

CNMI Comprehensive Public Land Use Plan Update *for* Rota, Tinian, Saipan, and the Northern Islands



**Department of Public Lands
Commonwealth of the Northern Mariana Islands
Public Information Meeting
May 7 – 11, 2018**

Welcome & Introductions



- Marianne Concepcion-Teregeyo, Secretary DPL
- CNMI Government and DPL Representatives and other distinguished guests

Project Team



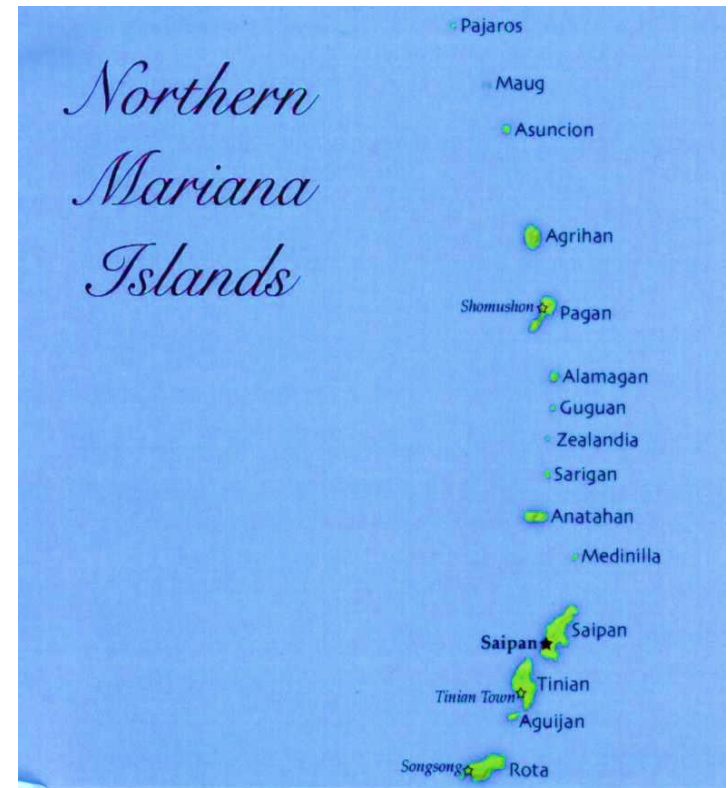
- SSFM CNMI (PEGS)
 - Roy Reyes, PE, Project Manager
 - Denn Manglona, CQM, Assistant Project Manager
- Chris Hart & Partners, Inc.
 - Jordan Hart, Land Planner
 - Brett Davis, Land Planner
 - David Sereda, Landscape Architect, GIS Team
 - Robert Bridges, Landscape Architect, GIS Team
 - Raymond Cabebe, GIS Team
- John M. Knox & Associates, Inc.
 - John M. Knox, Economic Analyst
- Myounghee Noh & Associates, LLC
 - Myounghee Noh - Principal Investigator
 - Jessica Walsh, Environmental Planner/Project Manager, B.S.

Meeting Agenda



- ✓ Welcome and introductions
- ✓ Schedule for the Plan Update
- ✓ Purpose and Scope
- ✓ Update on North Islands Visit
- ✓ Key Drivers for Land Selection
- ✓ Collaborative Team Mapping
- ✓ Comment Reminder

- ✓ Meeting End



Schedule of Comprehensive Land Use



➤ Key Milestone Dates:

- September 18 - 21, 2017: First Public Information Meetings
- September 18, 2017 through December 31, 2017: Data Collections Phase I
- January 1, 2018 through February 28, 2018: Data Collections Phase II
 - January 31, 2018: Completion of Socioeconomic Study
 - February 21, 2018: Publication of Preliminary Draft
- March 1, 2018 through April 30, 2018: Data Collection Phase III
 - Receipt of Preliminary Draft Comments
 - April 22 through April 29, 2018: Trip to the Northern Islands
 - Agency meetings for discussion on Prelim Draft Comments
 - May 1, 2018: Data Collections Phase IV
 - May 1 to 11, 2018: Second Public Information Meeting & Comment Collection
- June 15, 2018: Conclusion of Agency and Public Comment for this DPL Comprehensive Land Use Plan Update, in order to deliver the Final Report to DPL in July of 2018
- July 2018: Delivery of Final Report to DPL
- August 6 – 10, 2018: Public Information Meetings for Presentation of the Final Report

Purpose and Scope of Comprehensive Land Use Plan



- Understand & Report:
 - Current statutes, regulations, land use conditions and availability, identify lessons from outdated land use plan, other plans & studies (environmental or economic), additional trends or elements in land use & management

- Outreach & Participation:
 - Community involvement completed to date:
 - Community Meetings, Newspaper Notices, Surveys (appx. 164 submitted), Radio Spots, DPL Facebook Page, DPL Website, outreach booths
 - Currently undertaking 2nd round of Community Meetings
 - Coordinate use and development of public lands with plans, programs and requirements of other Commonwealth agencies:
 - Written correspondence, with follow up meetings
 - Currently undertaking 2nd round of written correspondence and meetings

Purpose and Scope of Comprehensive Land Use Plan



- Hazardous Sites:
 - Identify lands that require special handling resulting from manmade impacts & contamination

- Systems Analysis:
 - Determine if DPL's current GIS mapping system and software are the best tools for the responsibilities of the Agency
 - (land survey -> CAD -> ArcGIS)

- Economic Analysis & Population Forecast:
 - Analysis of current conditions, population demographics, socioeconomic status and trends and forecast future land requirements over a 10-year build-out
 - Anticipated NMD and Anticipated total population

Past & Current CNMI Population



CNMI	1990	2000	2010	2016A	2016B
TOTAL Population	43,345	69,221	53,883	53,890	55,700
Permanent CNMI Resident	20,082	29,094	35,115	33,219	34,335
<i>NMD</i>	17,181	21,784	19,971	18,249	18,862
<i>Non-NMD</i>	2,901	7,310	15,144	14,970	15,473
Foreign Non-Resident	23,263	40,121	24,168	20,671	21,365
SAIPAN	1990	2000	2010	2016A	2016B
TOTAL Population	38,896	62,392	48,220	48,200	49,820
Permanent CNMI Resident	17,171	24,968	26,227	29,280	30,264
<i>NMD</i>	14,416	18,016	16,933	15,758	16,288
<i>Non-NMD</i>	2,755	6,952	9,294	13,522	13,976
Foreign Non-Resident	21,725	37,424	21,993	18,920	19,556
TINIAN	1990	2000	2010	2016A	2016B
TOTAL Population	2,118	3,540	3,136	3,056	3,160
Permanent CNMI Resident	1,286	1,897	1,782	1,950	2,016
<i>NMD</i>	1,226	1,709	1,517	1,146	1,185
<i>Non-NMD</i>	60	188	265	804	831
Foreign Non-Resident	832	1,643	1,354	1,105	1,143
ROTA	1990	2000	2010	2016A	2016B
TOTAL Population	2,295	3,283	2,527	2,635	2,720
Permanent CNMI Resident	1,595	2,229	1,706	1,989	2,053
<i>NMD</i>	1,508	2,054	1,521	1,346	1,389
<i>Non-NMD</i>	87	175	185	643	664
Foreign Non-Resident	700	1,054	821	646	667

Estimated Future CNMI Population



Total Estimated Population (2028)

	Saipan	Tinian	Rota	Total
Scenario A	67,414	8,707	3,577	79,698
Scenario B	50,559	5,779	2,868	59,206
Scenario C	40,457	2,325	2,284	45,066

Homestead Awards as of 2017

	Saipan	Tinian	Rota	Total
Total Homesteads Awarded by 2017	1,997	912	2,597	5,506

Estimated Eligible NMD Applicants by 2028

	Saipan	Tinian	Rota	Total
(Scenario A)	5,038	409	421	5,869
(Scenario B)	4,769	366	368	5,503
(Scenario C)	4,691	382	413	5,487

Purpose and Scope of Comprehensive Land Use Plan



- Identify Resources and Reserve Lands
 - Such as, Springs, ground water, quarries, habitat, historic and cultural resources, current & future sites of government buildings, wetlands, prime public recreation areas, potential school sites, potential hospital sites and potential transportation corridors
 - Lands unsuitable for development, not required for current use, or to be held in reserve or for further consideration by the Commonwealth during later iterations of this plan

Northern Islands Visit



Overview

- Project consultants, Mayor Vicente C. Santos, Jr., his staff and crew of Super Emerald Boat
- Departed Saipan on Sunday April 22 returned Sunday April 29, 2018
- 4 islands were visited and evaluated for this Plan as recommended by the Mayor's office and considered viable for resident occupancy within the planning horizon.

- Anatahan
- Alamagan
- Pagan
- Agrihan



- Islands North of Agrihan were not evaluated because these islands are located within the Mariana Trench Marine National Monument.
- The Mayor was picked up in Alamagan and returned to Saipan with the project team.

Northern Islands Visit - Anatahan



- 1st Island visited was Anatahan
 - The Boat trip from Saipan to Anatahan was approximately 8 hours
 - The project team landed at the Northwest area and hiked to the former Anatahan Village Area
 - The Northwest area was aerial surveyed by project consultant team
 - The South side of the island was not visited due to difficult terrain and inability to land
 - Recommendation is to identify the Northwest area as the primary future homestead site, the area identified on the South side of the island is recommend to be the secondary homestead site
 - During this Plan horizon, recommending DPL conduct feasibility study for safe boat or canoe access

Northern Islands Visit – Anatahan



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Northern Islands Visit - Anatahan



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Northern Islands Visit - Anatahan



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Northern Islands Visit - Alamagan



Alamagan

- 2nd Island visited was Alamagan
 - The Boat trip from Anatahan to Alamagan was approximately 9 hours
 - The project team landed at the Northern area and met the Mayor of the Northern Islands and his staff
 - The Northern area was aerial surveyed by project consultant team
 - The South side of the island was not visited due to difficult terrain and inability to land
 - Recommendation:
 - Identify the Northern area as the primary future homestead site; the area identified on the South side of the island is recommended to be the secondary homestead site
 - During this Plan horizon, recommending DPL conduct feasibility study for safe boat or canoe access

Northern Islands Visit - Alamagan



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Northern Islands Visit - Alamagan



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Northern Islands Visit - Alamagan



Northern Islands Visit - Pagan



- 3rd Island visited was Pagan
 - The Boat trip from Alamagan to Pagan was approximately 4 hours
 - The project team landed at the western bay near the airstrip area at the established base camp
 - 3 people are currently living on Pagan at the base camp
 - The identified homestead area located on the Southeast side of the island was aerial surveyed by project consultant team
 - DPL has surveyed a portion of this area for 40 Agricultural Homestead lots
- Recommendation:
 - Identify the Southeast area as the primary future homestead site
 - Establish a 20,000 square meter area for the Office of Mayor of the Northern Islands
 - This is anticipated to include an emergency shelter, Mayor's office, clinic, school house, lodging for Mayor's staff and Agricultural homesteaders
 - Recommending DPL conduct an airstrip and harbor feasibility study

Northern Islands Visit - Pagan



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Northern Islands Visit - Pagan



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Northern Islands Visit - Pagan



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Northern Islands Visit - Pagan



Northern Islands Visit - Pagan



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Northern Islands Visit - Pagan



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Northern Islands Visit - Pagan



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Northern Islands Visit - Agrihan



- 4th Island visited was Agrihan
 - The Boat trip from Pagan to Agrihan was approximately 3.5 hours
 - The project team landed at the Southern side of the island and met at the established base camp
 - 2 people are currently living on Agrihan at the base camp
 - The identified homestead area located on the South side of the island was aerial surveyed by project consultant team
 - Recommendation:
 - Occupy the Southern area as the primary future homestead site
 - The 2 areas identified on the East side of the island are recommend to be the secondary homestead site
 - During this Plan horizon, recommending DPL conduct feasibility study for safe boat or canoe access

Northern Islands Visit - Agrihan



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Northern Islands Visit - Agrihan



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Northern Islands Visit - Agrihan



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Project Key Drivers



- Establishing Reserve Lands & Determining the Suitably of Usable Land using Constraints:
 - Public or Private Land
 - Vacant or occupied
 - Hazardous Materials
 - Flood or Tsunami Zone
 - Suitable Slope
 - Free of Known Natural Resources
 - Free of Known Habitat
 - Free of Known Historic or Cultural Resources
 - Proximity to Infrastructure
 - Accessibility
 - On Saipan, fit with surrounding zoning
 - On Tinian, Rota & Northern Islands, fit with surrounding uses

- Allocation of Reasonable Uses for Identified Remaining Suitable Lands, WITHIN THIS PLAN'S TIME HORIZON:
 - Siting of Necessary Government Services & Facilities
 - Siting of Homesteads
 - Siting of Proposed Lease for Economic Development
 - Appropriate for Land Exchange

Purpose and Scope of Comprehensive Land Use Plan



- Reserve Lands:
 - Important, habitat, resources as well as lands impractical or infeasible to use within this project horizon
- Governmental Use:
 - Lands required to provide governmental facilities and services necessary to the CNMI
- Homesteads:
 - Identify lands suitable for Village & Agricultural Homestead Use, on all islands
- Private Development on Public Lands:
 - Reserve lands that should be made available to private developers for generation of revenue
- Land Exchange:
 - Lands that should be made available for exchange in order to improve the manageability and value of public land holdings, or other public purposes such as the acquisition of rights of way, parks, shoreline access, wetland, scenic resources, important habitat, historic or cultural sites

Proposed Homestead Allocation in this Plan



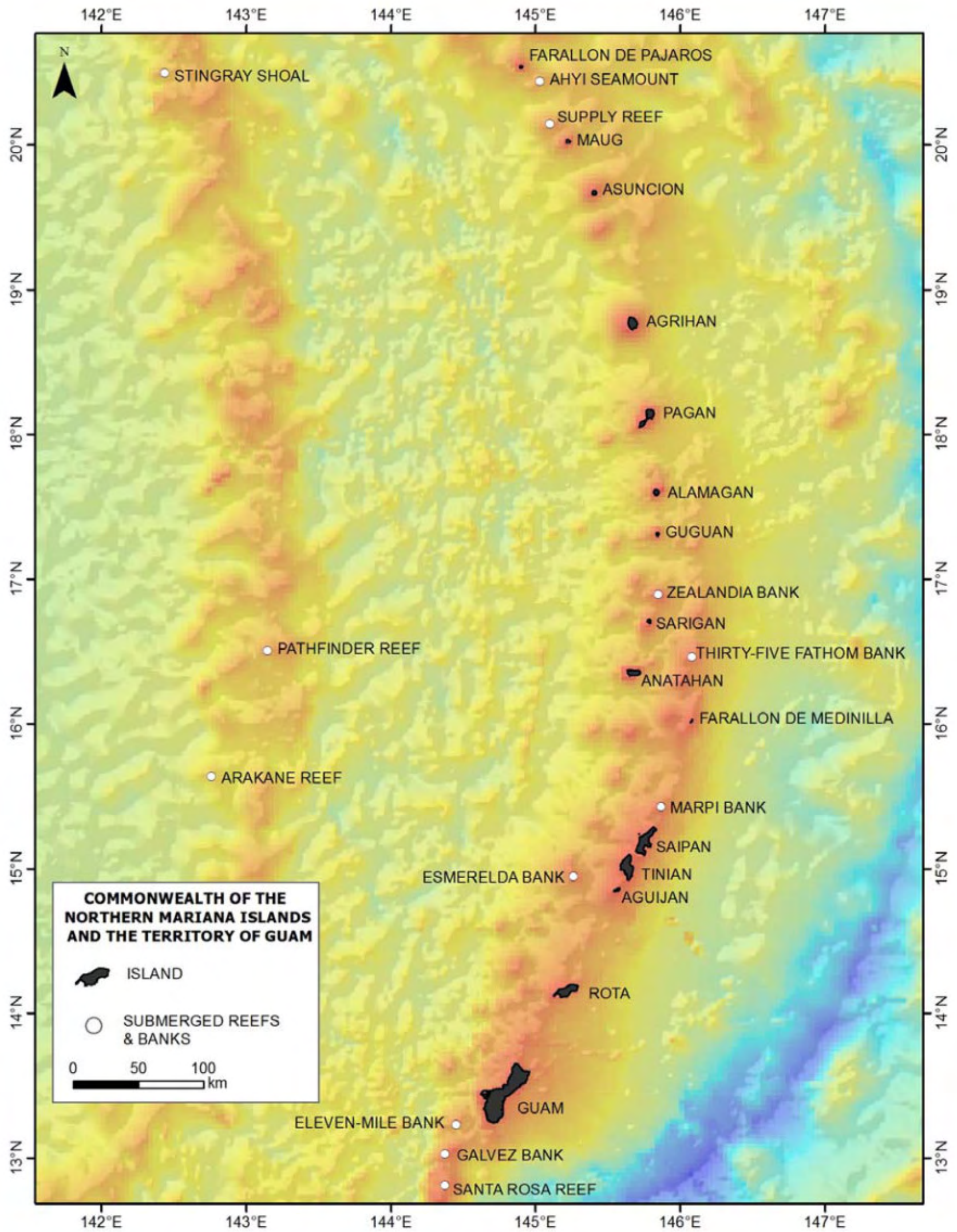
Hectares of Land Suitable for Homestead Use

Island	Village Homestead	Agricultural Homestead	NOTES:
Saipan	245	Program no longer sustainable on Saipan	Serious discussion of sustainability and possible transition to smaller lots by lease or multi-family options are recommended. Approximately 51 hectares suitable for AG use should be operated through lease
Tinian	627		Allocation pending Community Input
Rota	126	367	
Anatahan	Not in current plan horizon	108	(38 primary, 70 secondary)
Alamagan	Not in current plan horizon	139	(58 primary, 81 secondary)
Pagan	Not in current plan horizon	273	(40 primary, 233 secondary)
Agrihan	Not in current plan horizon	212	(81 primary, 131 secondary)

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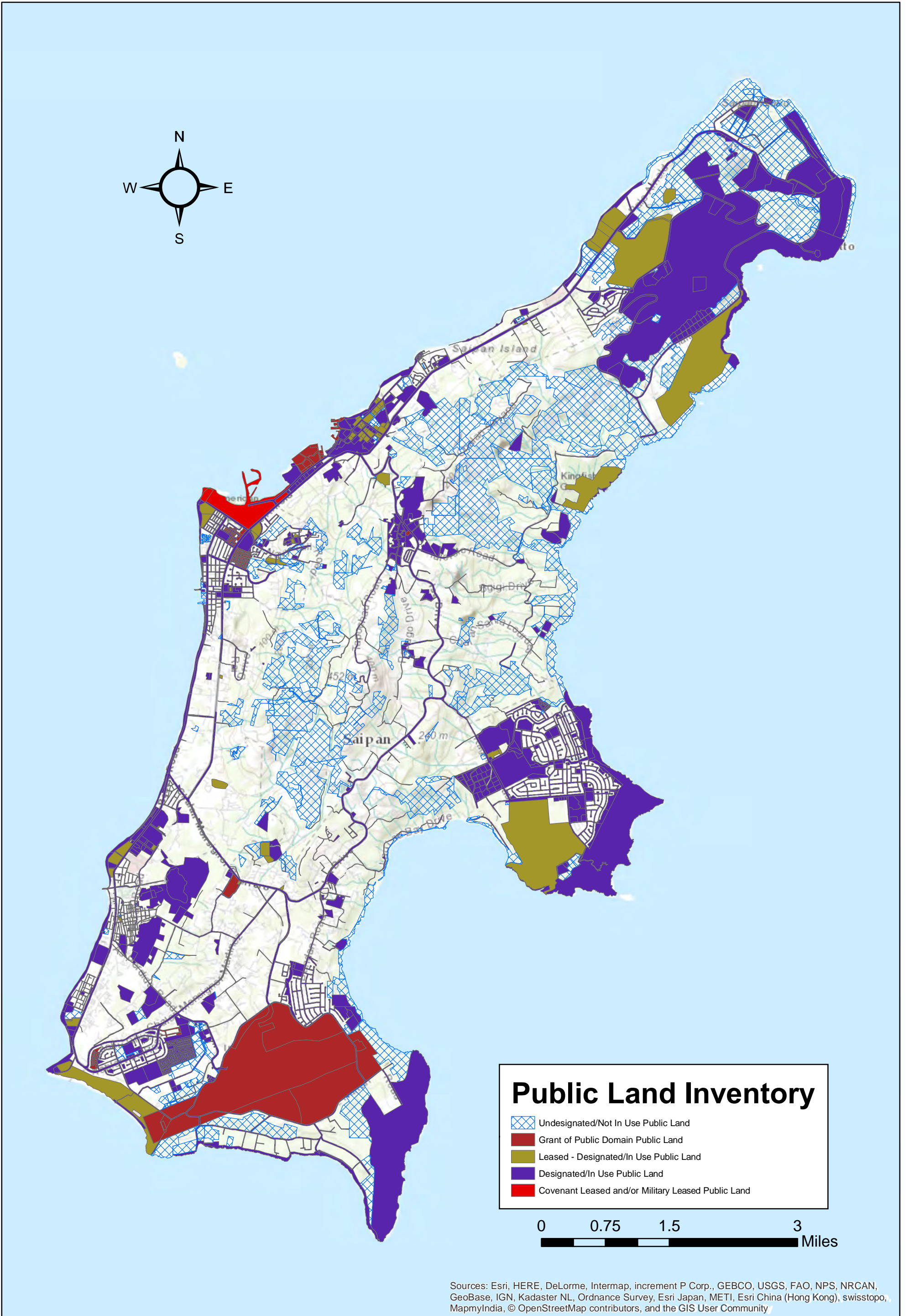


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COMMONWEALTH OF THE MARIANA ISLANDS

FIGURE 1



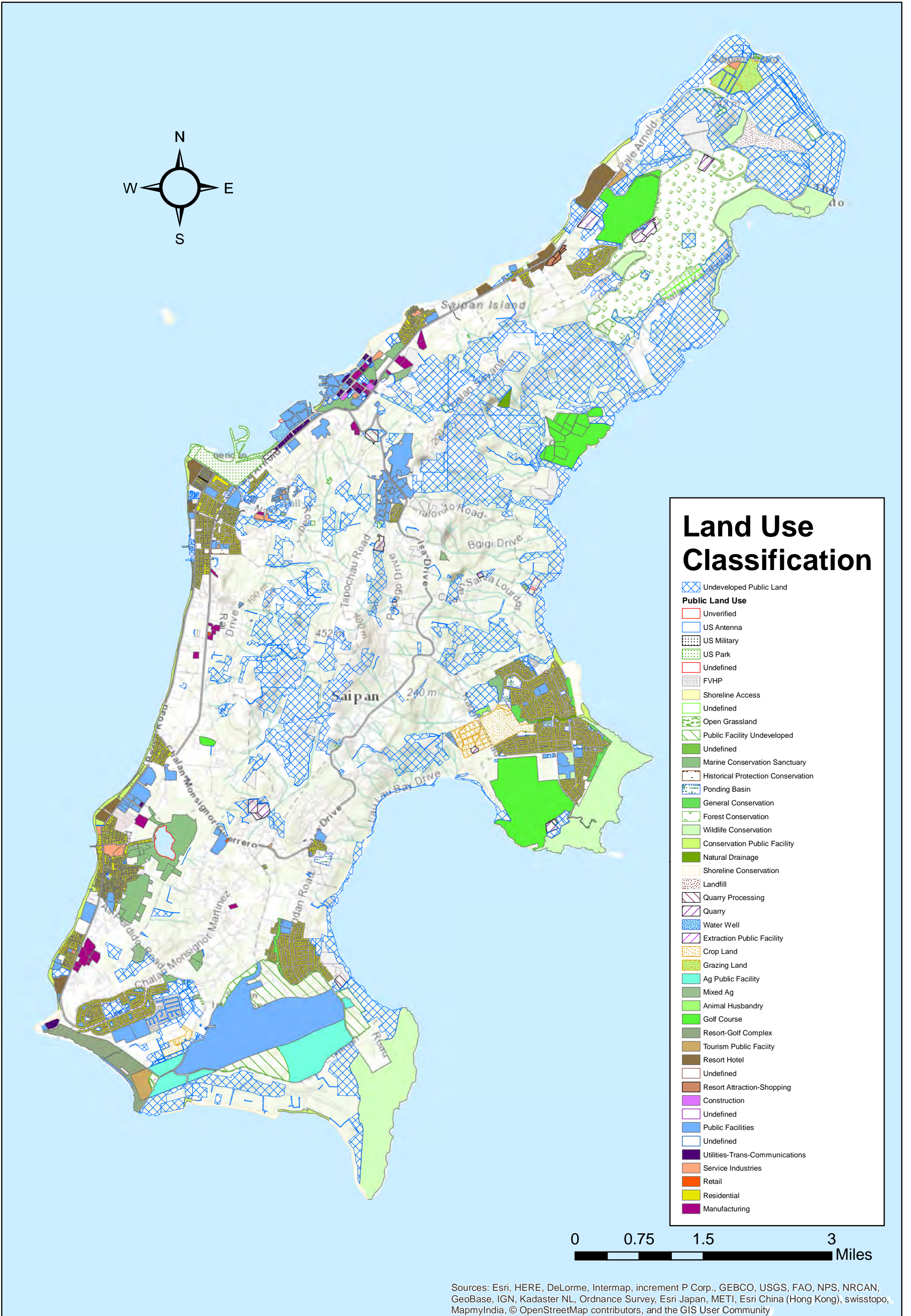


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SAIPAN

FIGURE S-1





Land Use Classification

- Undeveloped Public Land
- Public Land Use**
- Unverified
- US Antenna
- US Military
- US Park
- Undefined
- FVHP
- Shoreline Access
- Undefined
- Open Grassland
- Public Facility Undeveloped
- Undefined
- Marine Conservation Sanctuary
- Historical Protection Conservation
- Ponding Basin
- General Conservation
- Forest Conservation
- Wildlife Conservation
- Conservation Public Facility
- Natural Drainage
- Shoreline Conservation
- Landfill
- Quarry Processing
- Quarry
- Water Well
- Extraction Public Facility
- Crop Land
- Grazing Land
- Ag Public Facility
- Mixed Ag
- Animal Husbandry
- Golf Course
- Resort-Golf Complex
- Tourism Public Facility
- Resort Hotel
- Undefined
- Resort Attraction-Shopping
- Construction
- Undefined
- Public Facilities
- Undefined
- Utilities-Trans-Communications
- Service Industries
- Retail
- Residential
- Manufacturing

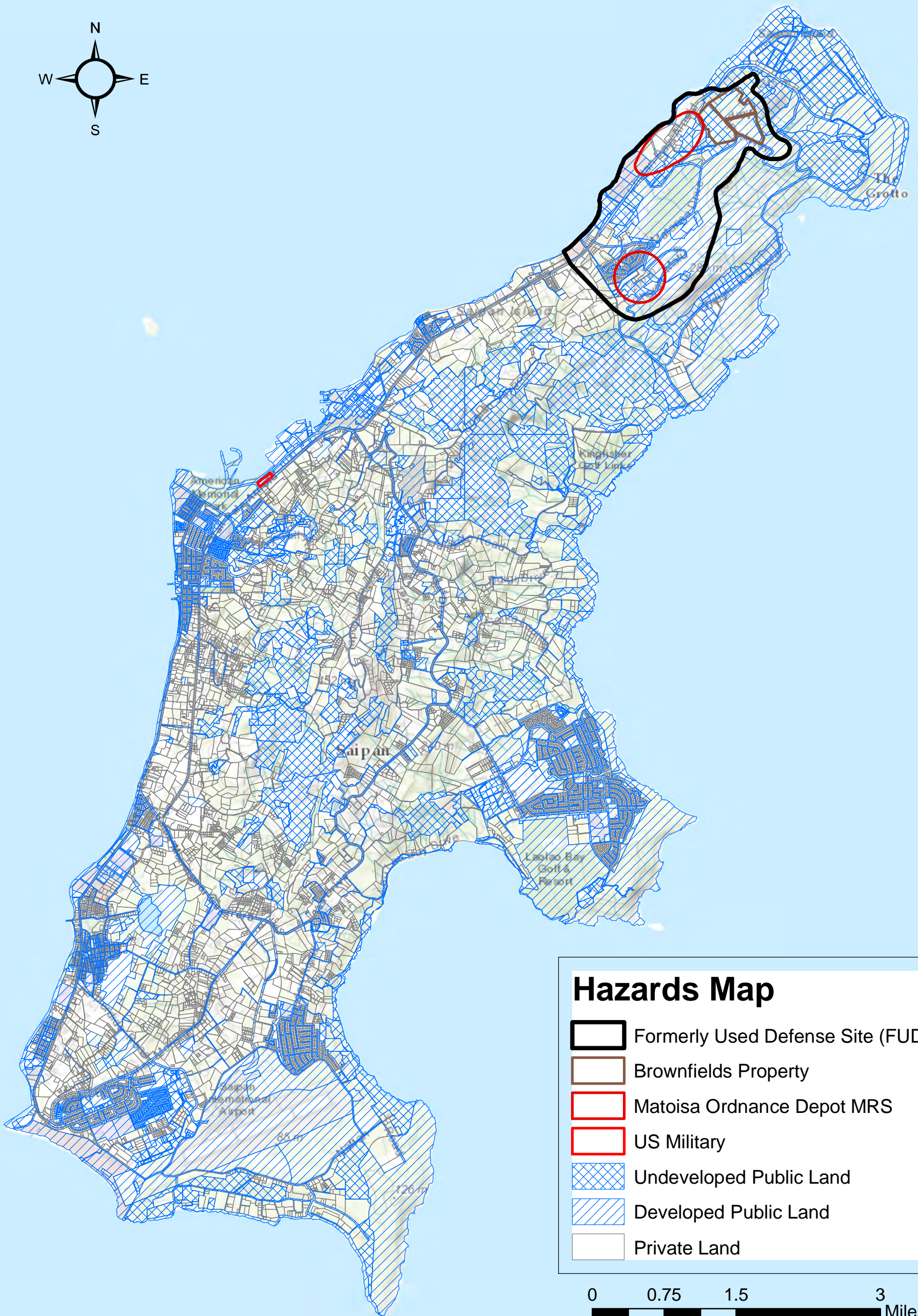
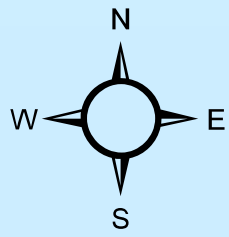
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Miles

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FIGURE S-2



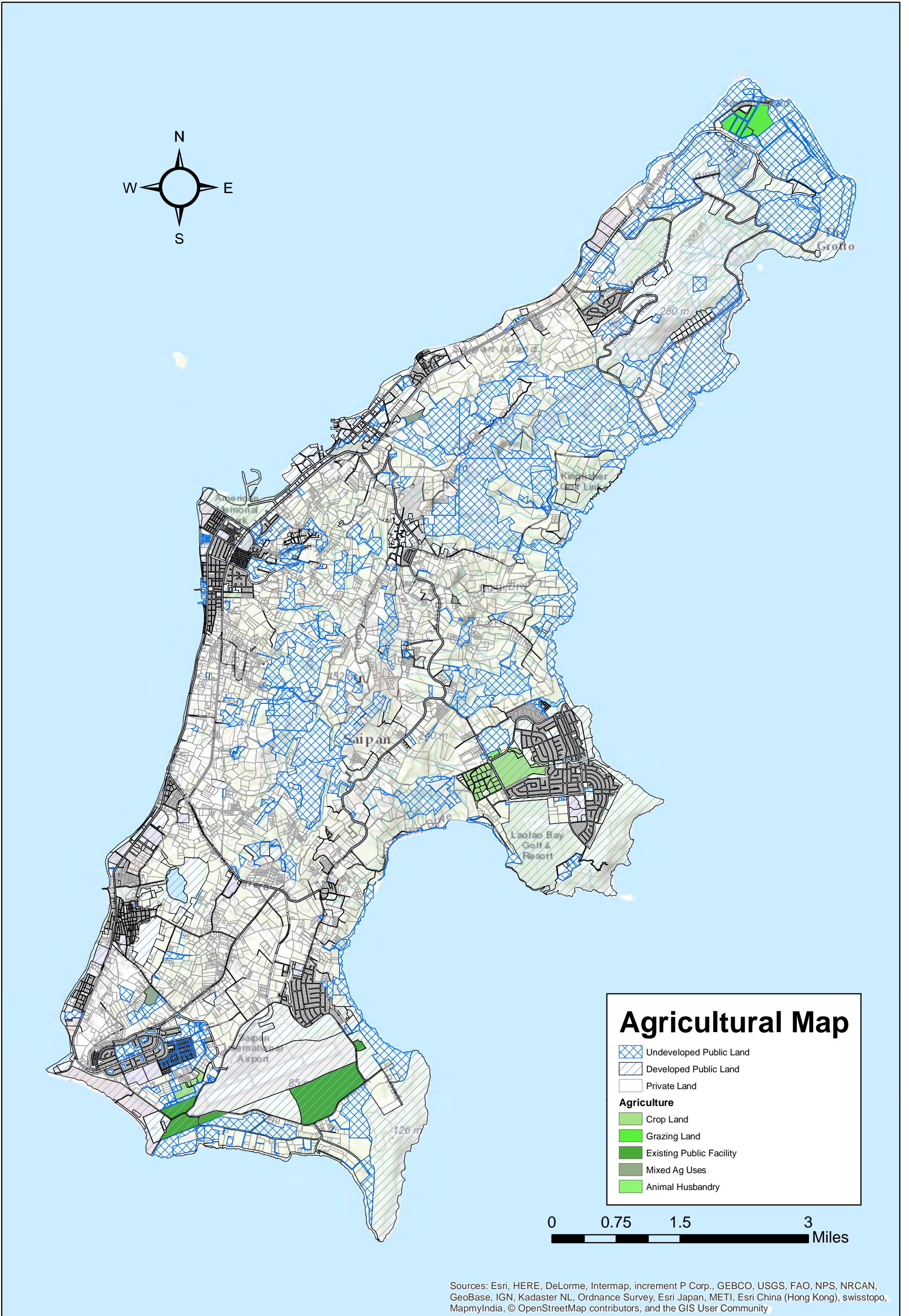


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FIGURE S-3





Agricultural Map

- Undeveloped Public Land
- Developed Public Land
- Private Land

Agriculture

- Crop Land
- Grazing Land
- Existing Public Facility
- Mixed Ag Uses
- Animal Husbandry

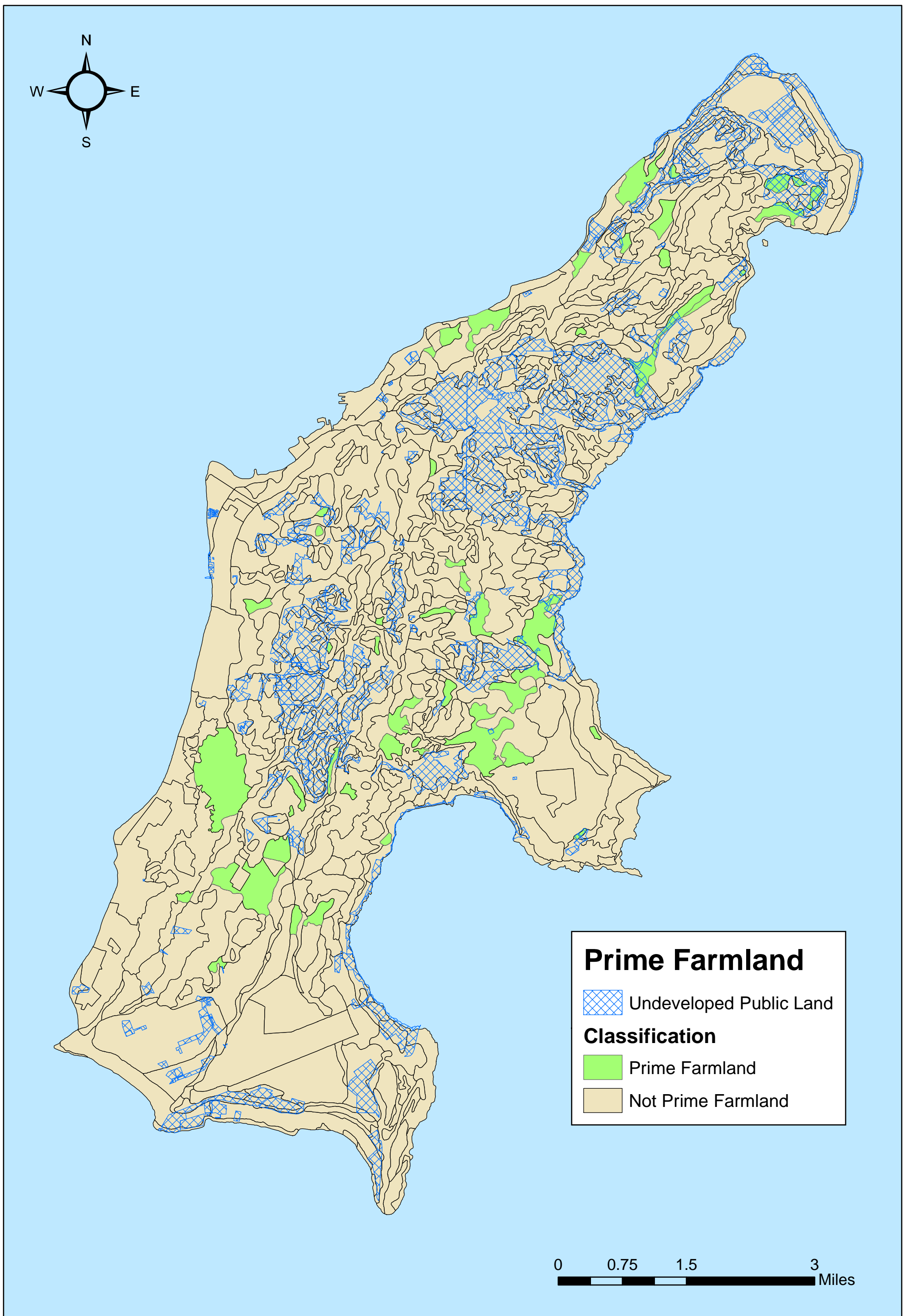
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FIGURE S-4

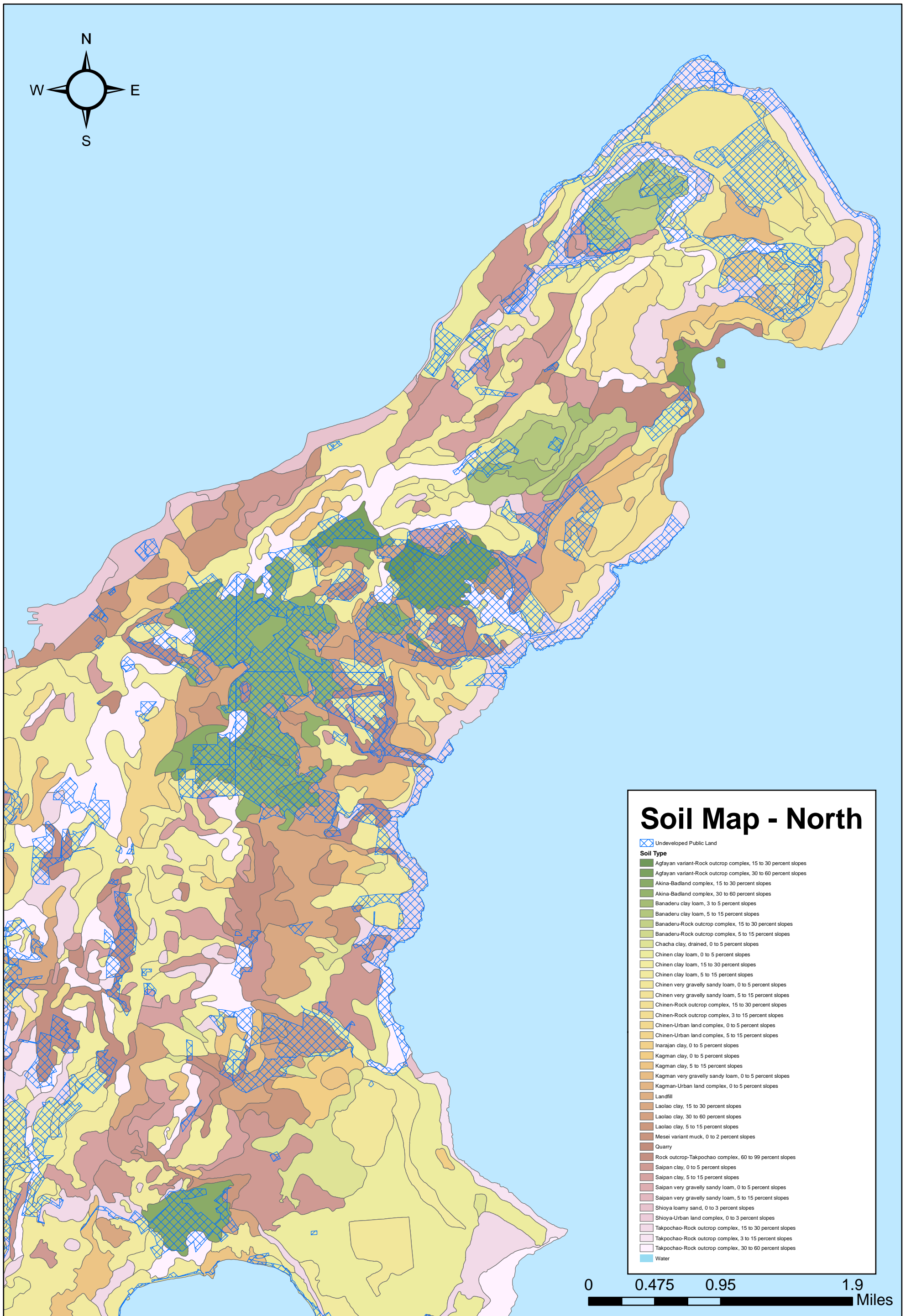




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FIGURE S-5

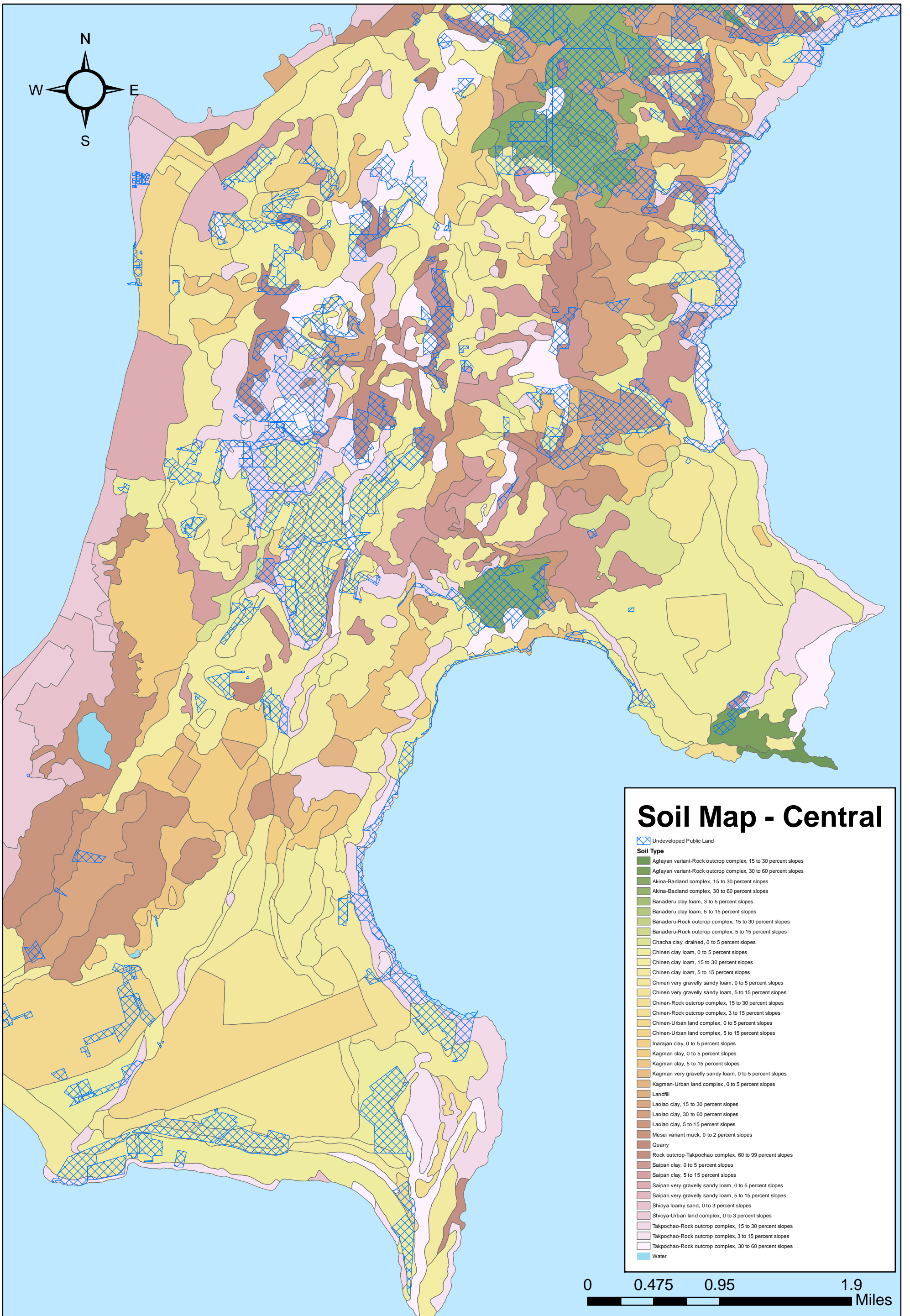




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FIGURE S-6.1

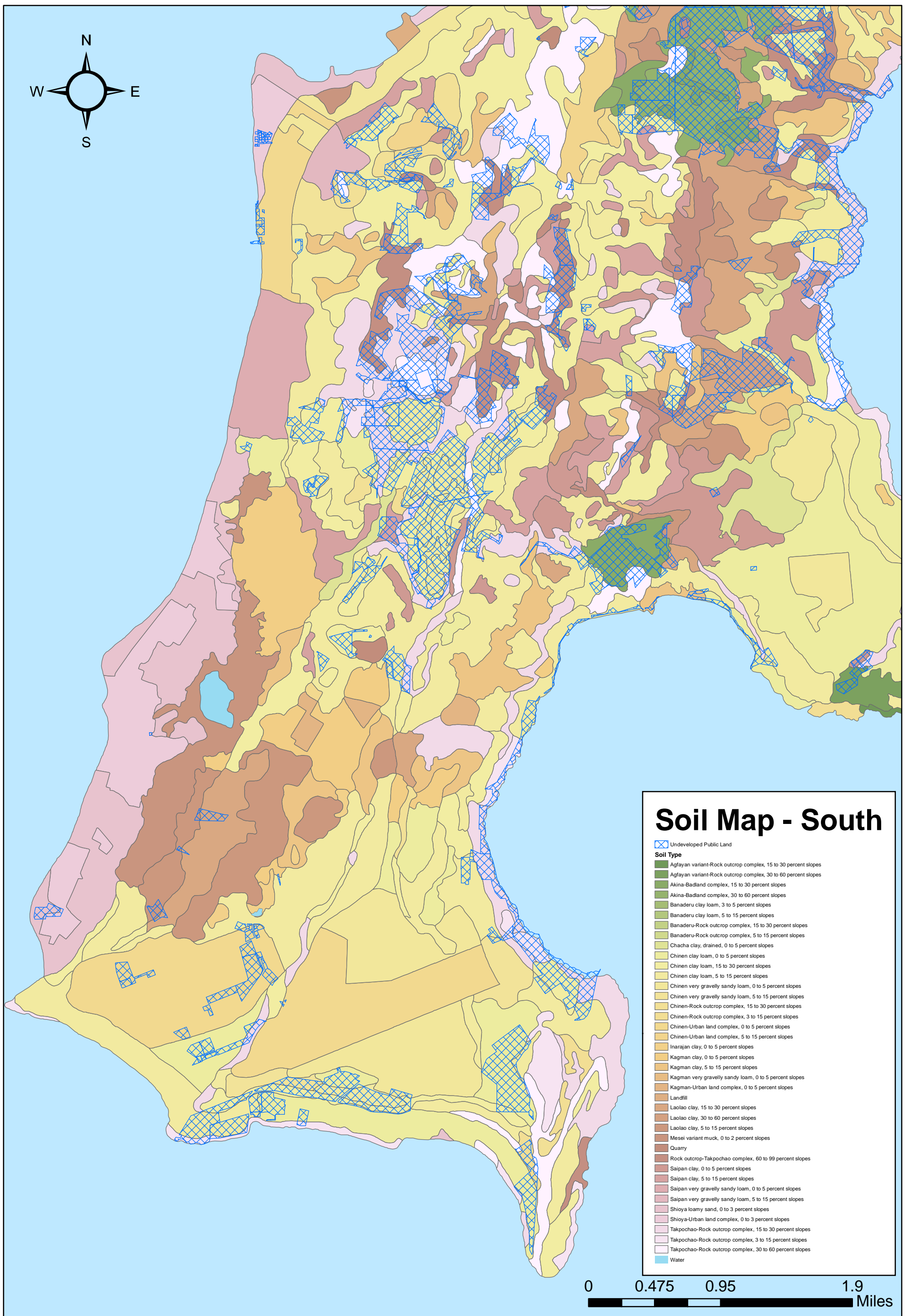




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FIGURE S-6.2

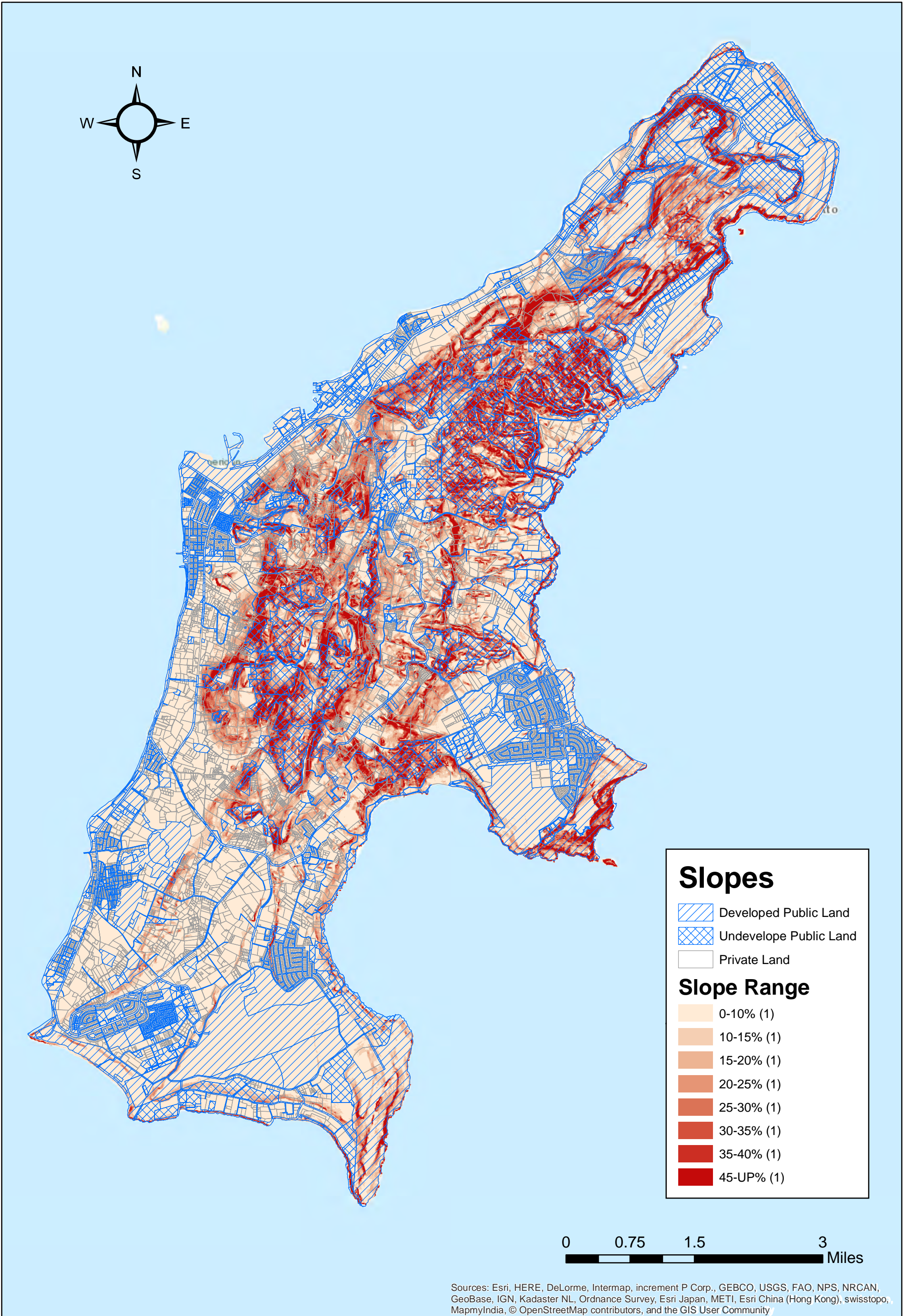




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FIGURE S-6.3

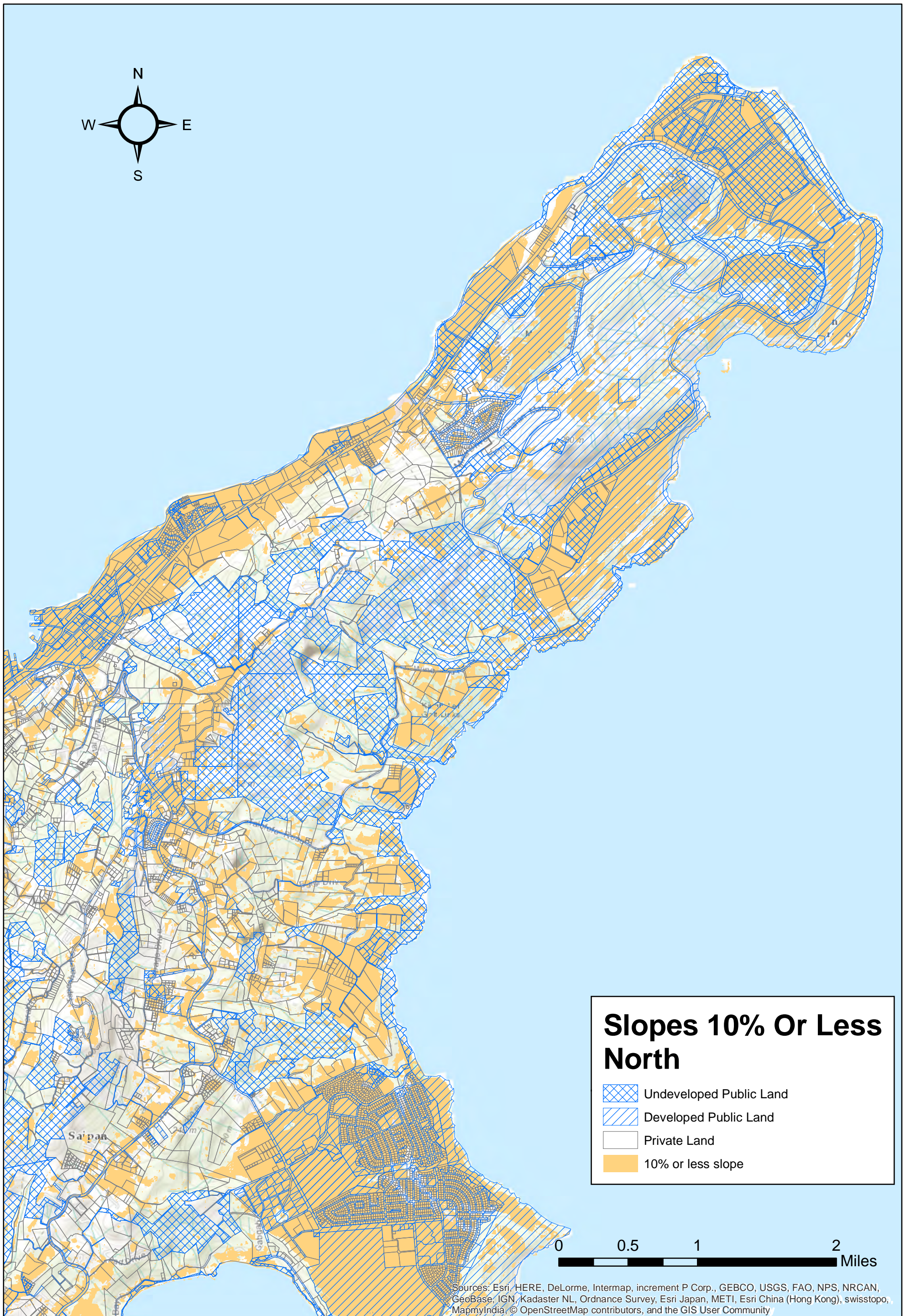




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FIGURE S-7.1

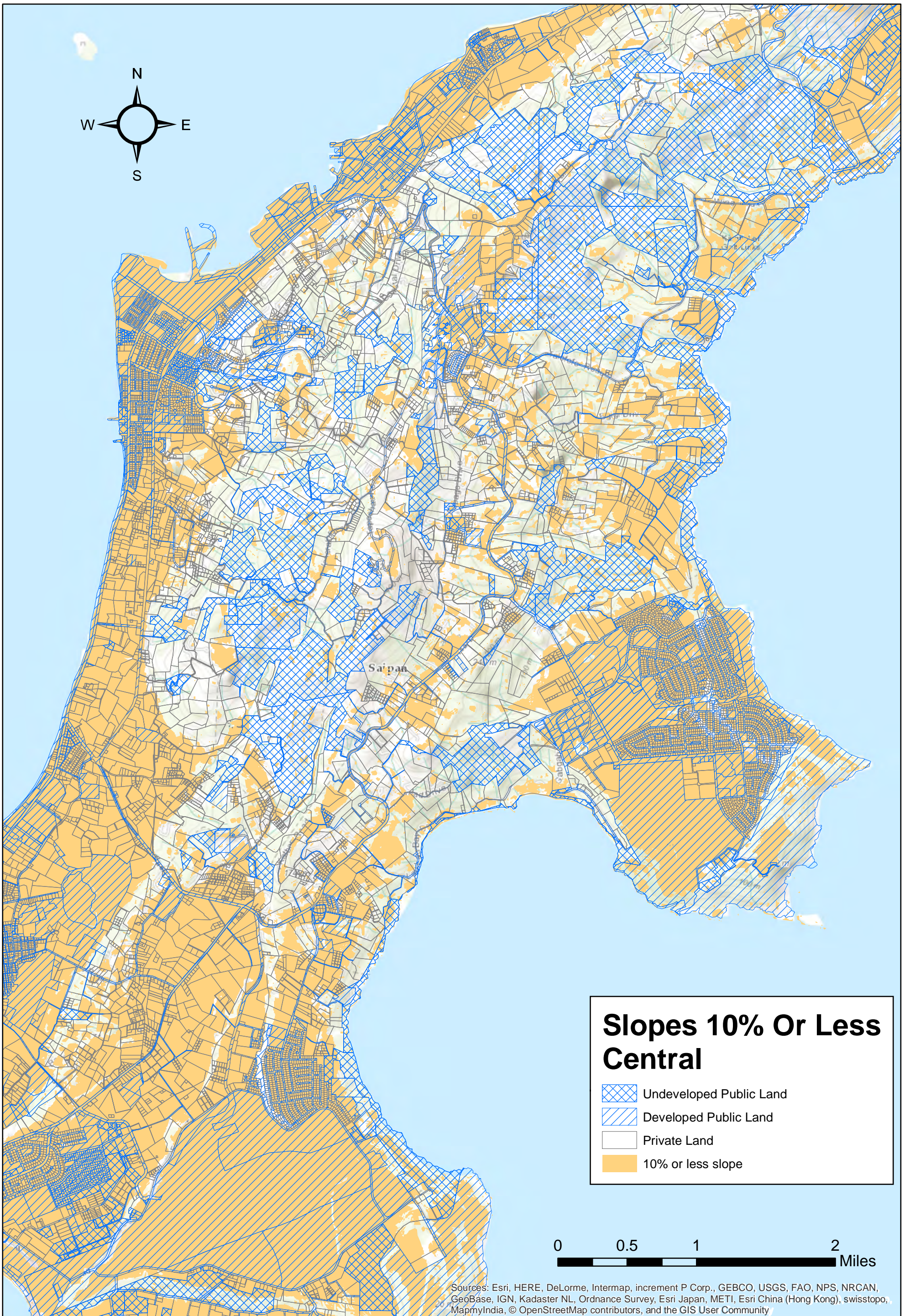




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FIGURE S-7.2

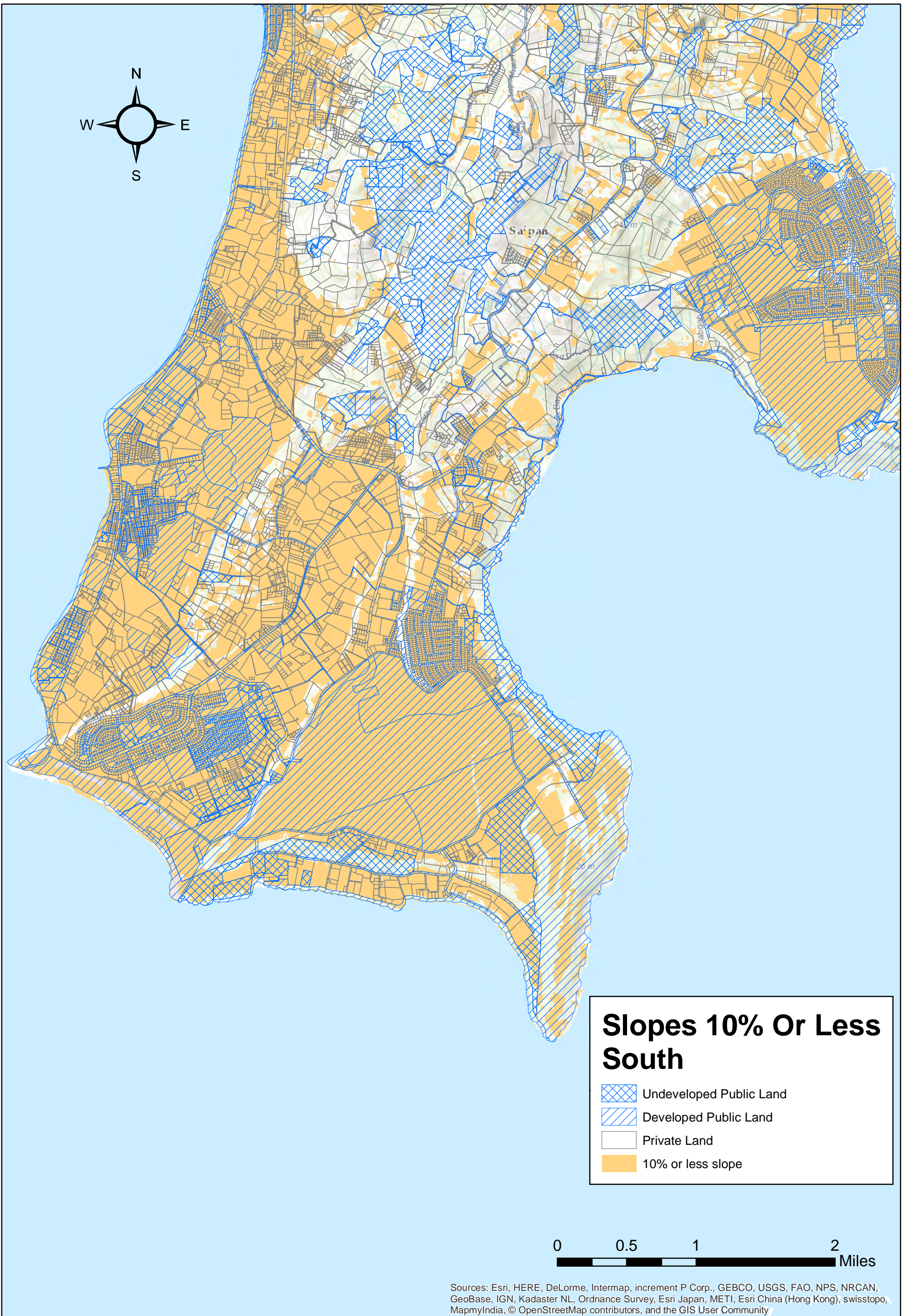




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FIGURE S-7.3

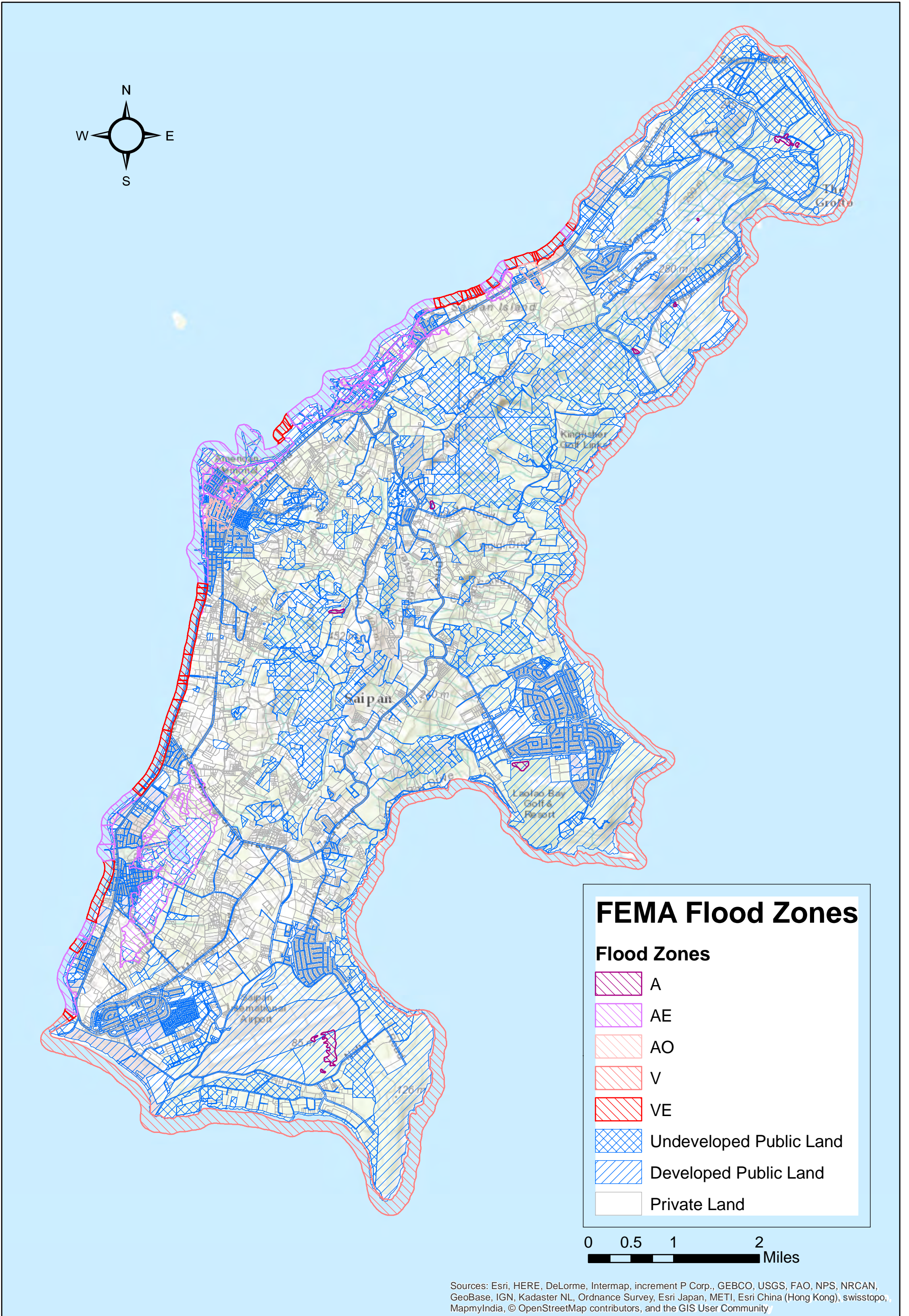




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FIGURE S-7.4

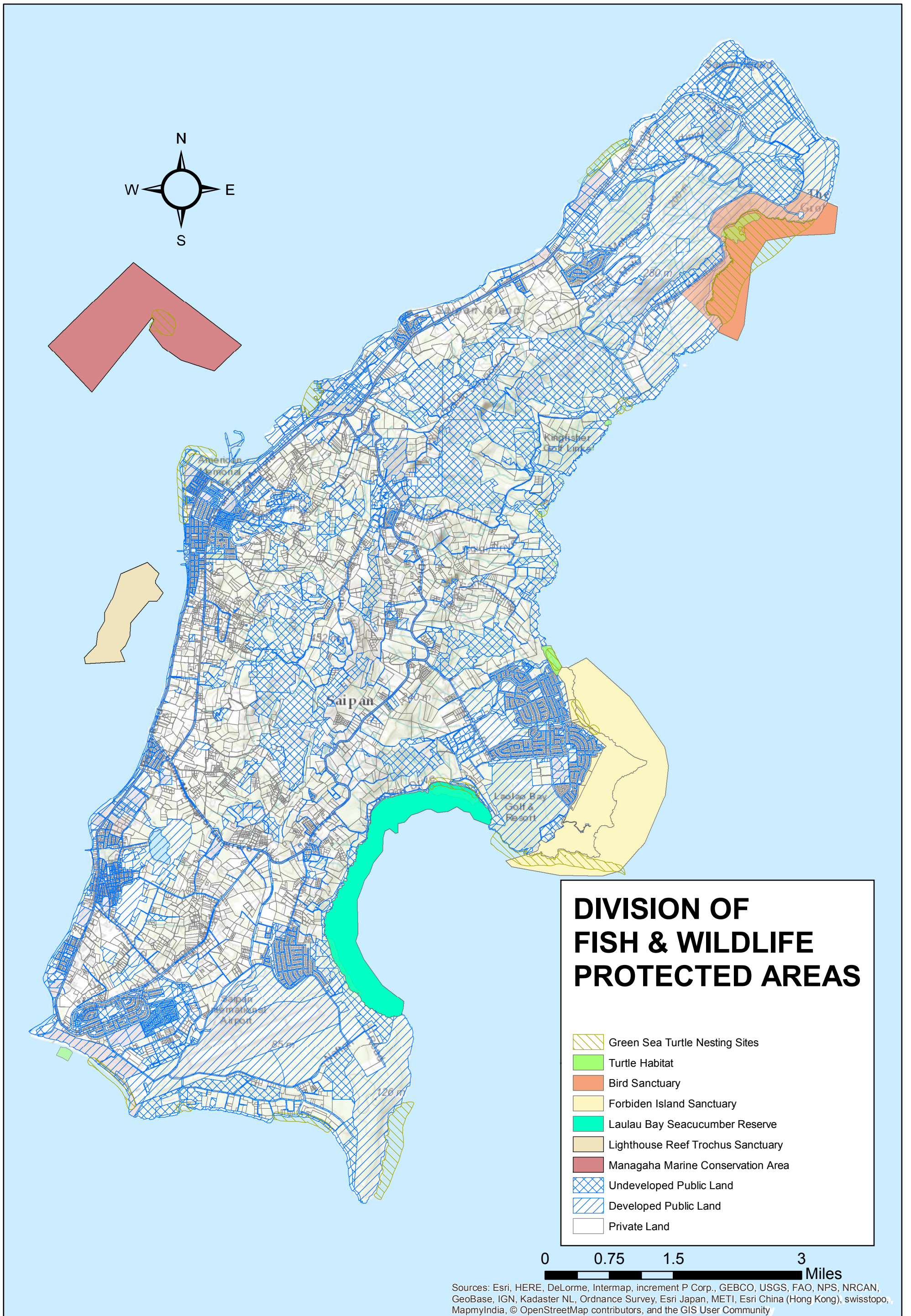




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FIGURE S-8

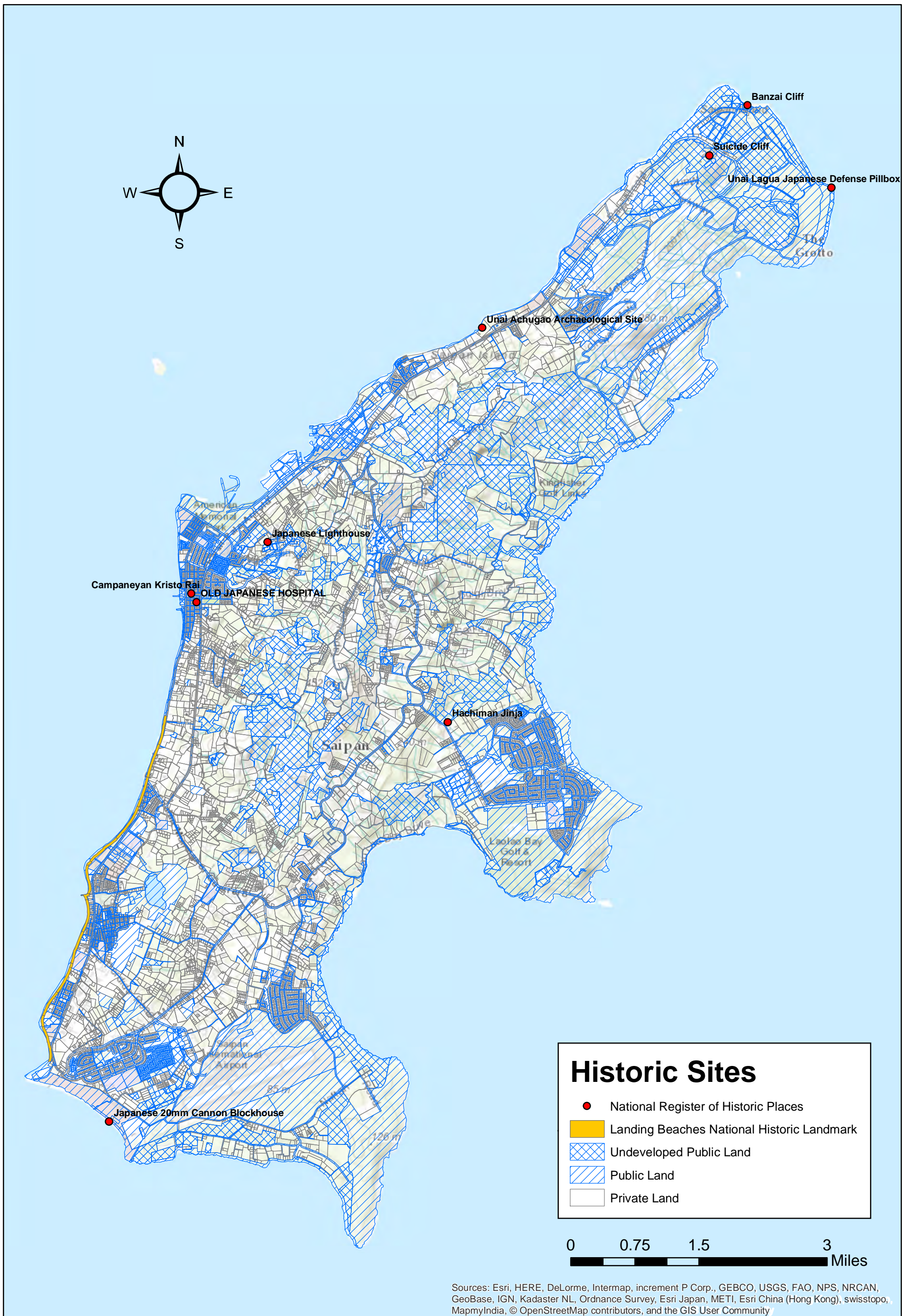




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FIGURE S-9

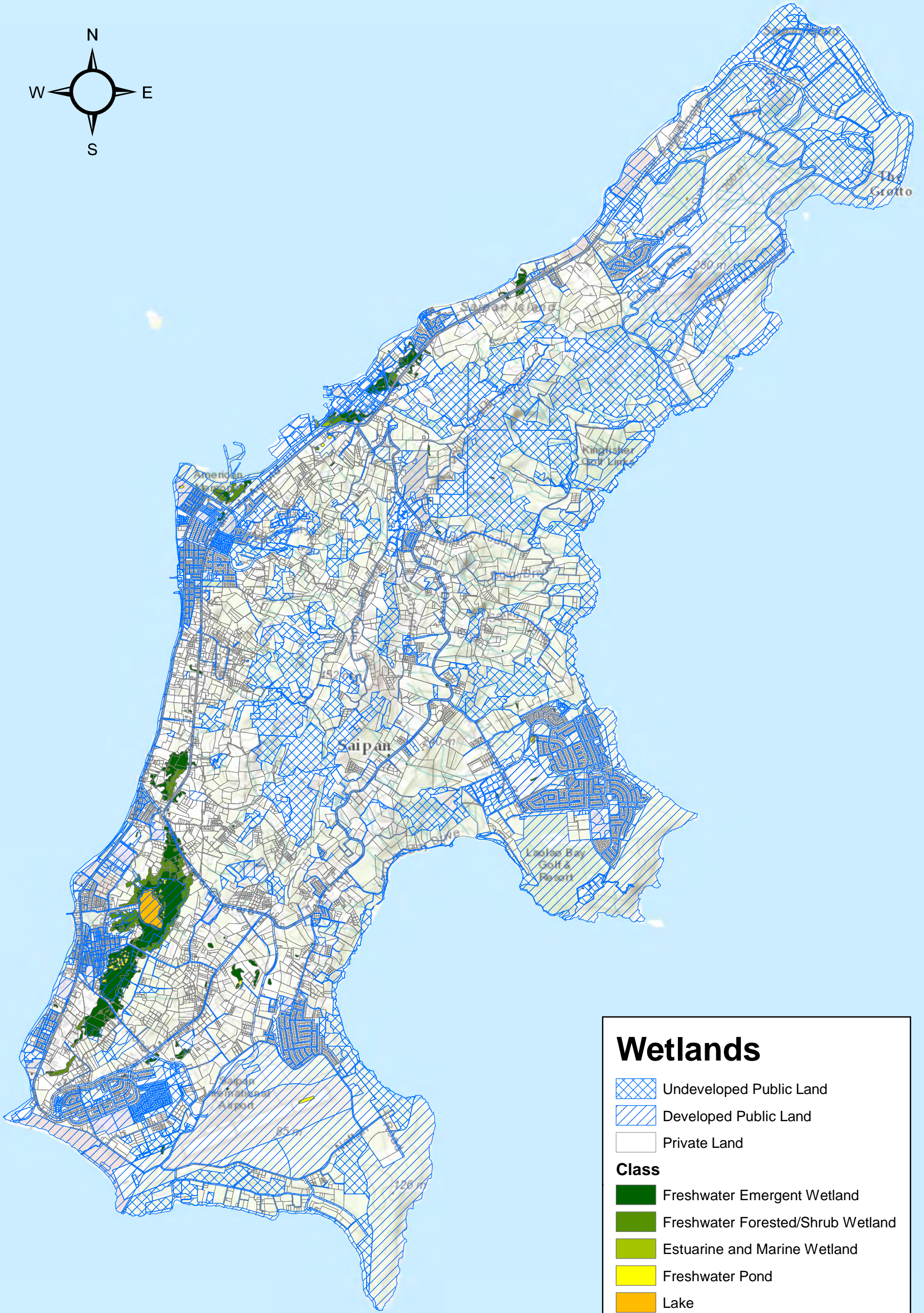
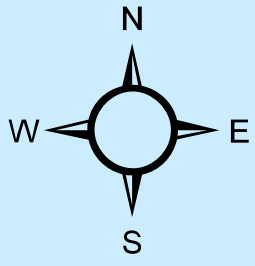




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FIGURE S-10



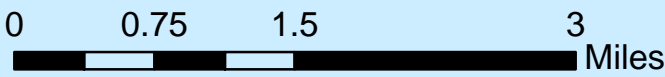


Wetlands

- Undeveloped Public Land
- Developed Public Land
- Private Land

Class

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Estuarine and Marine Wetland
- Freshwater Pond
- Lake
- Riverine

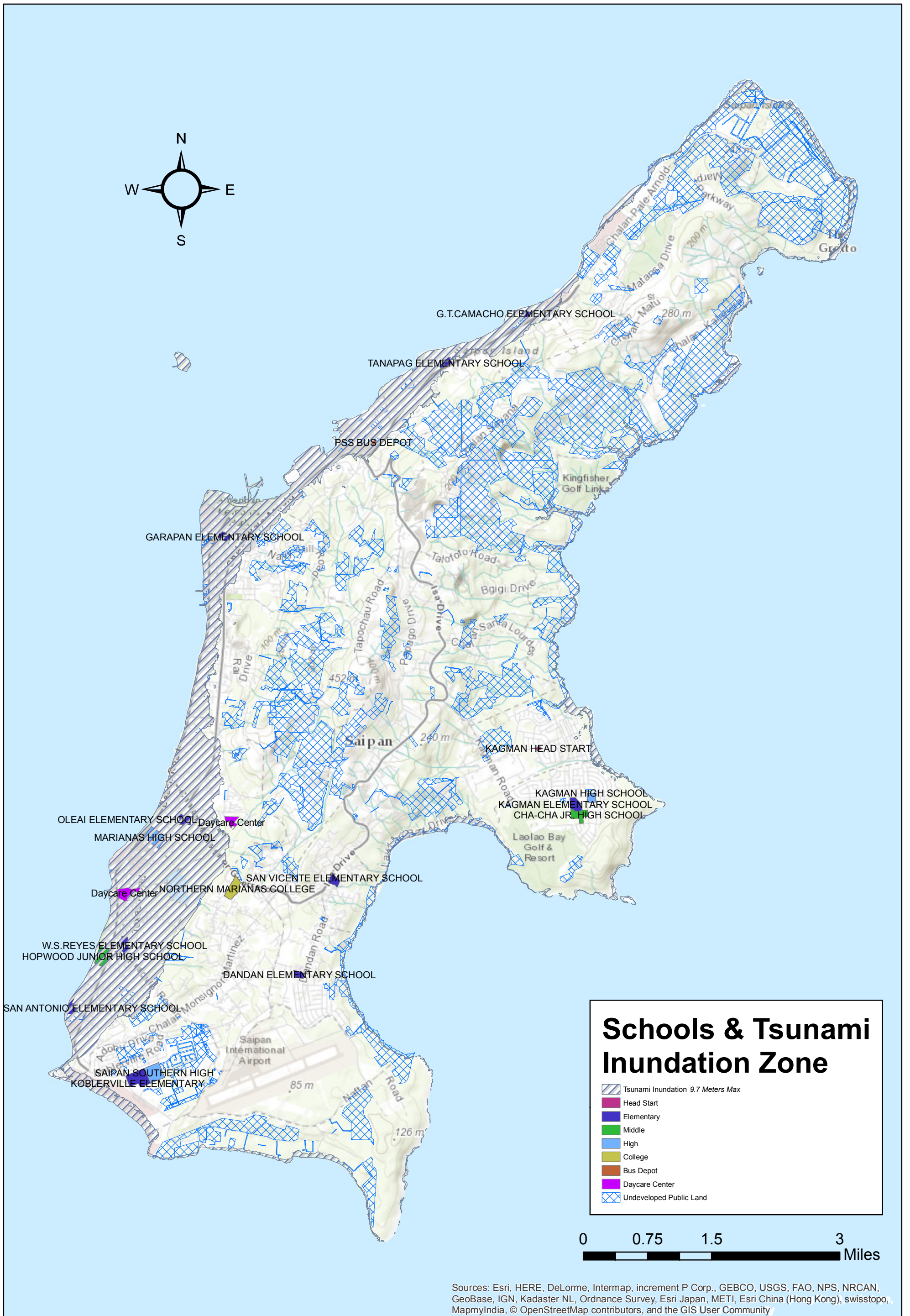


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SAIPAN

FIGURE S-12



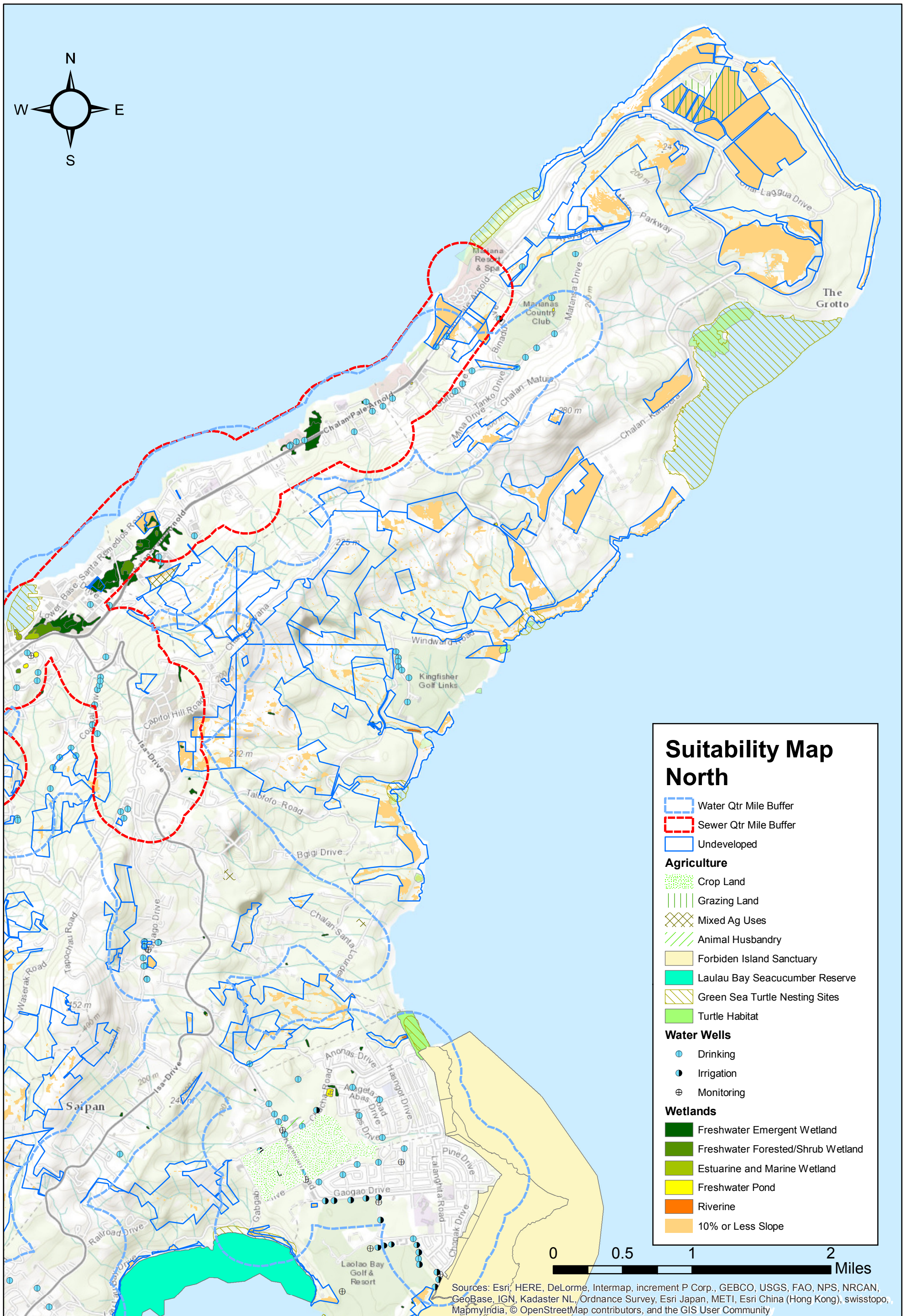


SAIPAN

FIGURE S-



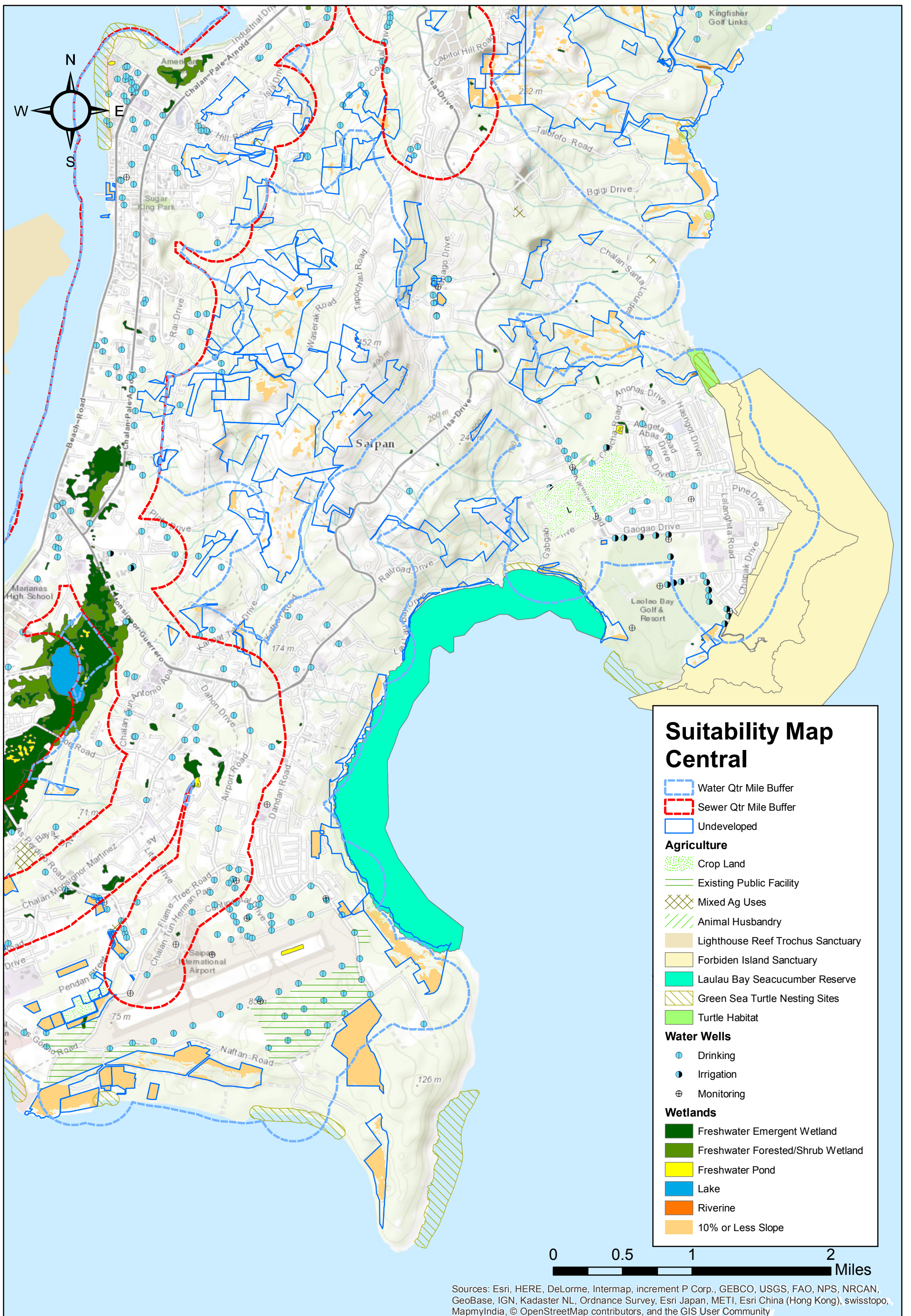
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



SAIPAN

FIGURE S-

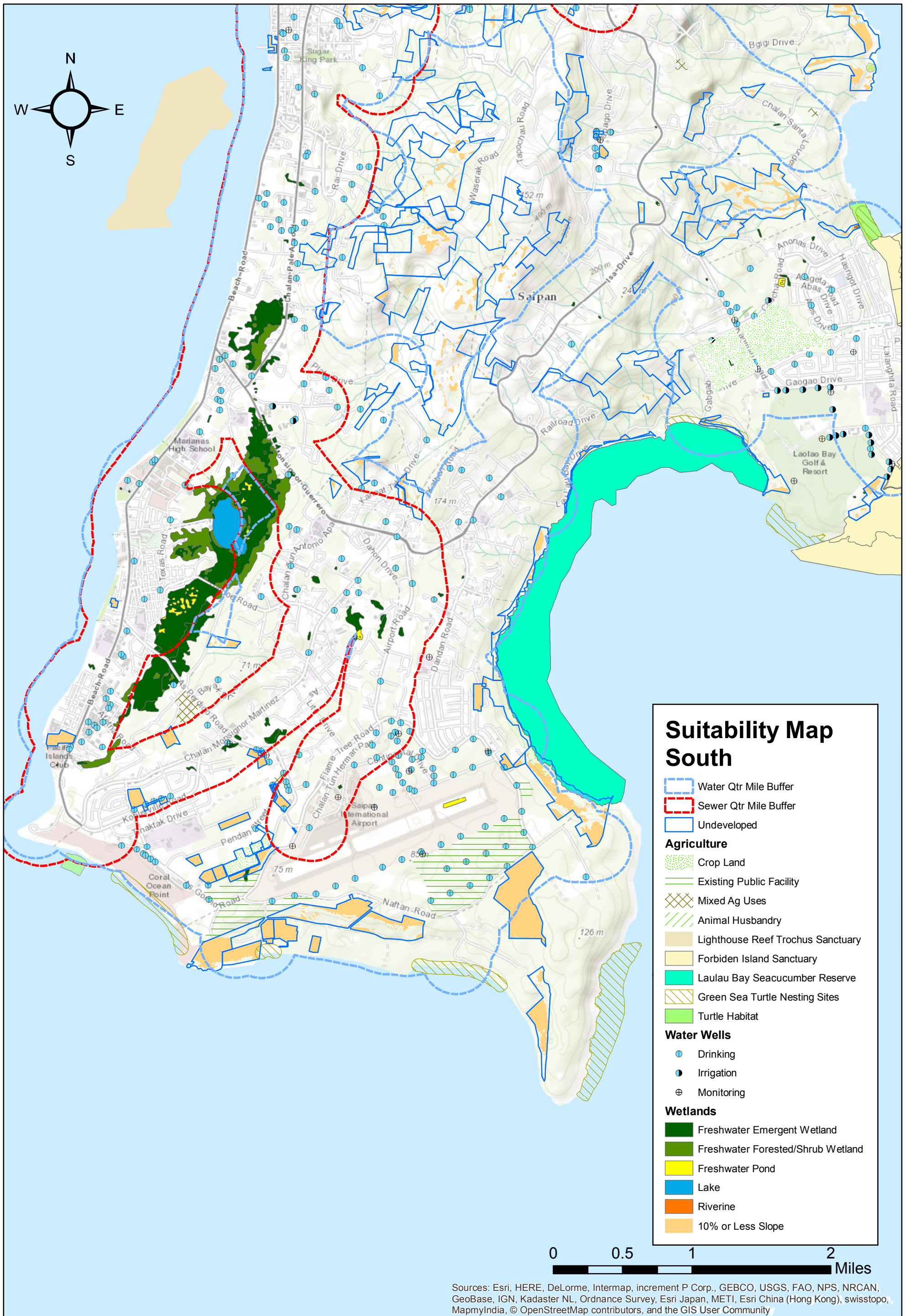




SAIPAN

FIGURE S-

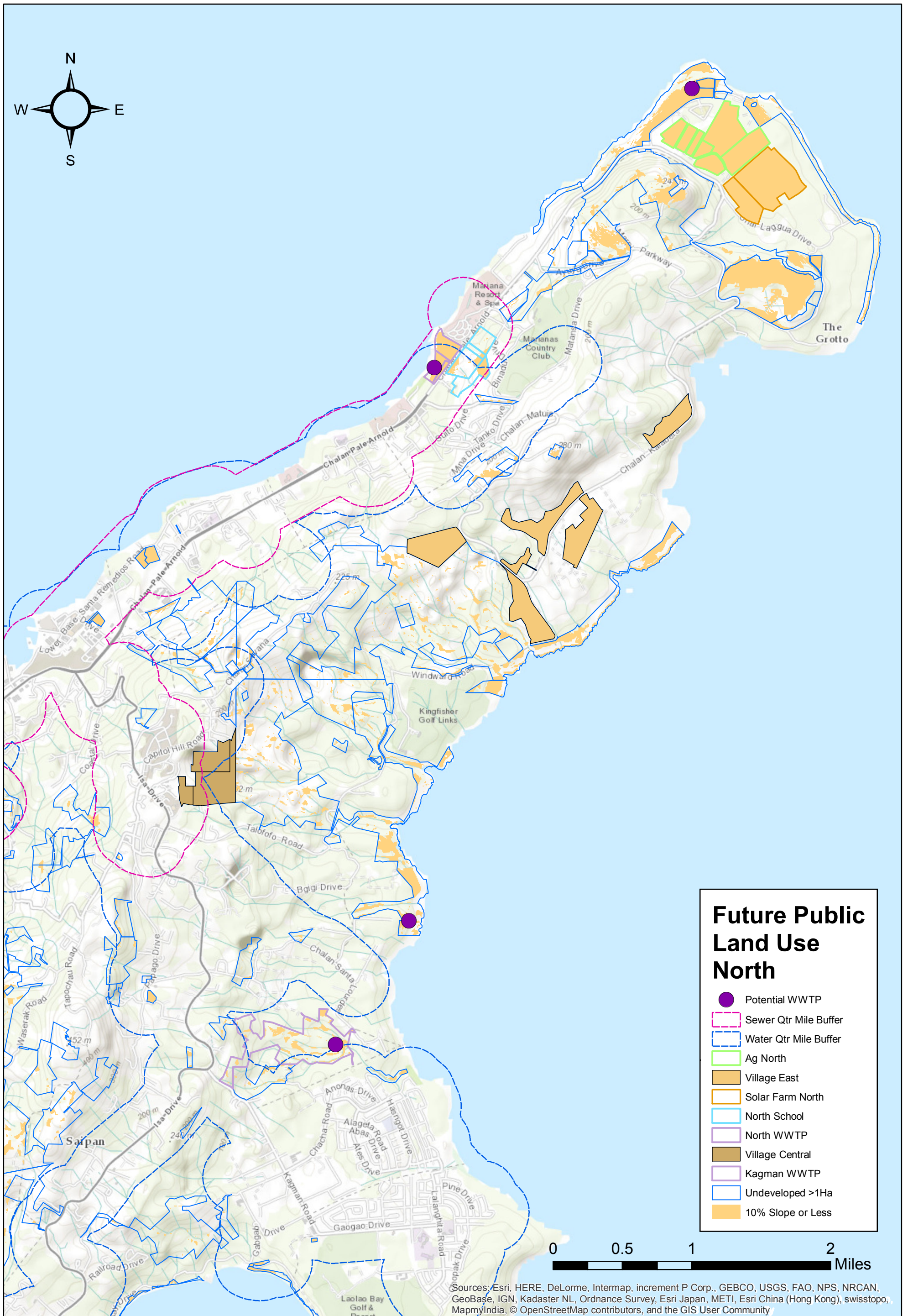




SAIPAN

FIGURE S-

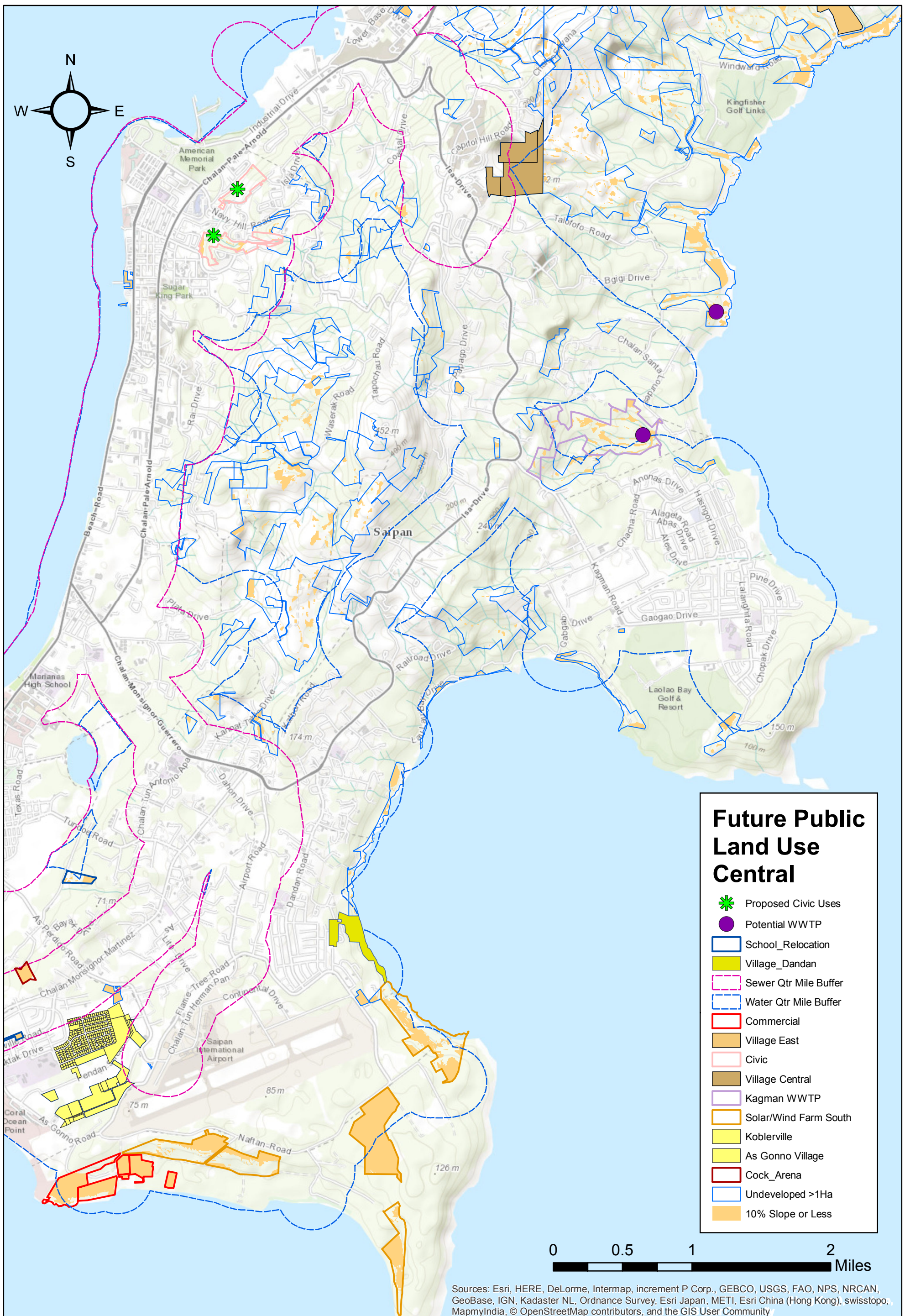




SAIPAN

FIGURE S-



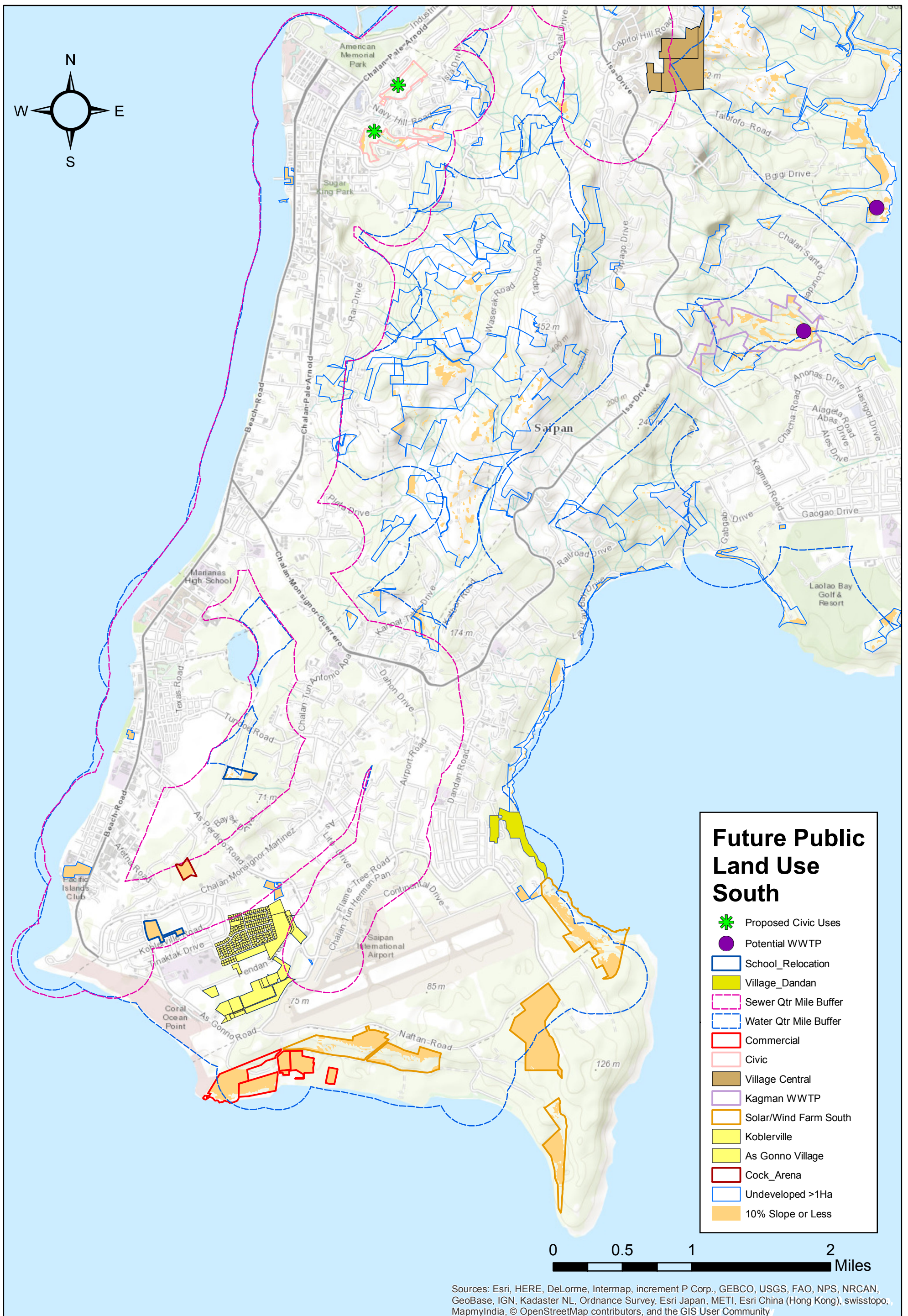


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

SAIPAN

FIGURE S-

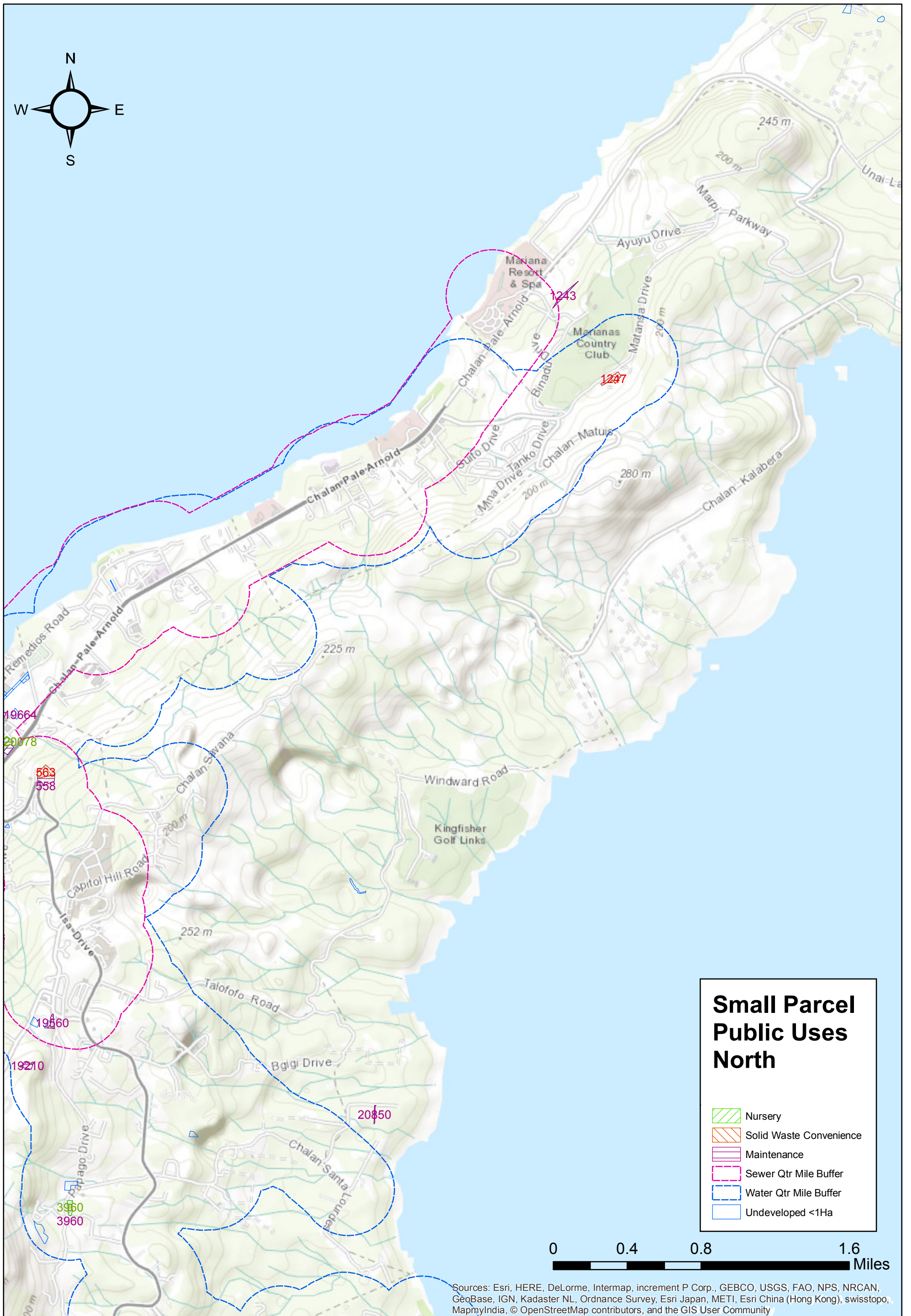




SAIPAN

FIGURE S-

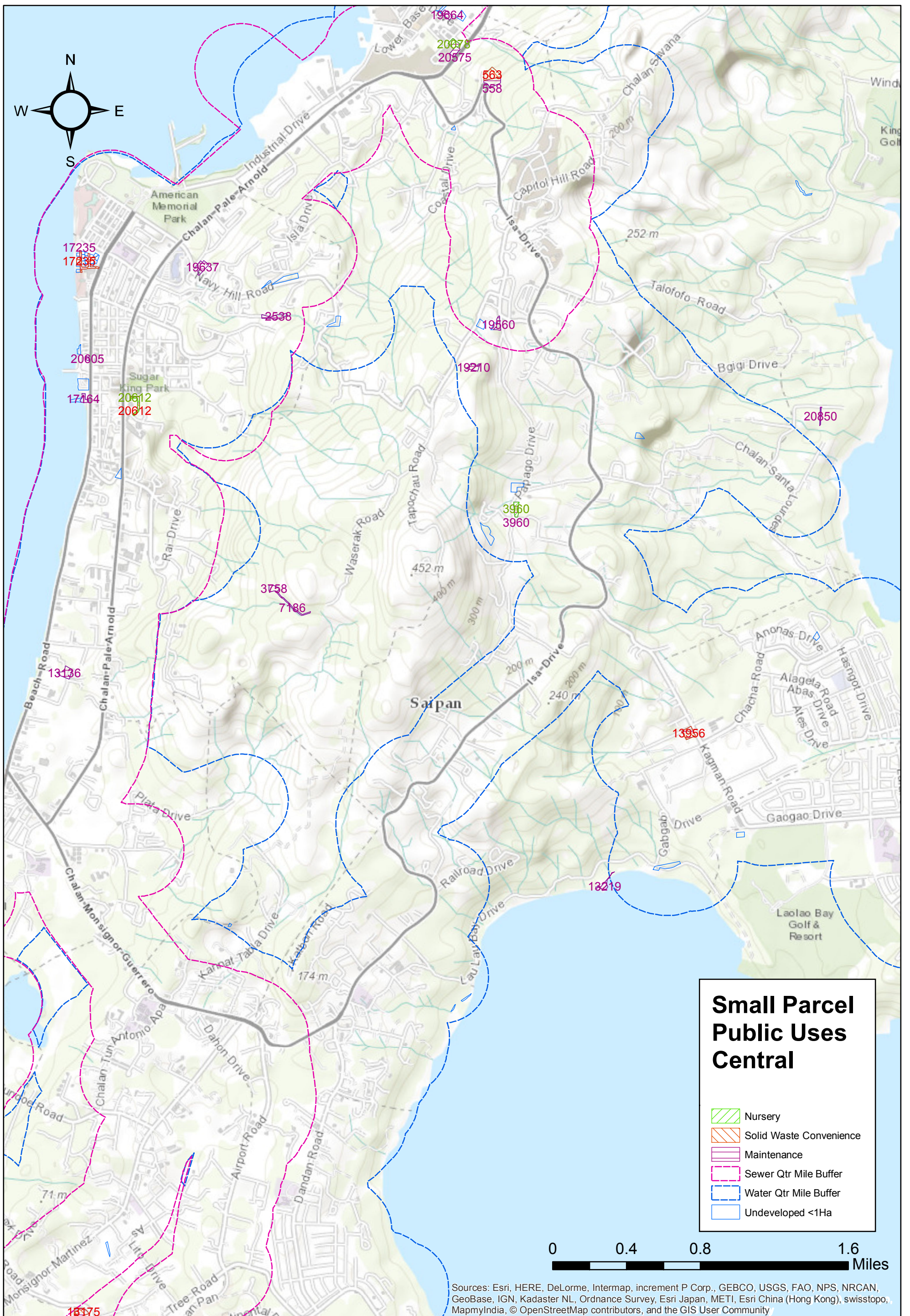




SAIPAN

FIGURE S-

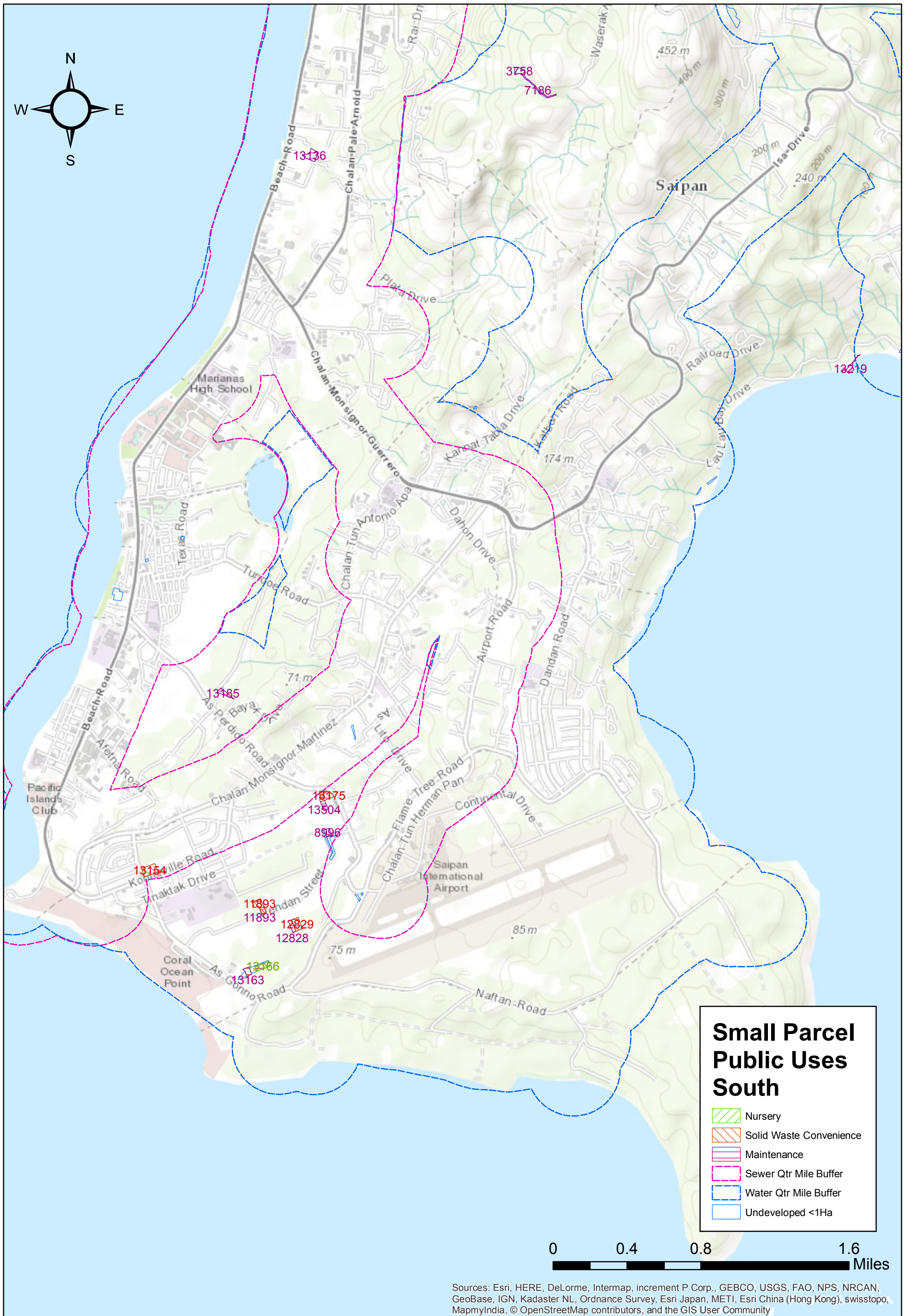




SAIPAN

FIGURE S-

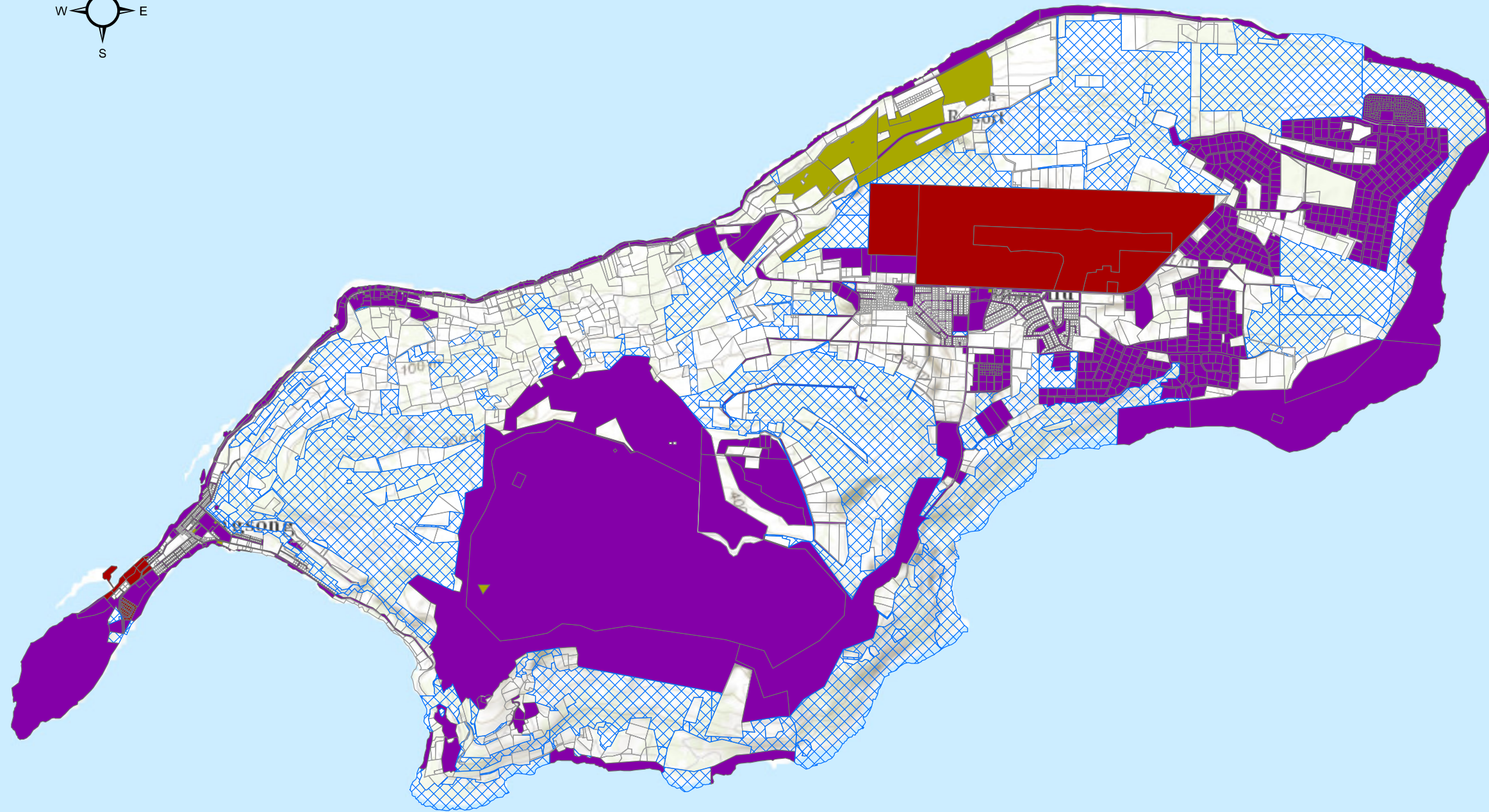
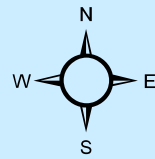









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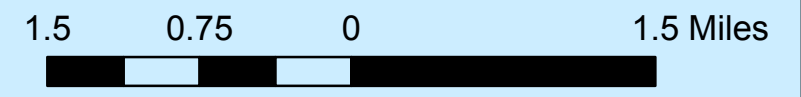
FIGURE S-





Public Lands

-  Undesignated/Not In Use
-  Grant of Public Domain
-  Leased
-  Designated/In Use
-  Private Land

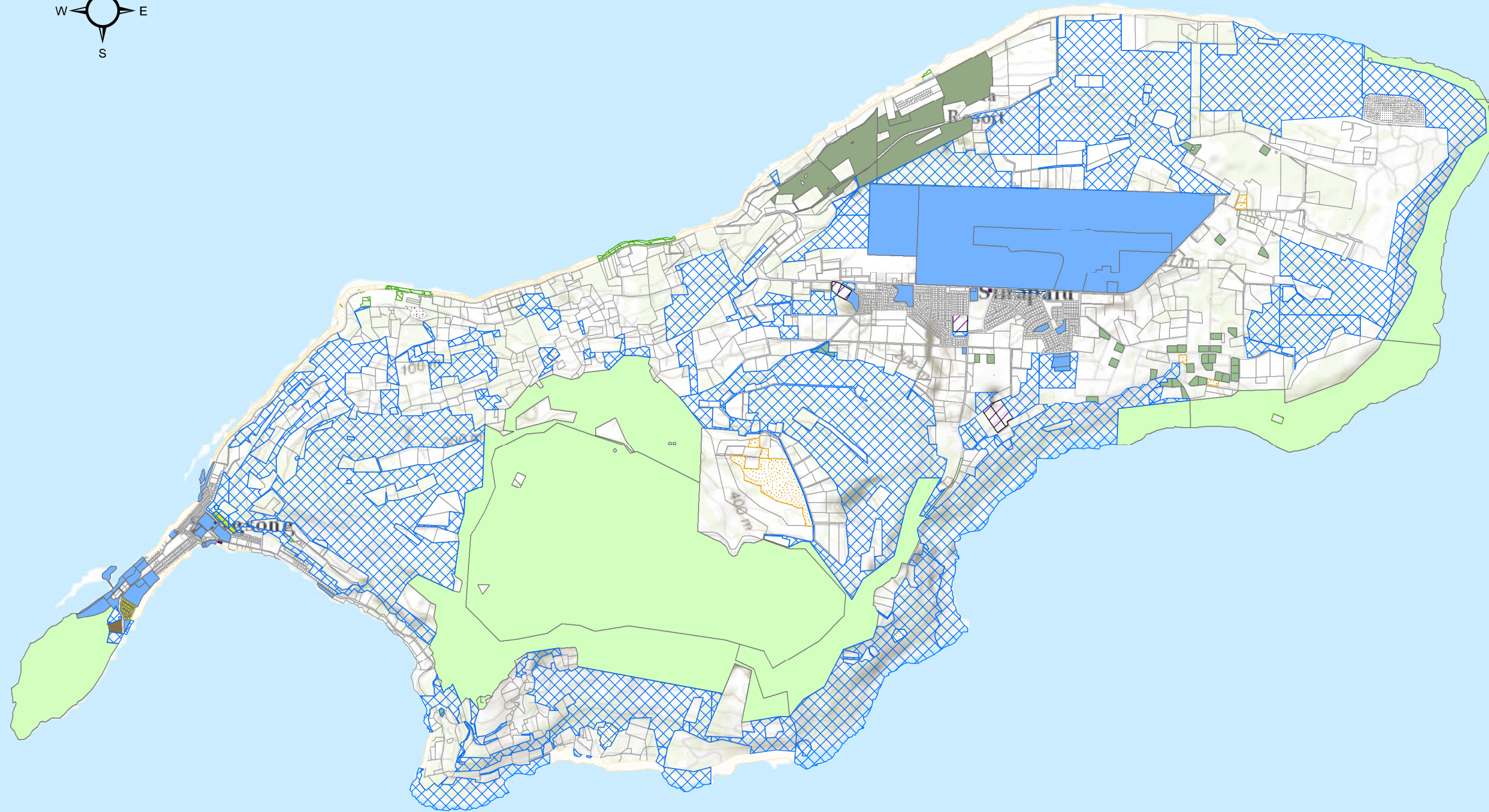
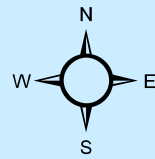


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

ROTA

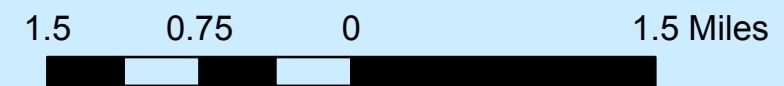
FIGURE R-1





Existing Public Land Use

- Undesignated/Not In Use
- Public Land Use**
- FVHP
- Public Facility Undeveloped
- Wildlife Conservation
- Shoreline Conservation
- Landfill
- Quarry
- Crop Land
- Mixed Ag
- Resort-Golf Complex
- Resort Hotel
- Public Facilities
- Undefined
- Utilities-Trans-Communications
- Residential
- Private Land

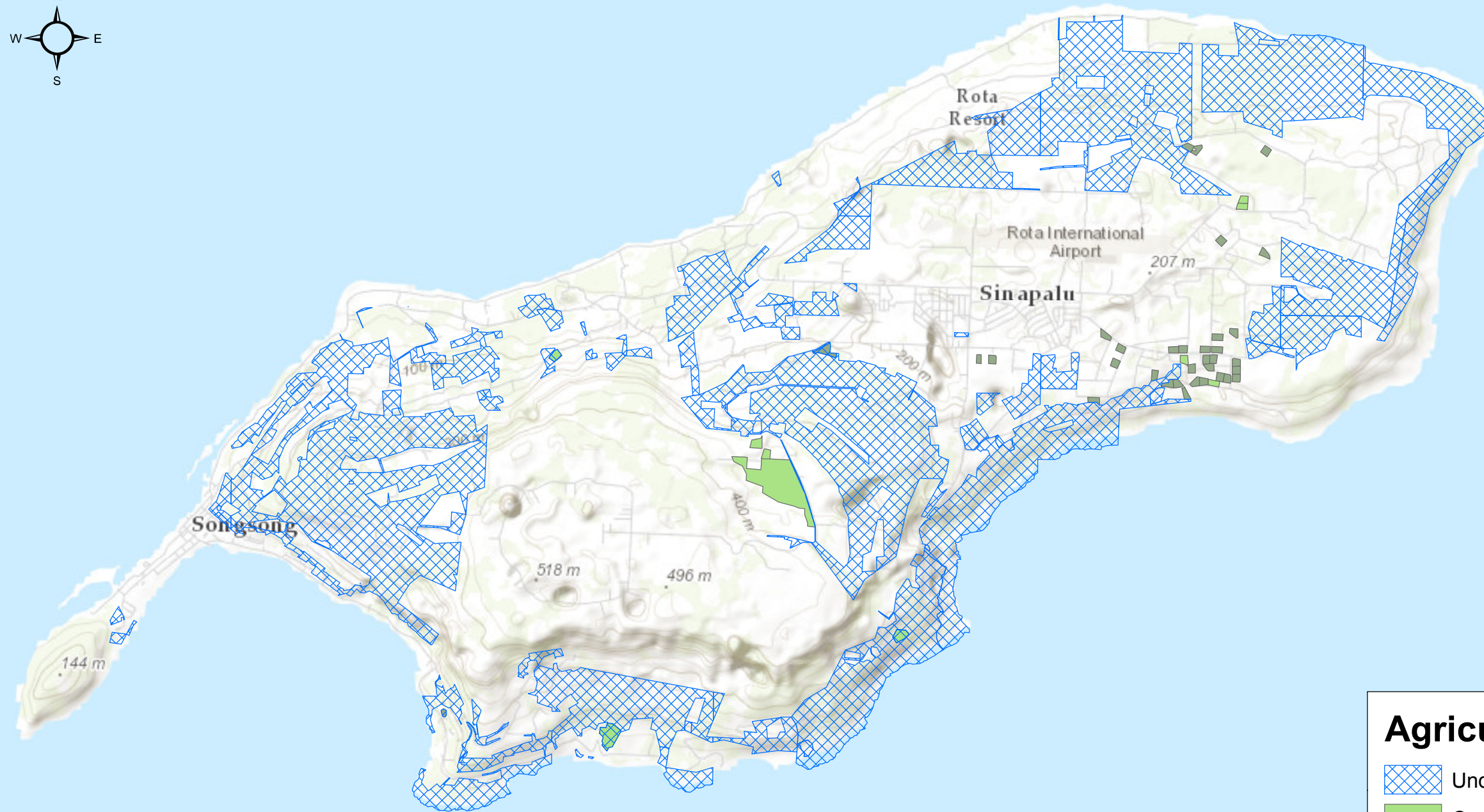
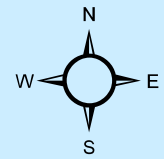


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


ROTA

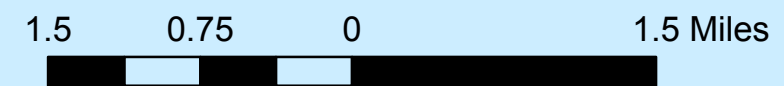
FIGURE R-2





Agricultural Uses

-  Undesignated/Not In Use Public Land
-  Crop Land
-  Mixed Ag Uses

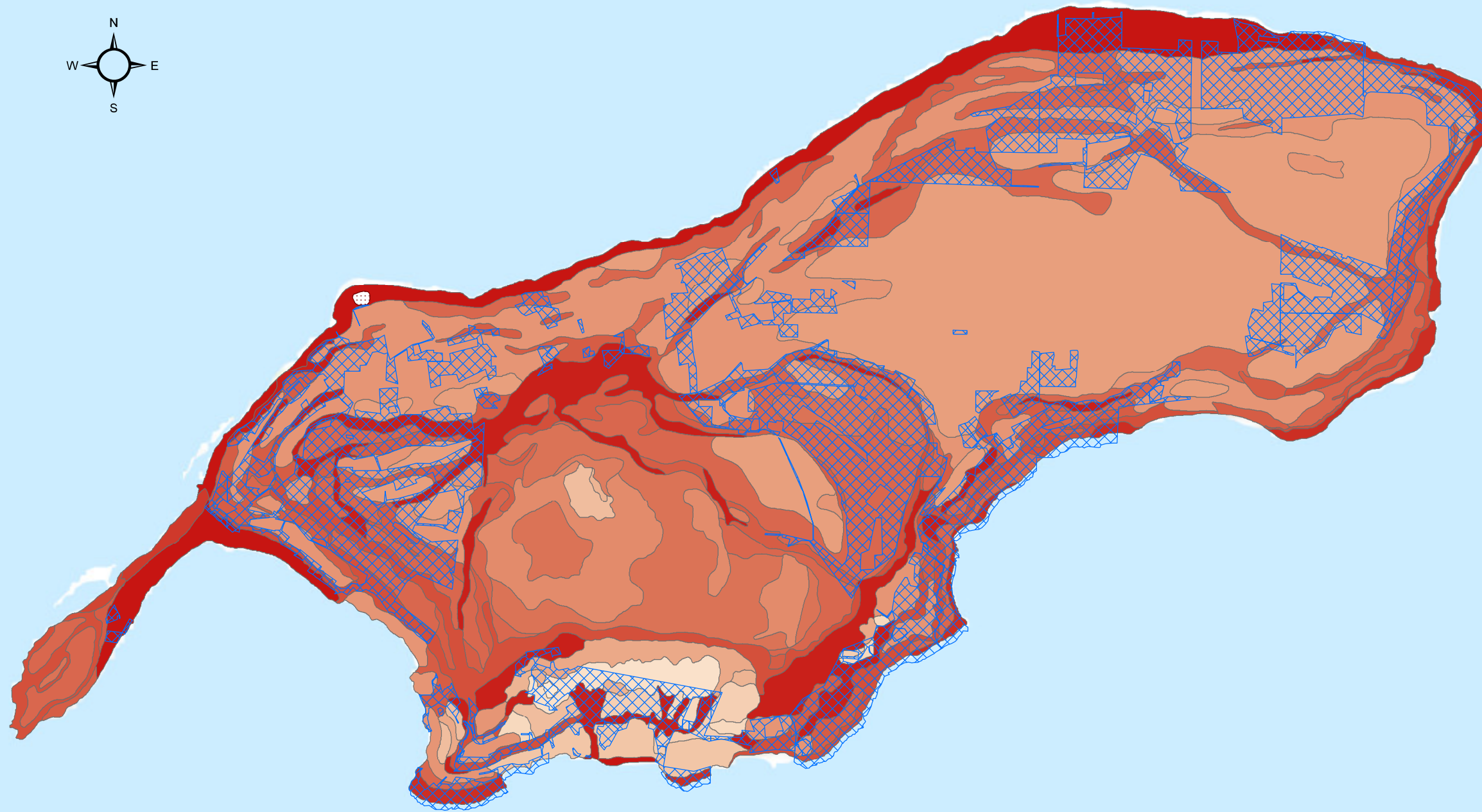
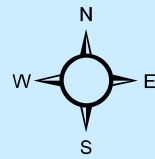


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


ROTA

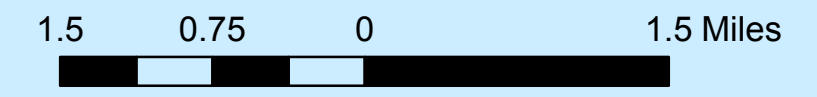
FIGURE R-3





Soils Map

-  Undesignate/Not In Use
-  Akina-Badland complex, 15 to 30 percent slopes
-  Akina-Badland complex, 30 to 60 percent slopes
-  Chinen clay loam, 5 to 15 percent slopes
-  Chinen clay loam, 15 to 30 percent slopes
-  Dandan-Chinen complex, 5 to 15 percent slopes
-  Laolao clay, 5 to 15 percent slopes
-  Laolao clay, 15 to 30 percent slopes
-  Laolao clay, 30 to 60 percent slopes
-  Luta cobbly clay loam, 0 to 5 percent slopes
-  Luta cobbly clay loam, 5 to 15 percent slopes
-  Luta cobbly clay loam, moist, 0 to 5 percent slopes
-  Luta cobbly clay loam, moist, 5 to 15 percent slopes
-  Luta-Rock outcrop complex, 0 to 5 percent slopes
-  Luta-Rock outcrop complex, 5 to 15 percent slopes
-  Luta-Rock outcrop complex, 15 to 30 percent slopes
-  Rock outcrop-Takpochao complex, 60 to 99 percent slopes
-  Shioya loamy sand, 0 to 3 percent slopes
-  Shioya-Urban land complex, 0 to 3 percent slopes
-  Takpochao-Rock outcrop complex, 3 to 15 percent slopes
-  Takpochao-Rock outcrop complex, 30 to 60 percent slopes
-  Takpochao variant-Shioya complex, 1 to 10 percent slopes
-  Landfill

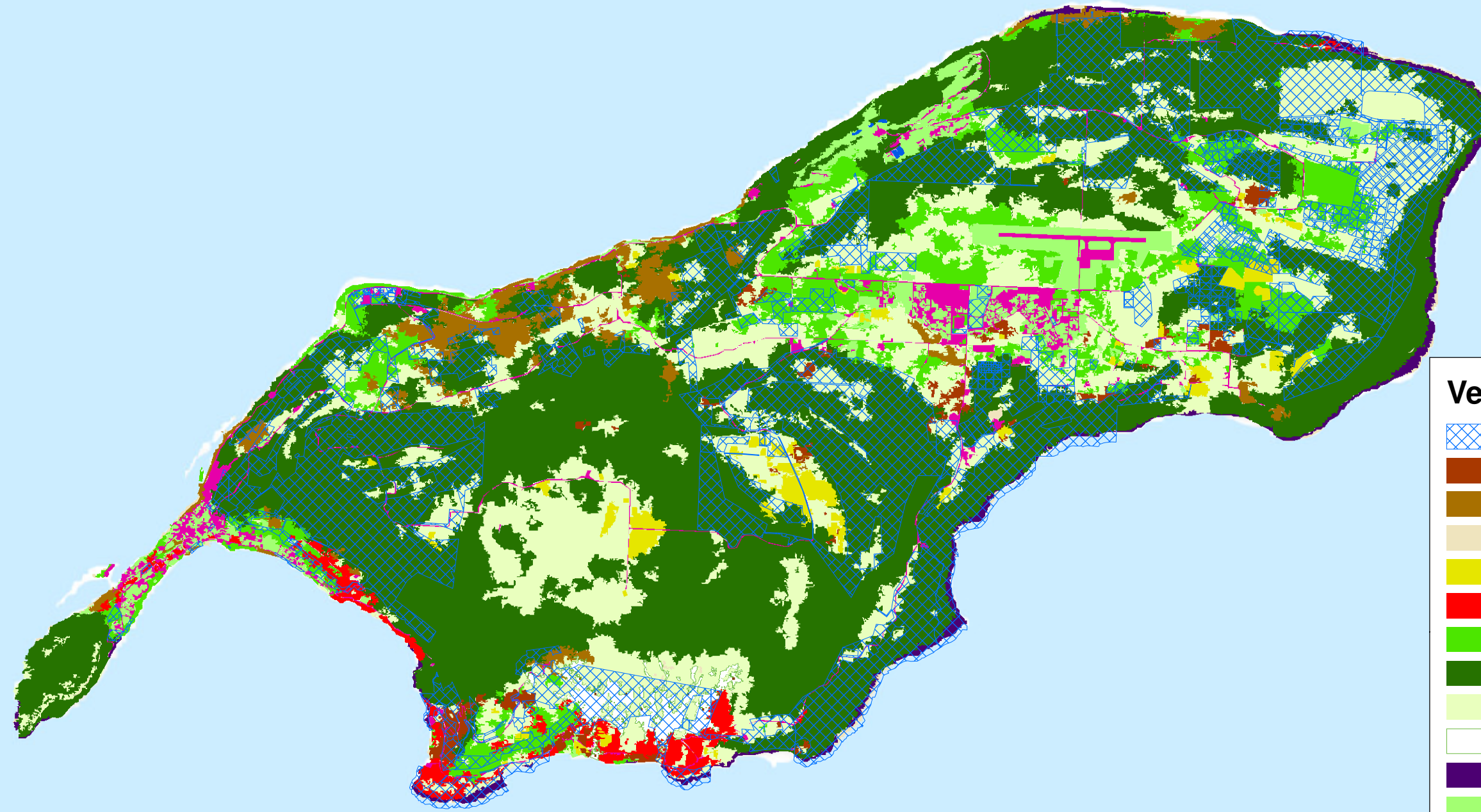
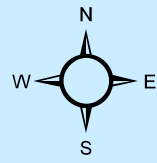


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

ROTA

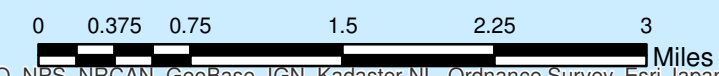
FIGURE R-4





Vegetation

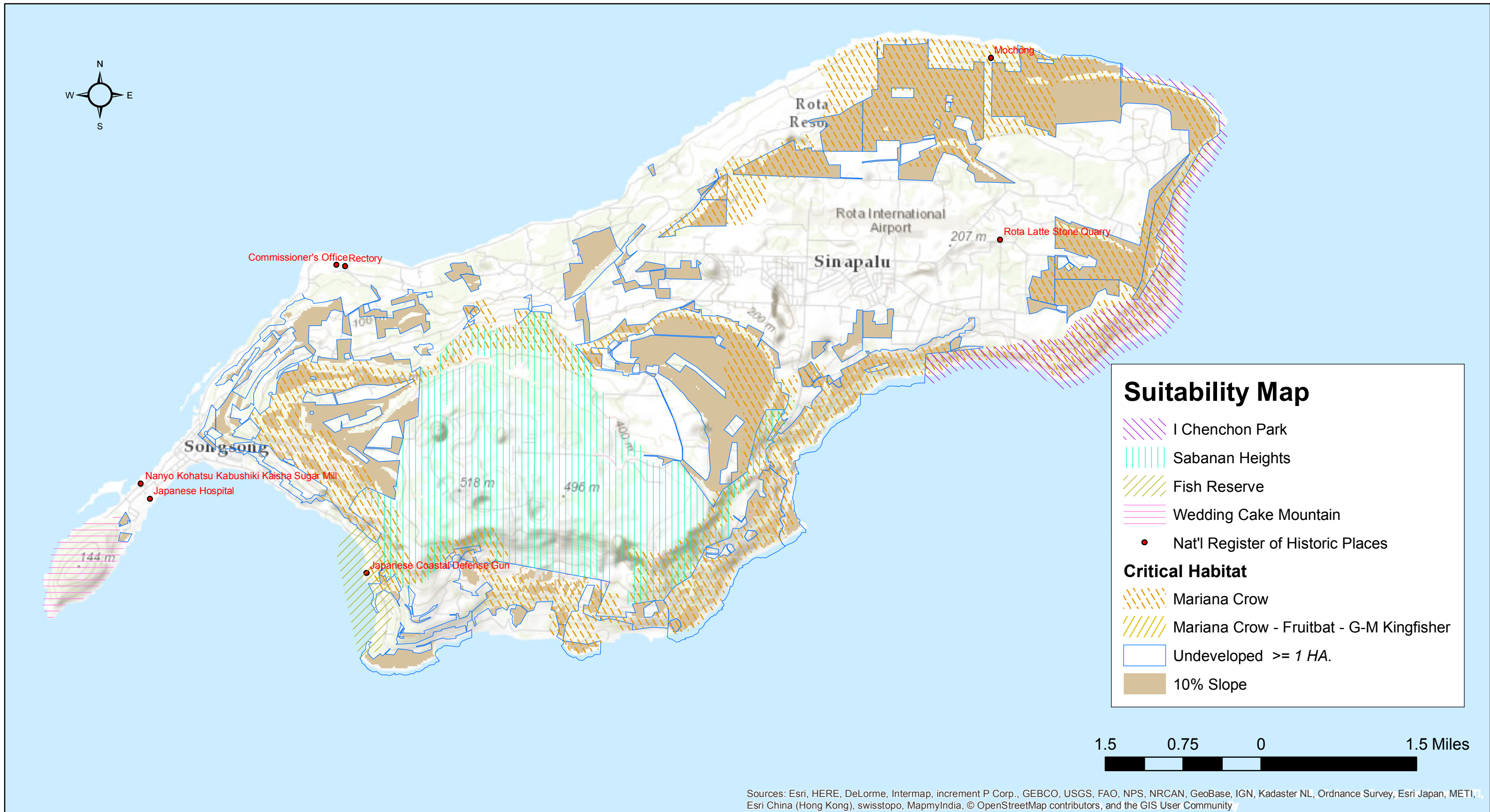
- Undeveloped Public Land
- Agroforest
- Agroforest -- Coconut
- Barren/Sandy Beach/Bare Rocks
- Cropland
- Leucaena Leucocephala (Tangantangan)
- Mixed Introduced Forest
- Native Limestone Forest
- Other Shrub and Grass
- Ravine Forest
- Strand
- Urban Vegetation
- Urban and Built-up
- Water



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

ROTA

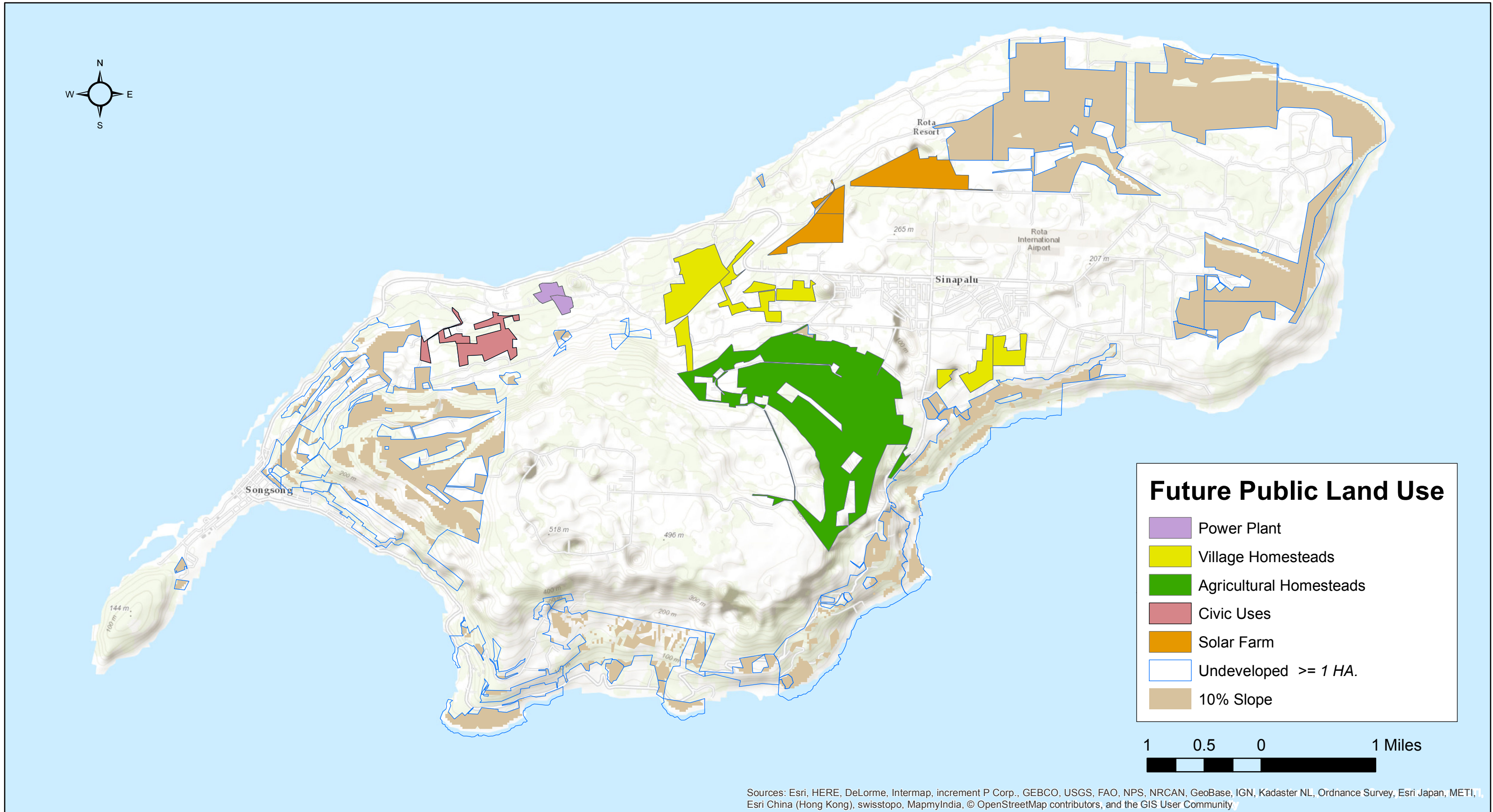
Figure R-5



ROTA

FIGURE R-6

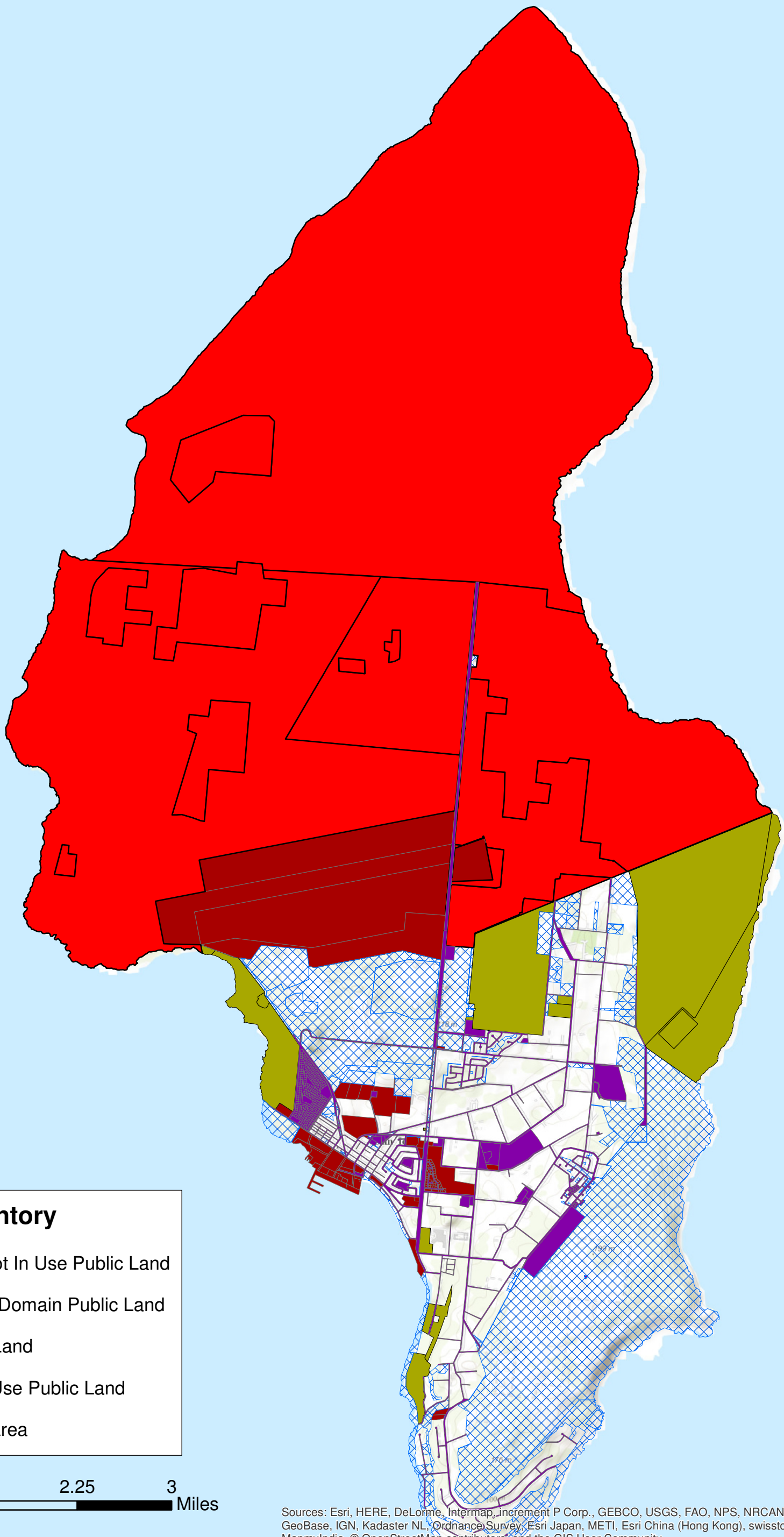
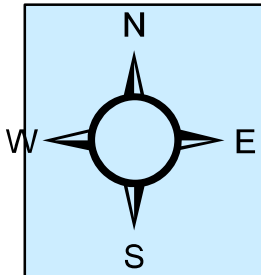




ROTA

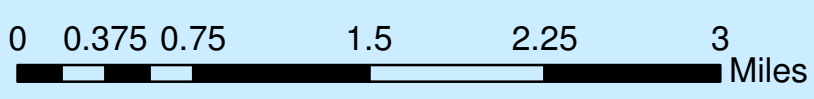
FIGURE R-





Public Land Inventory

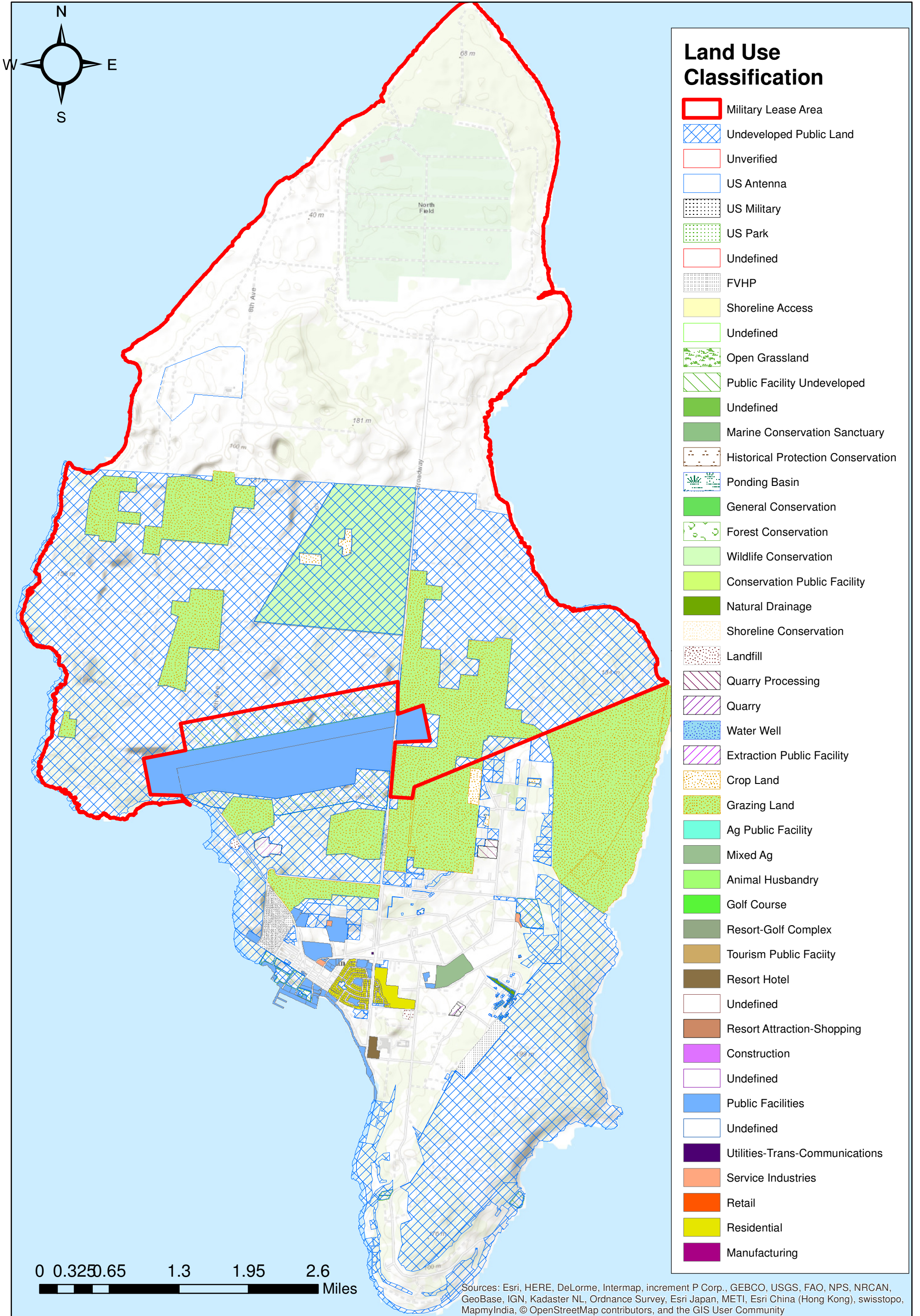
-  Undesignate/Not In Use Public Land
-  Grant of Public Domain Public Land
-  Leased Public Land
-  Designated/In Use Public Land
-  Military Lease Area



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

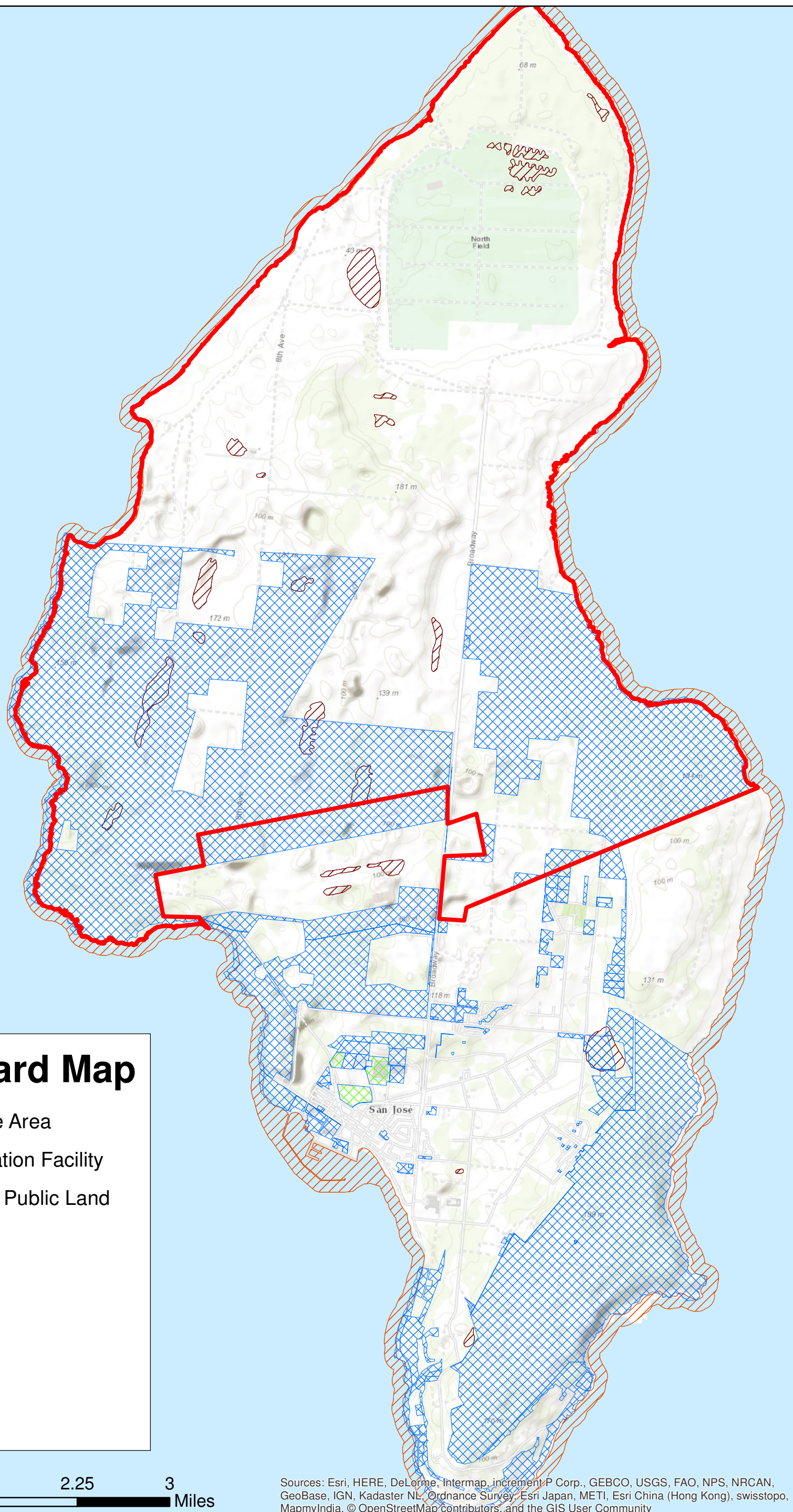
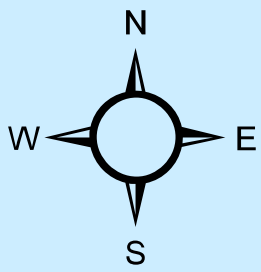
TINIAN




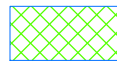

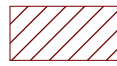






TINIAN





Flood Hazard Map

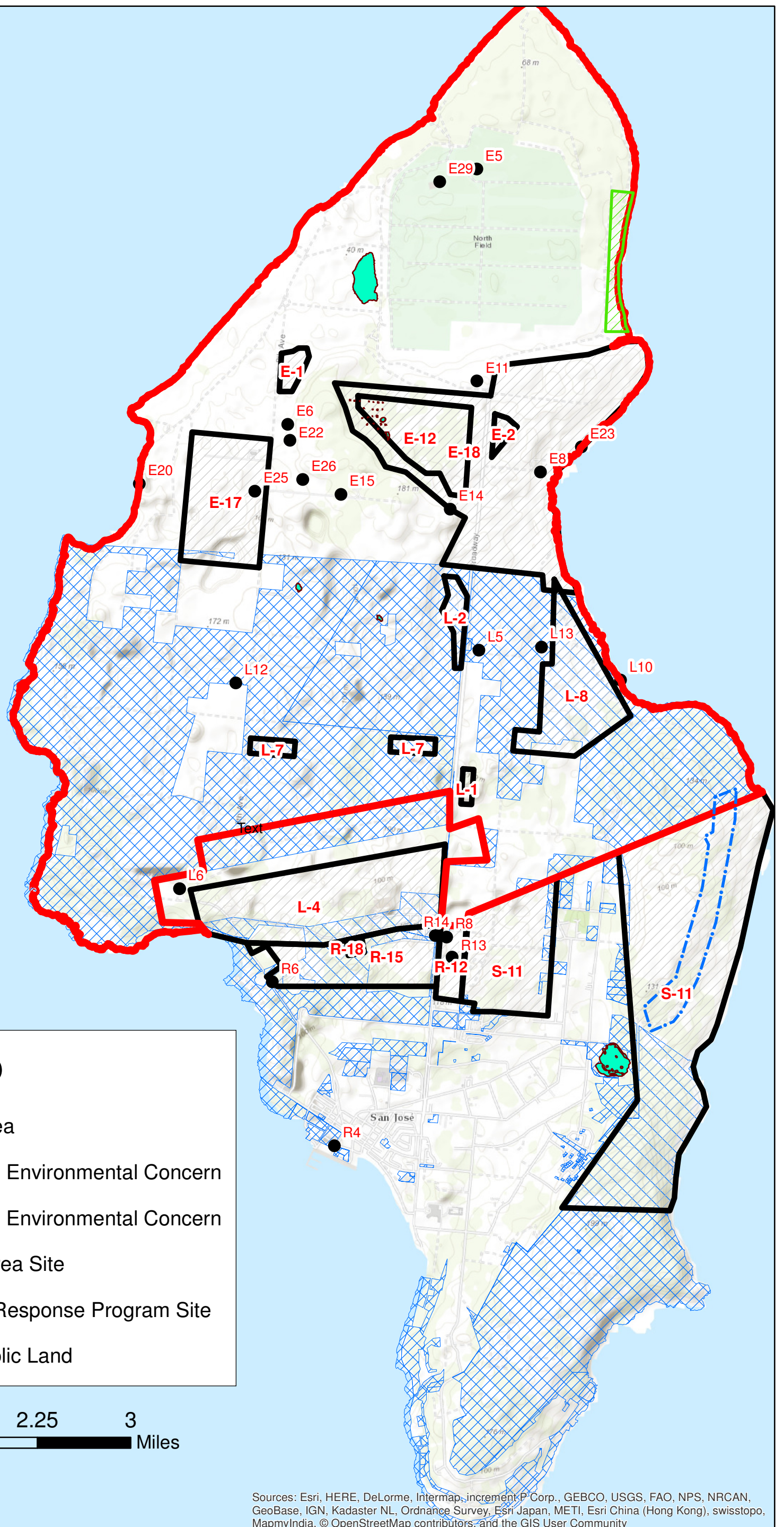
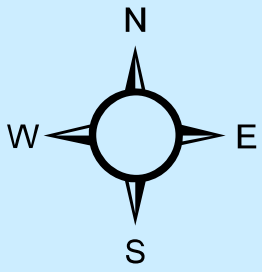
-  Military Lease Area
 -  School/Education Facility
 -  Undeveloped Public Land
- FEMA Flood Zones**
-  A
 -  AE
 -  AO
 -  V
 -  VE

0 0.375 0.75 1.5 2.25 3 Miles

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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Hazards Map

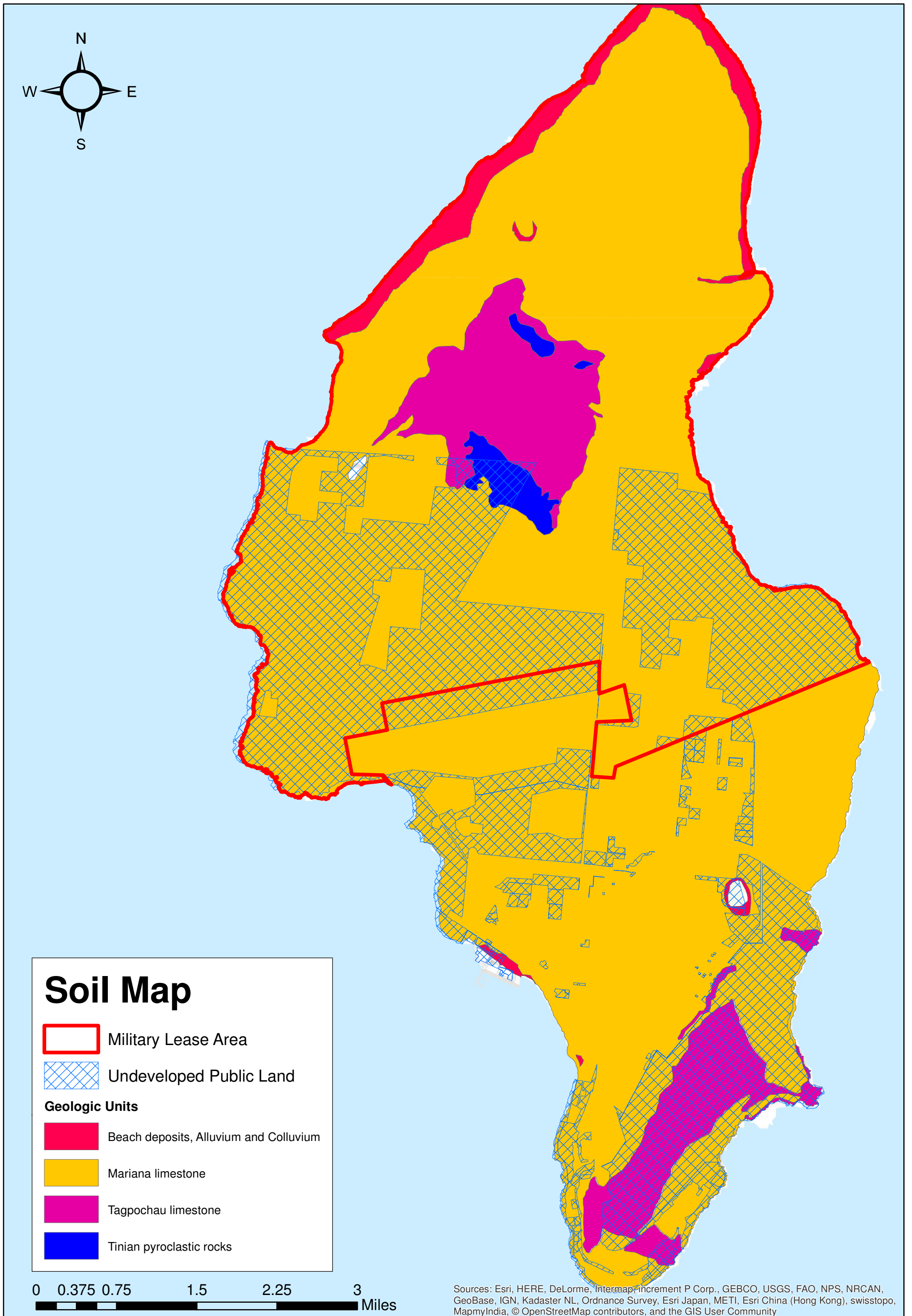
- Military Lease Area
- Areas of Potential Environmental Concern
- Areas of Potential Environmental Concern
- Masalog Ridge Area Site
- Military Munition Response Program Site
- Undeveloped Public Land

0 0.375 0.75 1.5 2.25 3 Miles

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

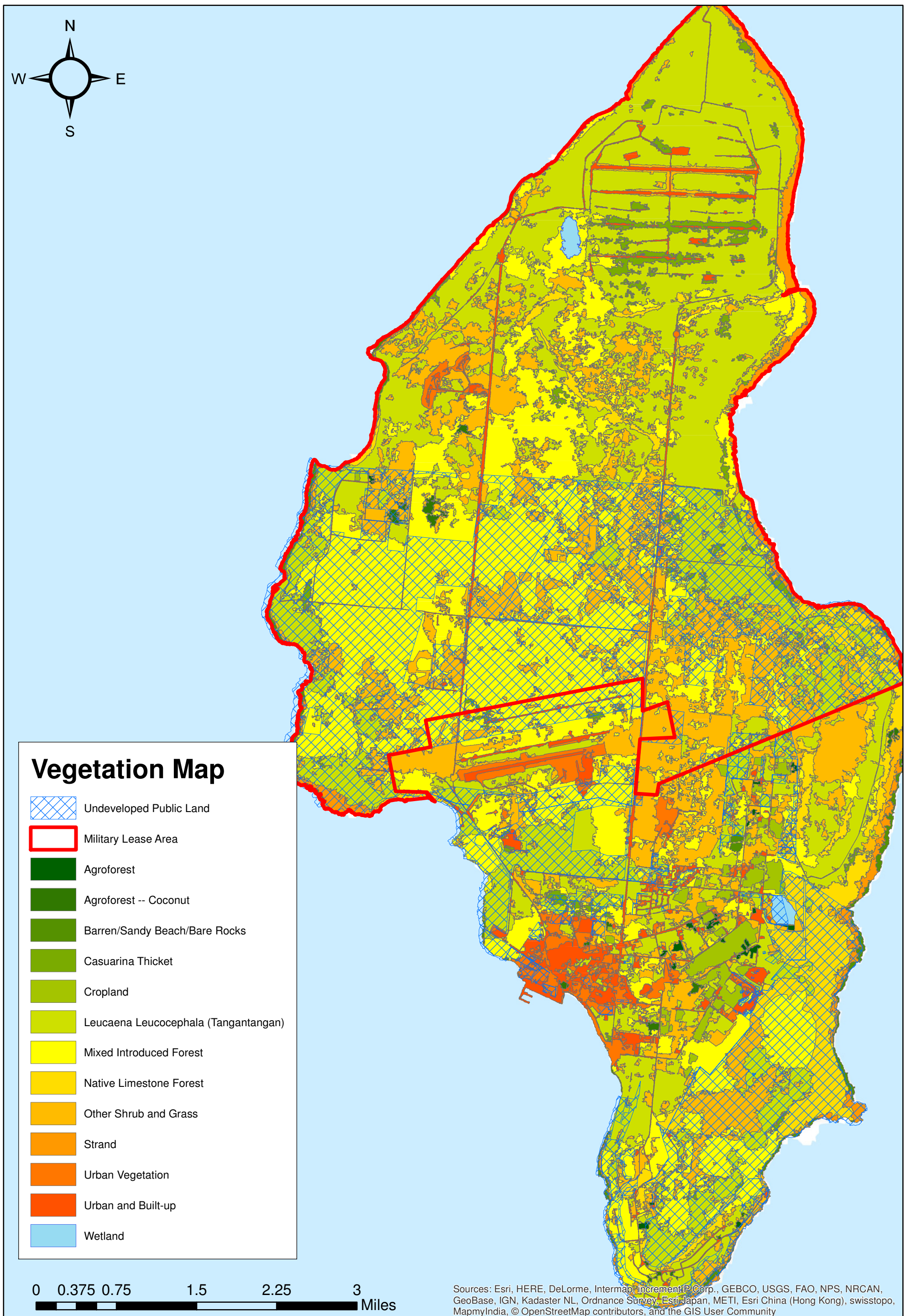
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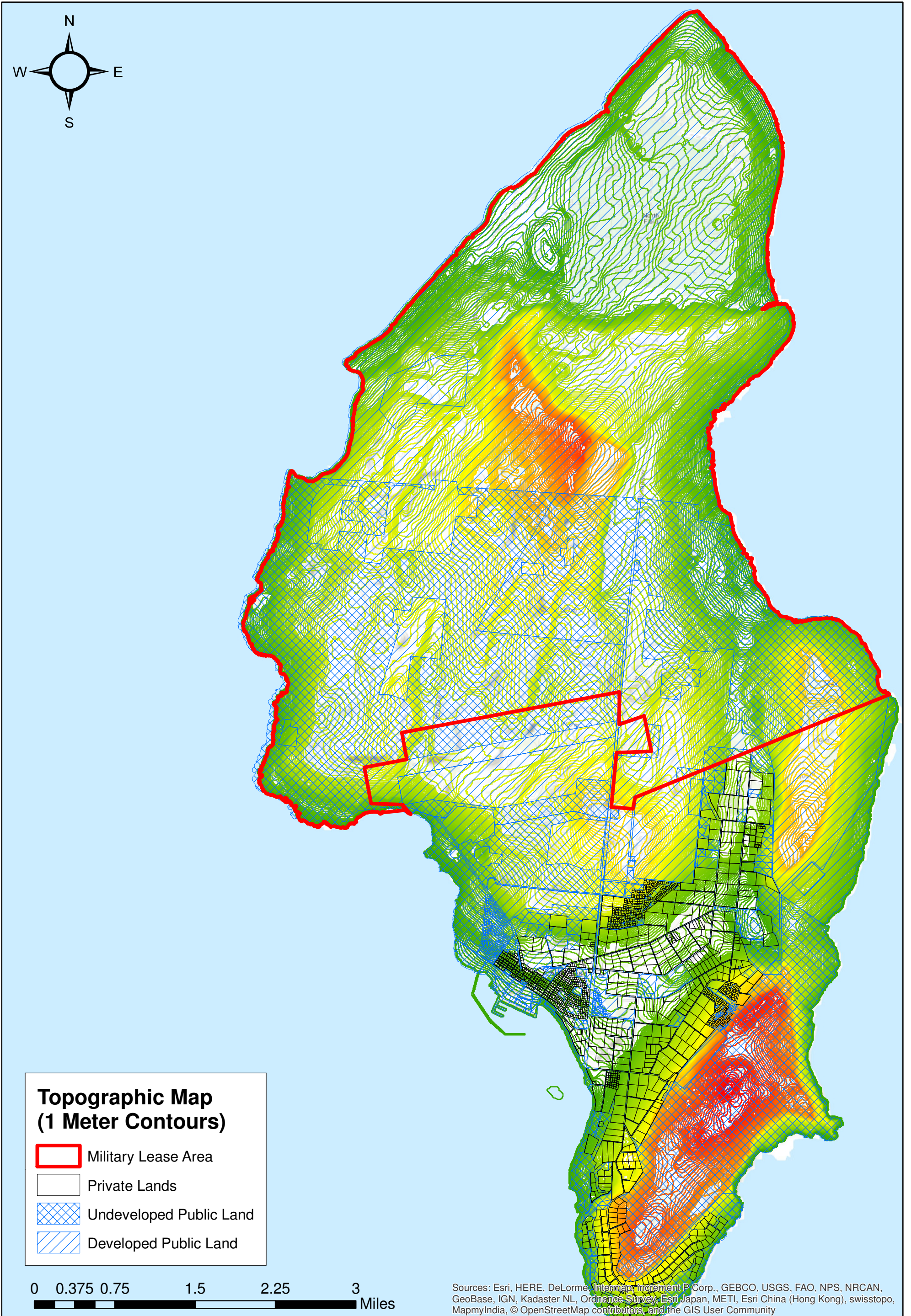
TINIAN





TINIAN





**Topographic Map
(1 Meter Contours)**

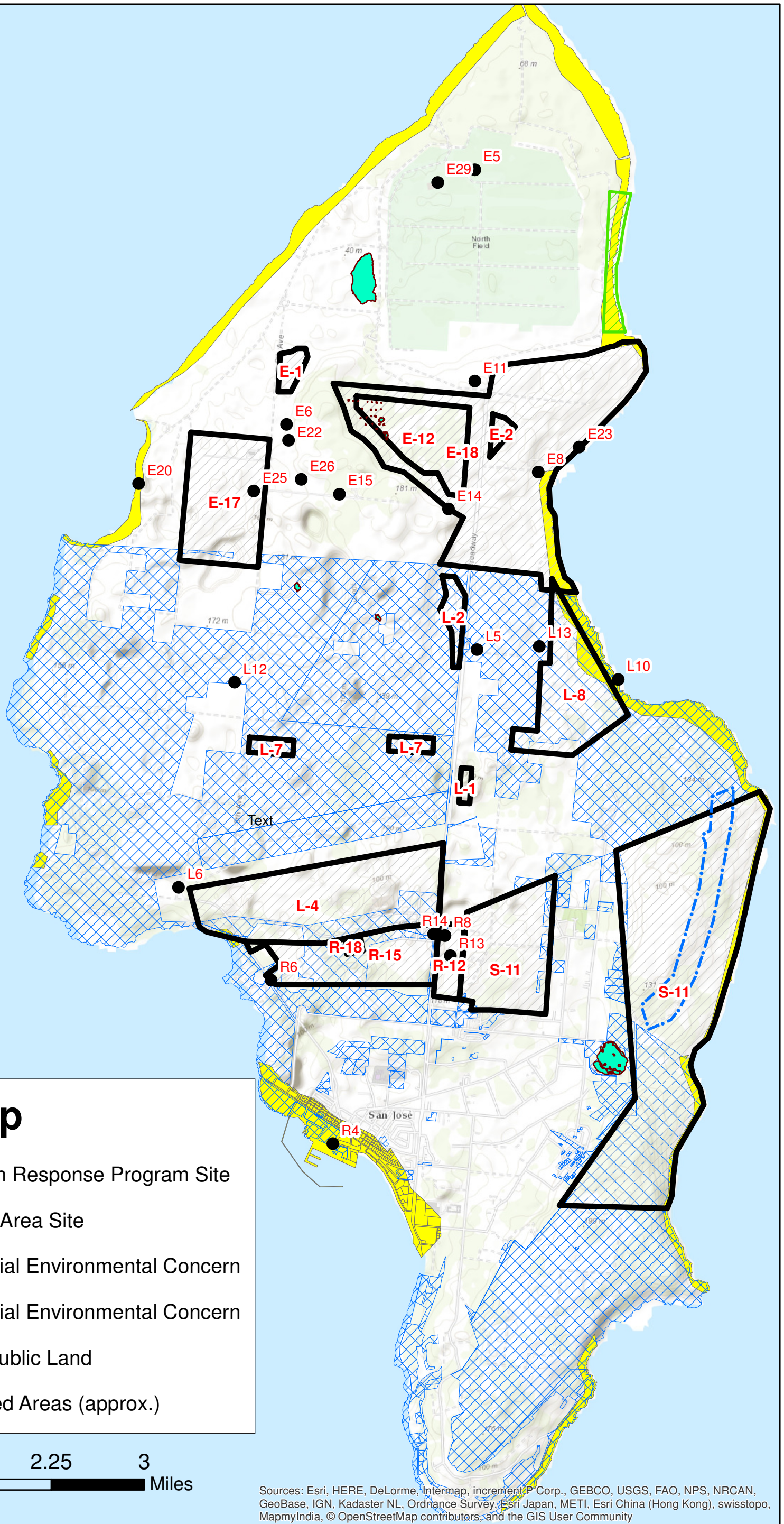
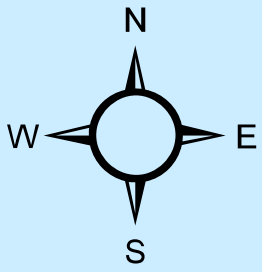
- Military Lease Area
- Private Lands
- Undeveloped Public Land
- Developed Public Land

0 0.375 0.75 1.5 2.25 3 Miles

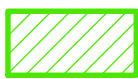





Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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Hazards Map

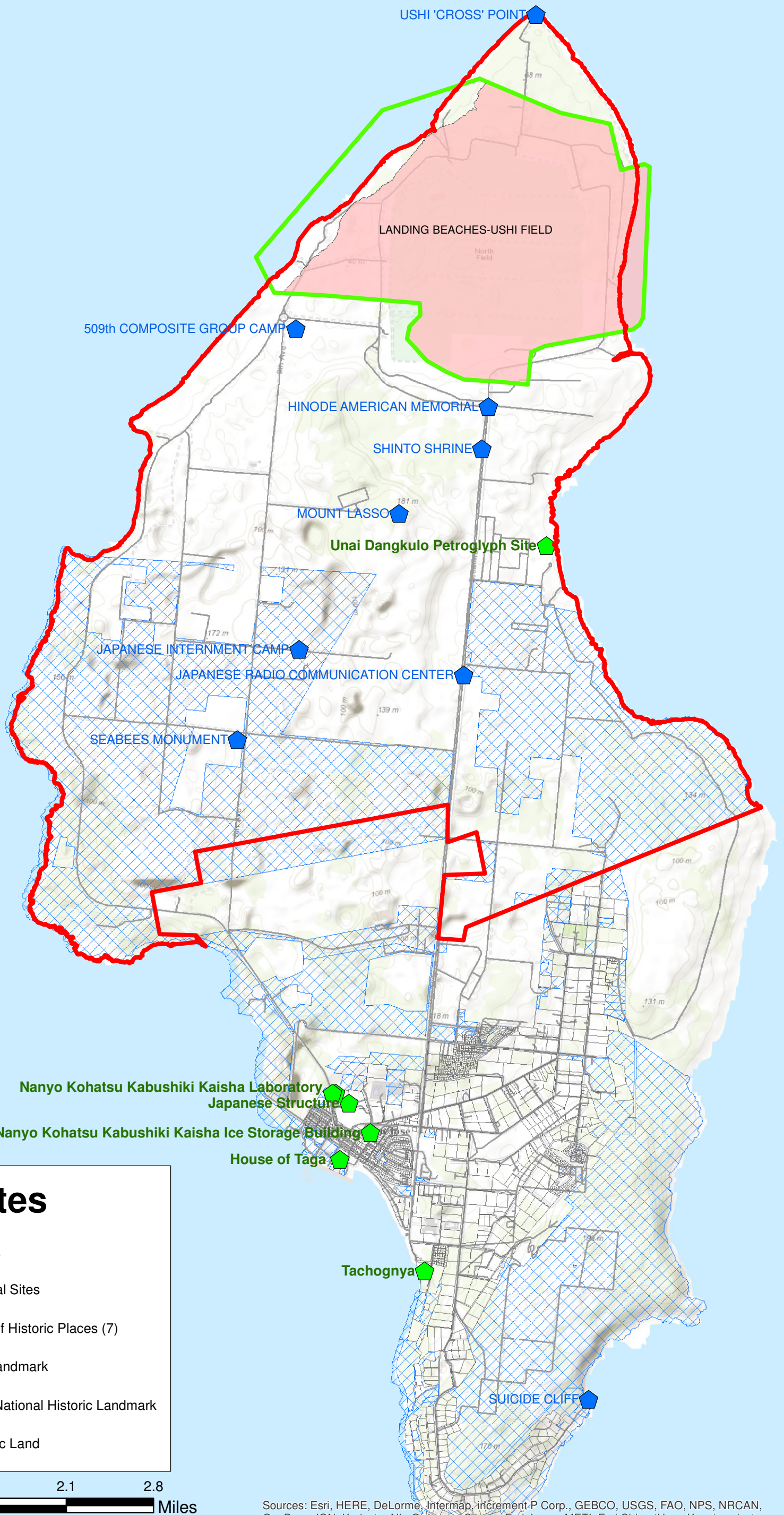
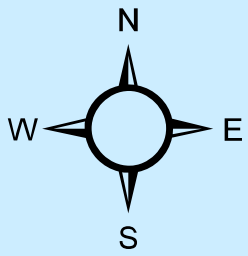
-  Military Munition Response Program Site
-  Masalog Ridge Area Site
-  Areas of Potential Environmental Concern
-  Areas of Potential Environmental Concern
-  Undeveloped Public Land
-  Tsunami Affected Areas (approx.)

0 0.375 0.75 1.5 2.25 3 Miles

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

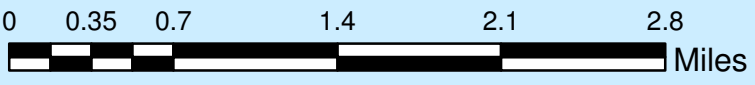
TINIAN





Historic Sites

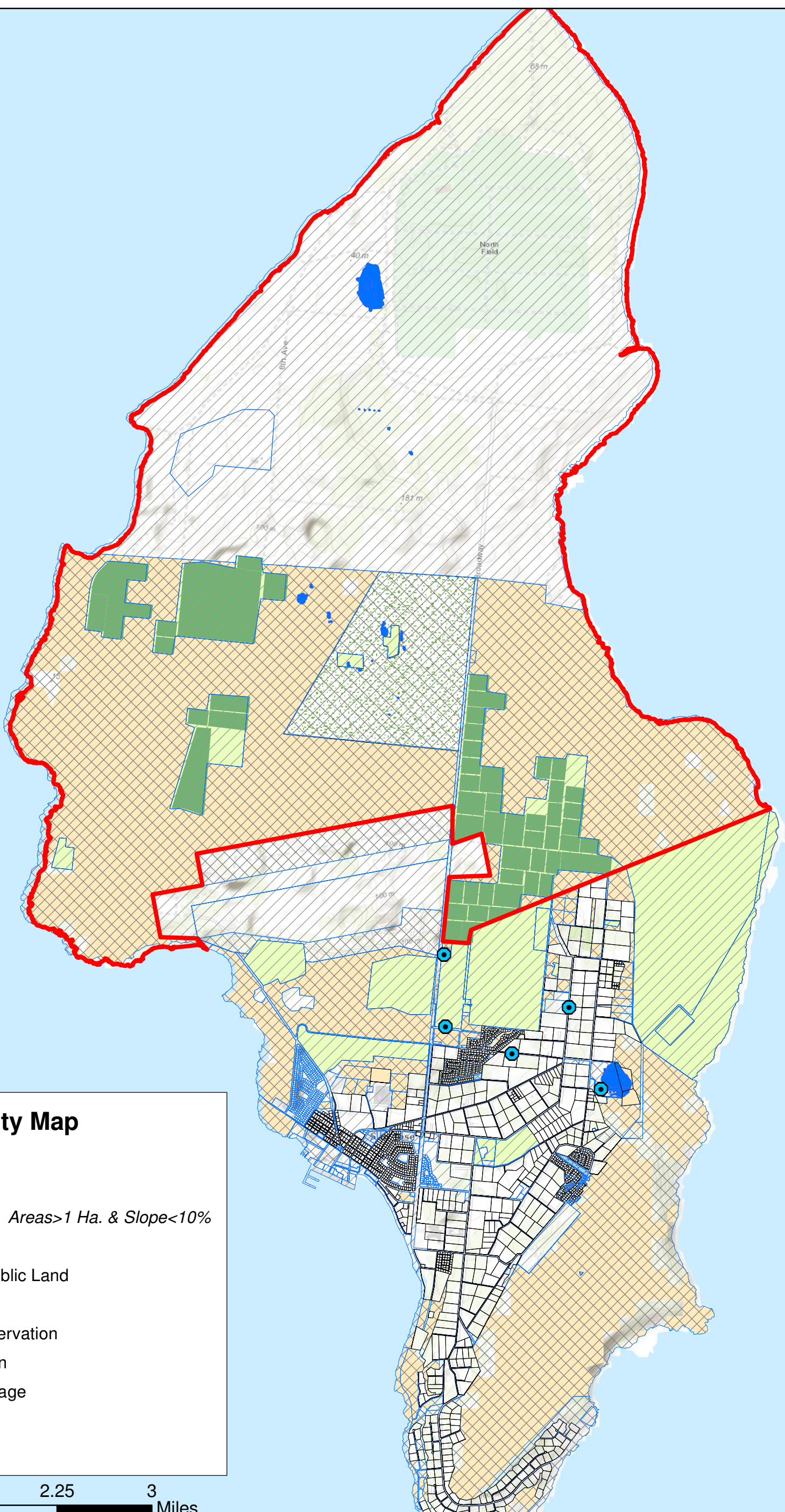
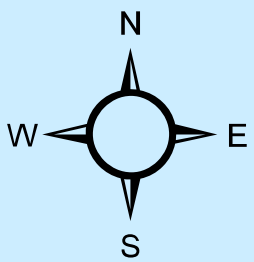
- Military Lease Area
- ◆ Historic and Cultural Sites
- ◆ National Register of Historic Places (7)
- National Historic Landmark
- Landing Beaches National Historic Landmark
- Undeveloped Public Land



Sources: Esri, HERE, DeLorme, Intermap, increment-P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

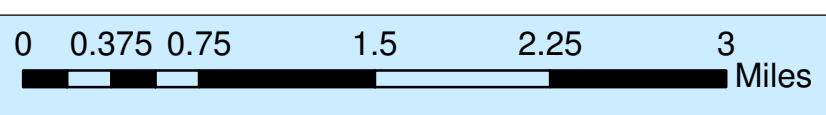
TINIAN





Public Land Suitability Map

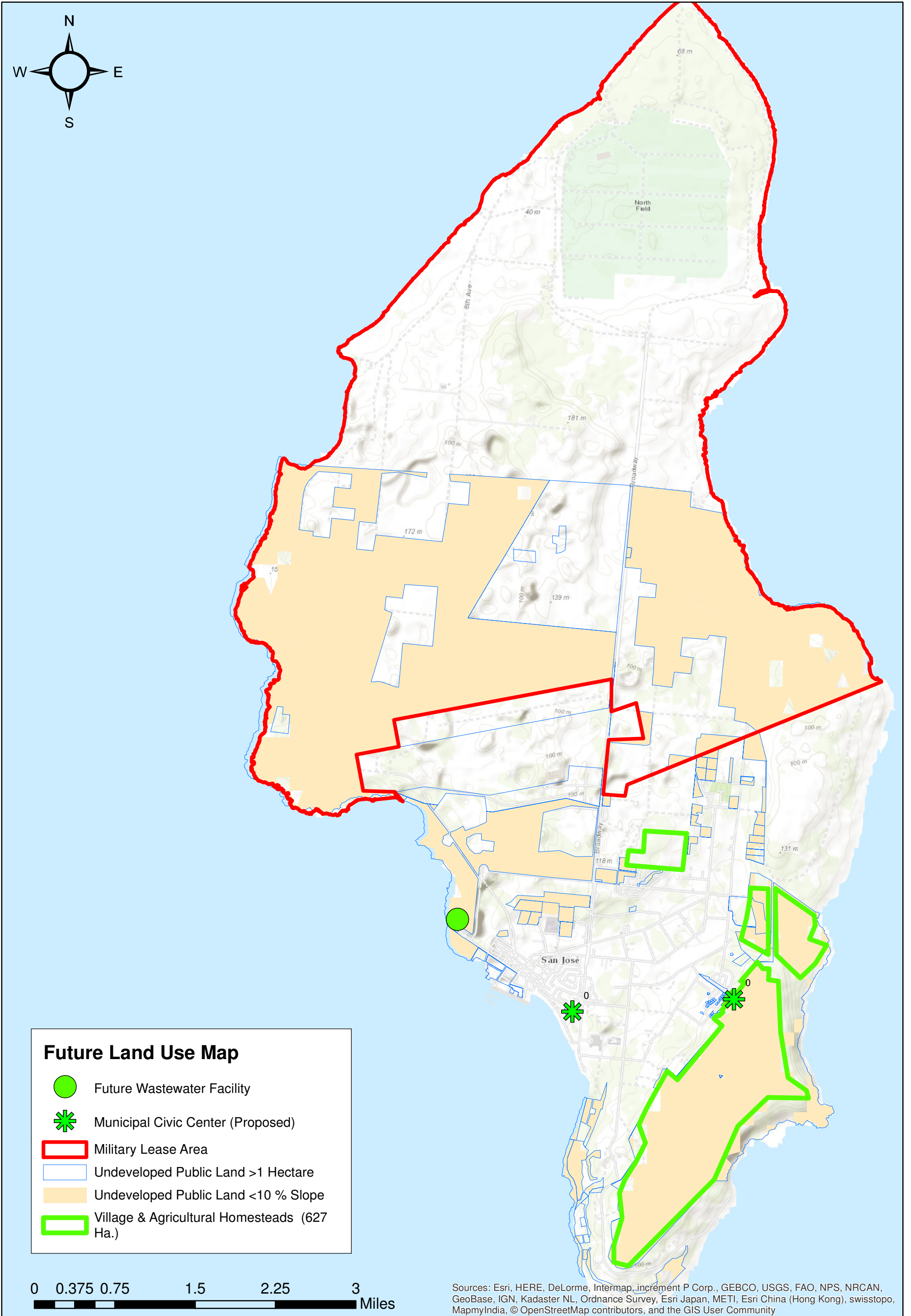
- Military Lease Area
- Undeveloped Public Land
- Undeveloped Public Land *Areas > 1 Ha. & Slope < 10%*
- Developed Public Land
- Developed Agricultural Public Land
- Agricultural Public Land
- Designated Wildlife Conservation
- Designated Ponding Basin
- Designated Natural Drainage
- Wetlands
- Water Wells



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

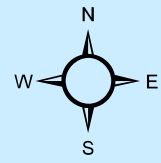
TINIAN





TINIAN





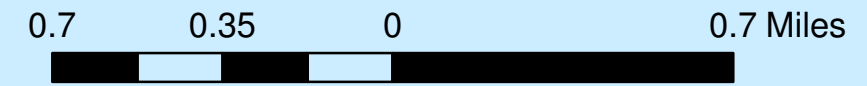
38 Hectares

Future Land Use

- Primary Potential Agricultural Homestead Site
- Secondary Potential Agricultural Homestead Site
- Contour Line



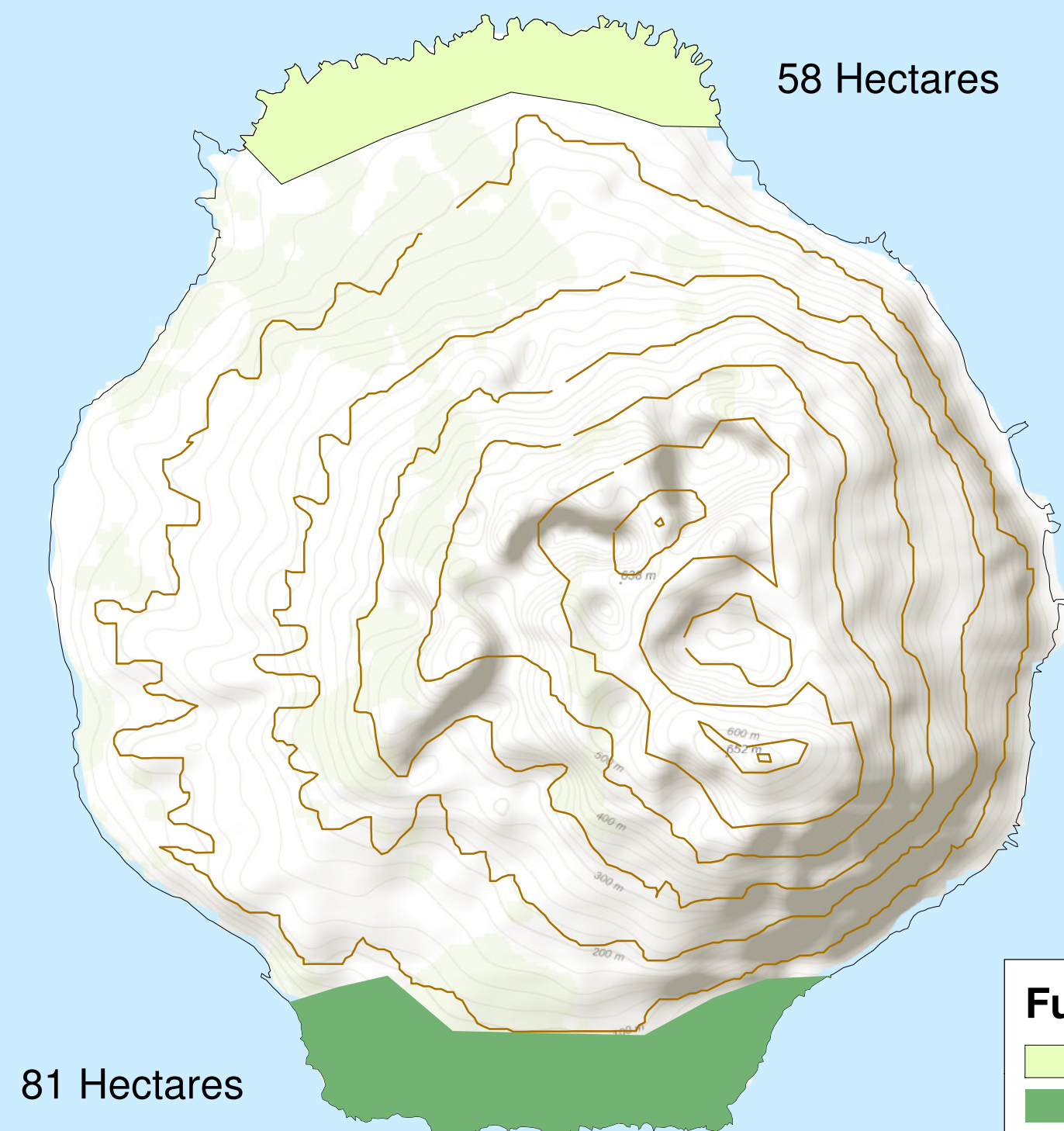
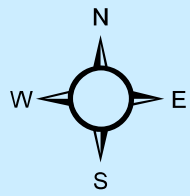
70 Hectares



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

ANATAHAN






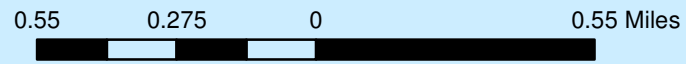


58 Hectares

81 Hectares

Future Land Use Map

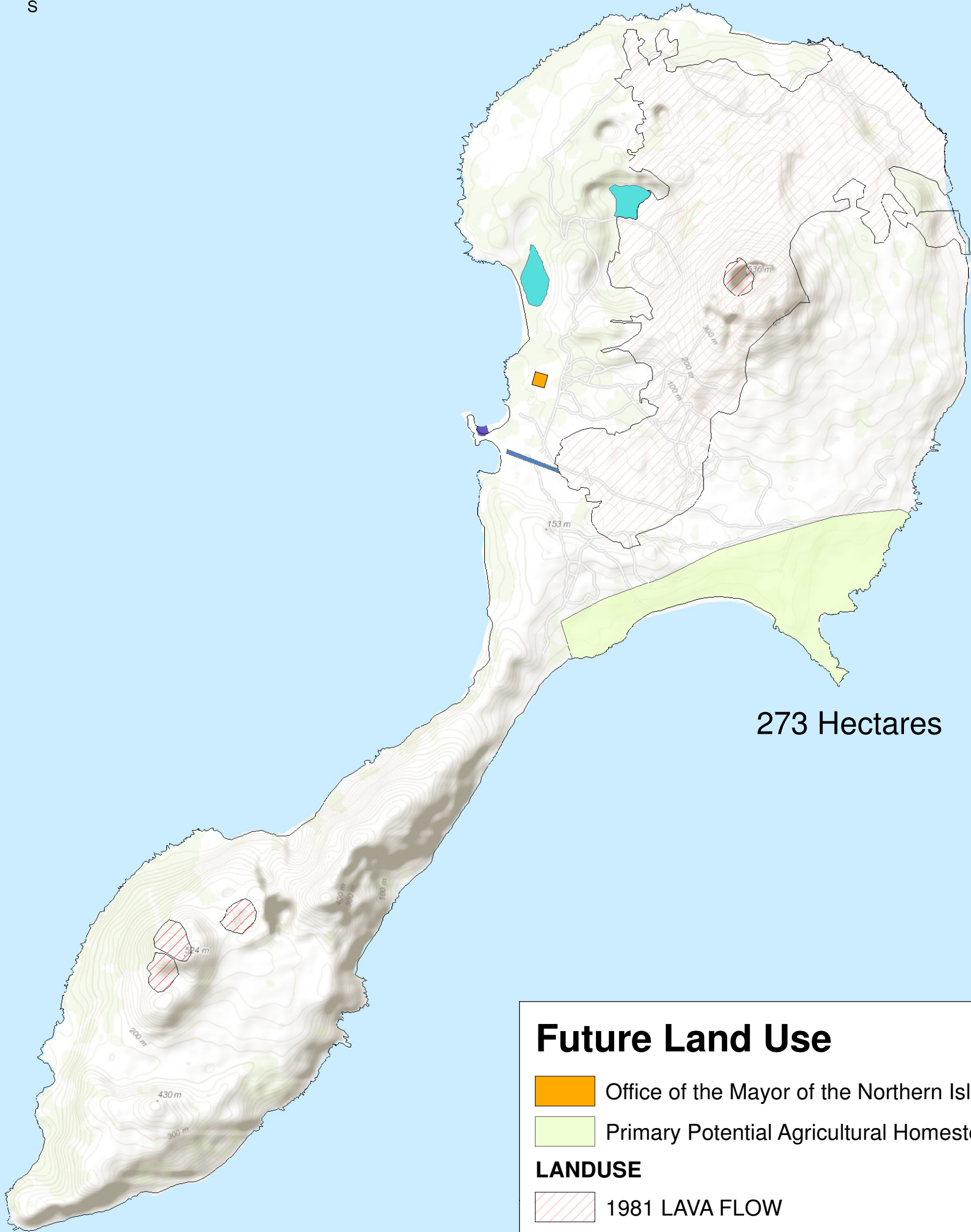
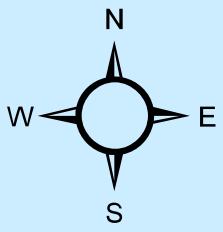
-  Primary Potential Agricultural Homestead Sites
-  Secondary Potential Agricultural Homestead Sites
-  CONTOUR_LINE



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community


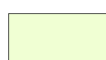




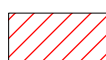
ALAMAGAN

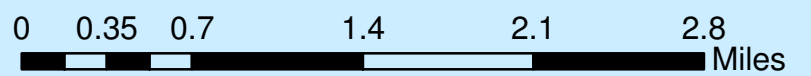




273 Hectares

Future Land Use

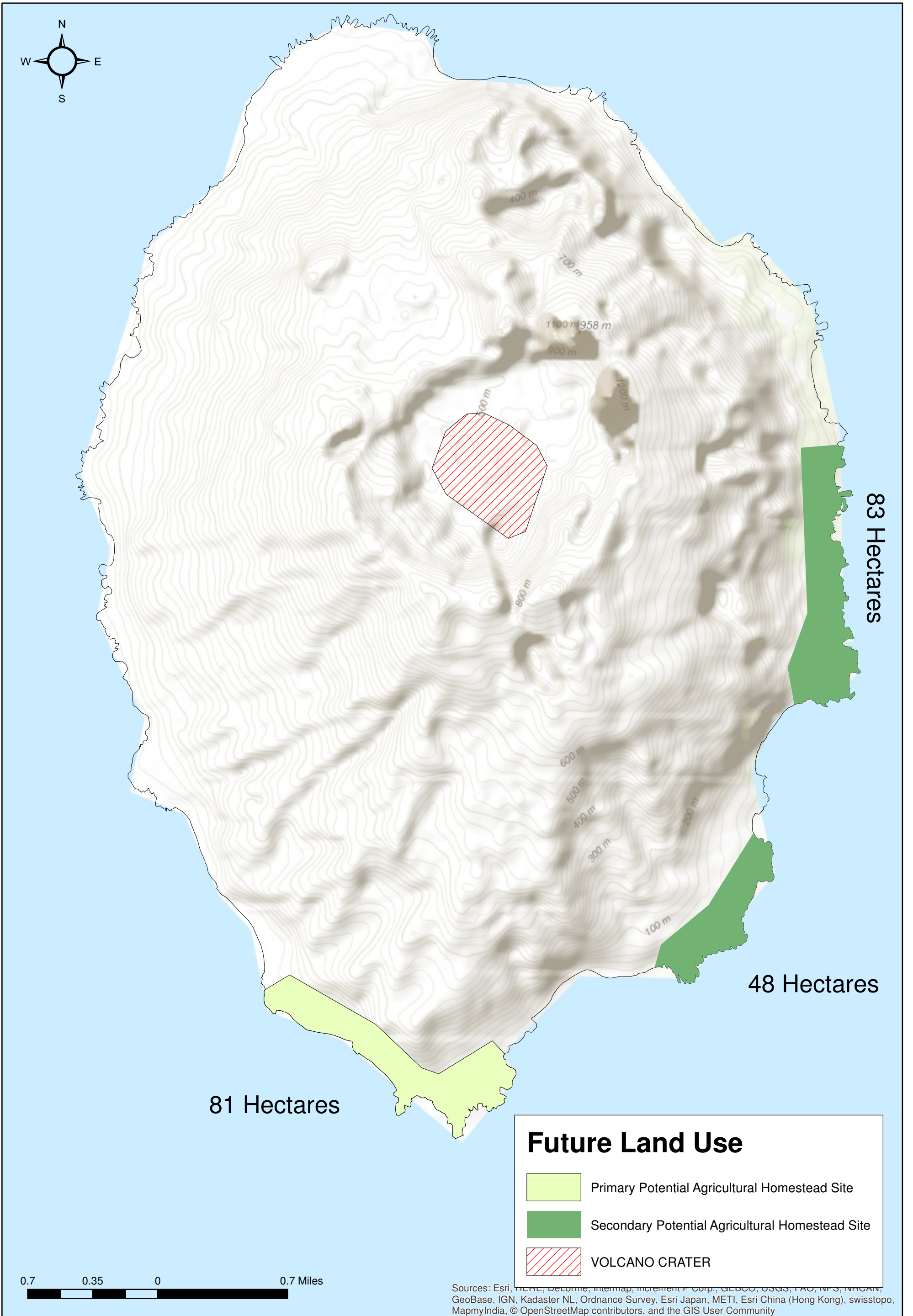
-  Office of the Mayor of the Northern Islands
-  Primary Potential Agricultural Homestead Site
- LANDUSE**
-  1981 LAVA FLOW
-  GRASS/DIRT RUNWAY
-  LAKE
-  PAGAN LANDING
-  VOLCANO CRATER



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

PAGAN





AGRIHAN

Collaborative Team Mapping



➤ We are requesting your hands-on participation:

➤ Please separate into two equal numbered Collaborative Teams

➤ We will be marking the maps with your Collaborative Team's proposed locations for:

- Village Homestead
- Agricultural Homestead
- Natural Resources: Springs, Groundwater, Quarries, Habitat, Wetlands
- Historic & Cultural Resources: Important Sites or Areas
- Community Use: Prime Recreation Areas, Shoreline Access, Scenic Resources, Community Centers
- Community Facilities: Schools, Hospitals, Transportation Corridors or other needs
- Land Exchange: Areas where Exchange awards should occur
- Hazardous Materials: Contaminated Sites
- Lease for Economic Development: Commercial, Industrial, Resort, Recreation, Eco-Tourism
- Possible Free Trade Zones

Comment Period Will Come to an End: June 15, 2018



Please contribute your input

- At Public Hearings
 - In Oral Statements
 - In Written Comments (Forms)
 - Stakeholder forms available from <http://www.dpl.gov.mp/land-use-plan-resources/>
- Via Email to SSFM CNMI, LLC
 - rreyes@pegssmp.com