorded and followed through to ensure that such findings are not affected prior and during any construction.

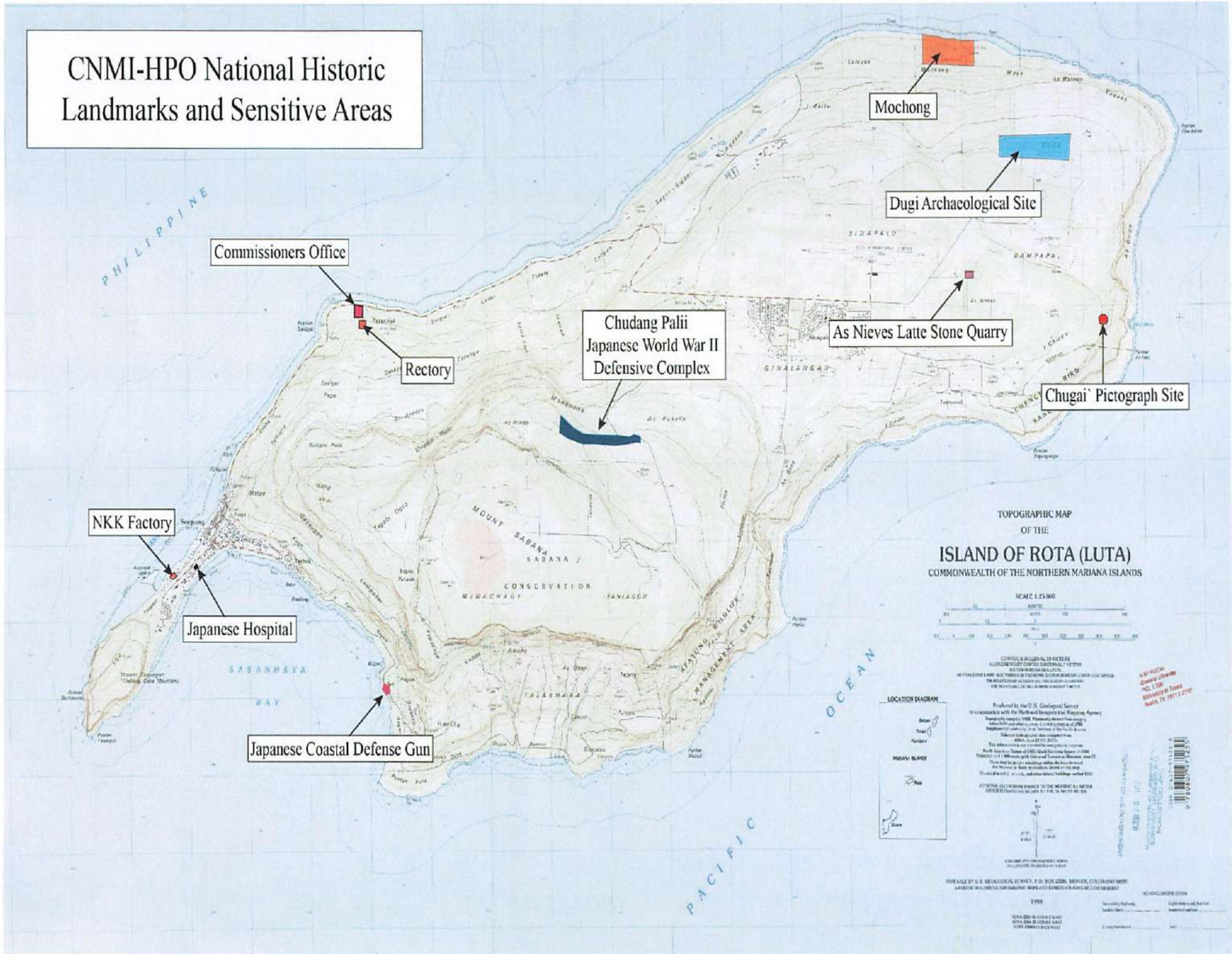
Are formal compliance steps or mitigation required?

☒ Yes

☐ No


CNMI-HPO National Historic Landmarks and Sensitive Areas
Marpi Point
Fanonchuluyan Aerea
Kalabera Area
Western Coastal Area
Akgak Area
Chalan Galaide Area
Landing Beaches
Laolao Bay Coastal Area
As Lito/Isley Field
Agingan Coastal Area
Obyan Coastal Area
PHILIPPINE
PACIFIC
OCEAN
TOPOGRAPHIC MAP
OF THE
ISLAND OF SAIPAN
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

Landmarks and Sensitive Areas


CNMI-HPO National Historic Landmarks and Sensitive Areas
Mochong
Dugi Archaeological Site
Commissioners Office
Rectory
Chudang Palii Japanese World War II Defensive Complex
As Nieves Latte Stone Quarry
Chugai` Pictograph Site
NKK Factory
Japanese Hospital
Japanese Coastal Defense Gun
PHILIPPINE
PACIFIC OCEAN
SASANHAYA BAY
MOUNT SABANA
SABANA
CONSERVATION
MANAGEMENT AREA
TOPOGRAPHIC MAP
OF THE
ISLAND OF ROTA (LUTA)
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
LOCATION DIAGRAM

Noise (EA Level Reviews)

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B
References		
https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control		

1. **What activities does your project involve? Check all that apply:**

☒ New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

→ *Continue to Question 2.*

☒ Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

→ *Continue to Question 2.*

☐ A research demonstration project which does not result in new construction or reconstruction, interstate, land sales registration, or any timely emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☐ None of the above

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. **Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport). Indicate the findings of the Preliminary Screening below:**

☒ There are no noise generators found within the threshold distances above.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.*

☐ Noise generators were found within the threshold distances.

→ *Continue to Question 3.*

3. **Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:**

☐ Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here: _____

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.*

☐ Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

Indicate noise level here: _____

<u>If project is rehabilitation:</u>

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.*

<u>If project is new construction:</u>

Is the project in a largely undeveloped area[1]?

☐ No

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.*

[1] A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses or does not have water and sewer capacity to serve the project.

☐ Yes

→Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Elevate this review to an EIS-level review.

☐ Unacceptable: (Above 75 decibels)

Indicate noise level here: _____

If project is rehabilitation:

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels.

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.

If project is new construction:

Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). You may either complete an EIS or provide a waiver signed by the appropriate authority. Indicate your choice:

☐ Convert to an EIS

→ Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

☐ Provide waiver

→ Provide an Environmental Impact Statement waiver from the Certifying Officer or the Assistant Secretary for Community Planning and Development per 24 CFR 51.104(b)(2) and noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

4. **HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.**

☐ Mitigation as follows will be implemented:

→ *Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures. Continue to the Worksheet Summary.*

☐ No mitigation is necessary.

Explain why mitigation will not be made here:

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Sites inspections are performed prior to any construction work commences to ensure that the properties are safe and free of noises.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Sole Source Aquifers (CEST and EA)

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149
Reference		
https://www.hudexchange.info/environmental-review/sole-source-aquifers		

1. **Does your project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?**

   ☐Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒No → *Continue to Question 2.*

2. **Is the project located on a sole source aquifer (SSA)[1]?**

   ☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area.*

   ☐Yes → *Continue to Question 3.*

3. **Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?**

   Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

   ☐Yes → *Provide the MOU or agreement as part of your supporting documentation. Continue to Question 4.*

   ☐No → *Continue to Question 5.*

4. **Does your MOU or working agreement exclude your project from further review?**

   ☐Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

---

[1] A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

☐No → *Continue to Question 5.*

5. **Will the proposed project contaminate the aquifer and create a significant hazard to public health?**
   Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

   ☐No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*

   ☐Yes → *Work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. <u>If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied.</u> Continue to Question 6.*

6. **In order to continue with the project, any threat must be mitigated, and all mitigation must be approved by the EPA. Explain in detail the proposed measures that can be implemented to mitigate for the impact or effect, including the timeline for implementation.**

   → *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

There are no Aquifers in the Commonwealth of the Northern Mariana Islands.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Sole Source Aquifer

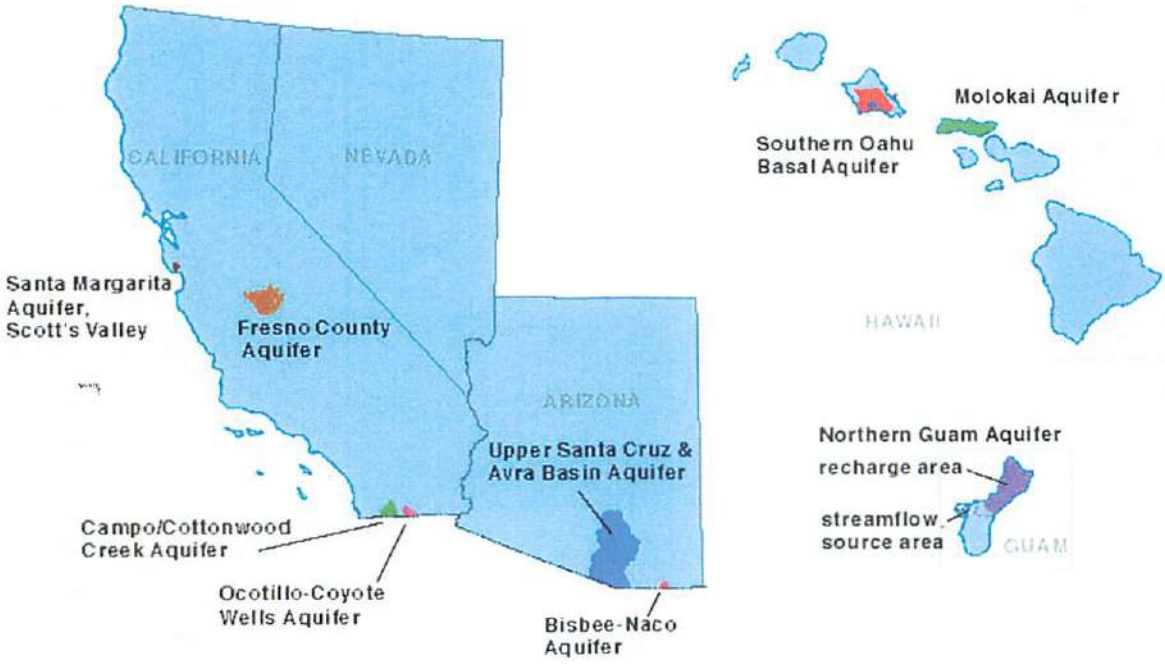
National Links

EPA Ground Water & Drinking Water Home

The EPA's Sole Source Aquifer (SSA) Program was established under Section 1424(e) of the Safe Drinking Water Act (SDWA.) Since 1977, it has been used by communities to help prevent contamination of groundwater from federally-funded projects. It has increased public awareness of the vulnerability of groundwater resources. The SSA program allows for EPA environmental review (PDF) (1pg, 34K) of any project which is financially assisted by federal grants or federal loan guarantees. These projects are evaluated to determine whether they have the potential to contaminate a sole source aquifer.

You will need Adobe Reader to view some of the files on this page. See EPA's PDF page to learn more about PDF, and for a link to the free Adobe Reader.

In Region 9, nine sole source aquifers have been designated:



Wetlands (CEST and EA)

General requirements	Legislation	Regulation
Executive Order 11990 discourages that direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.
References		
https://www.hudexchange.info/environmental-review/wetlands-protection		

1. **Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?**
   The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.

   ☐ No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒ Yes → *Continue to Question 2.*

2. **Will the new construction or other ground disturbance impact an on- or off-site wetland?**
   The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands.

   ☒ No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.
   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

   ☐ Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

→*You must determine that there are no practicable alternatives to wetlands development by completing the 8-Step Process.*
Provide a completed 8-Step Process as well as all documents used to make your determination, including a map. Be sure to include the early public notice and the final notice with your documentation.
Continue to Question 3.

3. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

Which of the following mitigation actions have been or will be taken? Select all that apply:

- ☐ Permeable surfaces
- ☐ Natural landscape enhancements that maintain or restore natural hydrology through infiltration
- ☐ Native plant species
- ☐ Bioswales
- ☐ Evapotranspiration
- ☐ Stormwater capture and reuse
- ☐ Green or vegetative roofs with drainage provisions
- ☐ Natural Resources Conservation Service conservation easements
- ☐ Compensatory mitigation

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

No project is considered in wetlands.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Wild and Scenic Rivers (CEST and EA)

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297
References		
https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers		

1. **Is your project within proximity of a NWSRS river as defined below?**
   Wild & Scenic Rivers: These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational
   Study Rivers: These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.
   Nationwide Rivers Inventory (NRI): The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

   ☒ No
   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.*

   ☐ Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.
   → *Continue to Question 2.*

2. **Could the project do *any* of the following?**
   - Have a direct and adverse effect within Wild and Scenic River Boundaries,
   - Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
   - Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

☐ No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

☐ Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Continue to Question 3.*

3. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

There are no **Wild and Scenic Rivers** in the Commonwealth of the Northern Mariana Islands.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No

Environmental Justice (CEST and EA)

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	
References		
https://www.hudexchange.info/environmental-review/environmental-justice		

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. **Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?**

   ☐Yes → *Continue to Question 2.*

   ☒No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. **Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?**

   ☐Yes

   Explain:

   → *Continue to Question 3. Provide any supporting documentation.*

   ☐No

   Explain:

   → *Continue to the Worksheet Summary and provide any supporting documentation.*

3. **All adverse impacts should be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

☐Mitigation as follows will be implemented:

→ *Continue to Question 4.*

☐No mitigation is necessary.

Explain why mitigation will not be made here:

→ *Continue to Question 4.*

4. **Describe how the affected low-income or minority community was engaged or meaningfully involved in the decision on what mitigation actions, if any, will be taken.**

→ *Continue to the Worksheet Summary and provide any supporting documentation.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

This subject matter is not applicable to the community in the Commonwealth of the Northern Mariana Islands.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No