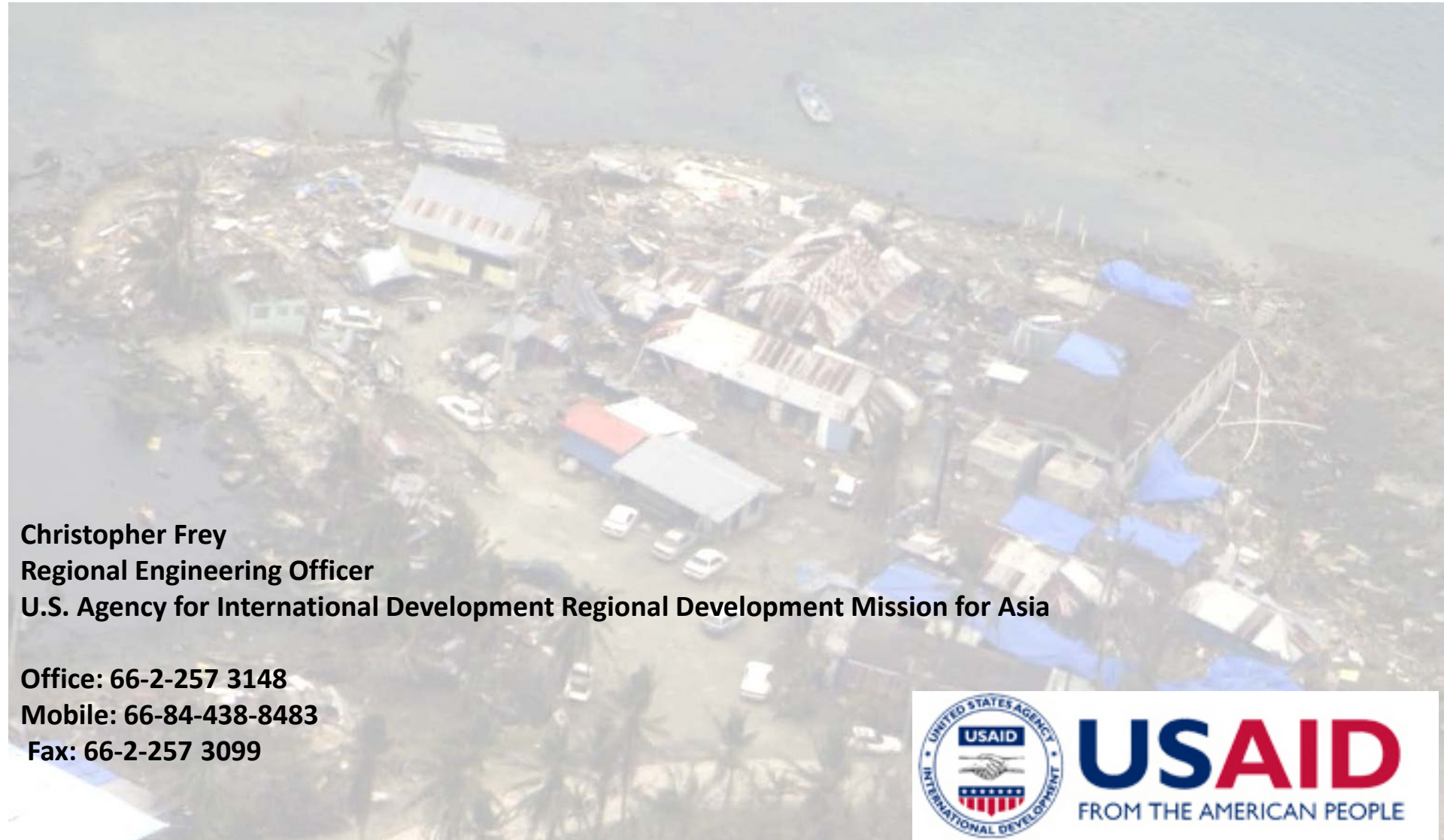


# TECHNOLOGY FOR POST-DISASTER RECONSTRUCTION PLANNING AND MONITORING



**Christopher Frey**  
**Regional Engineering Officer**  
**U.S. Agency for International Development Regional Development Mission for Asia**

**Office: 66-2-257 3148**  
**Mobile: 66-84-438-8483**  
**Fax: 66-2-257 3099**



**USAID**  
FROM THE AMERICAN PEOPLE

# Disaster Preparedness for Effective Response: “PREPARE”

A five-year USAID-funded initiative to increase disaster-preparedness in the Federated States of Micronesia and the Marshall Islands



**USAID**  
FROM THE AMERICAN PEOPLE

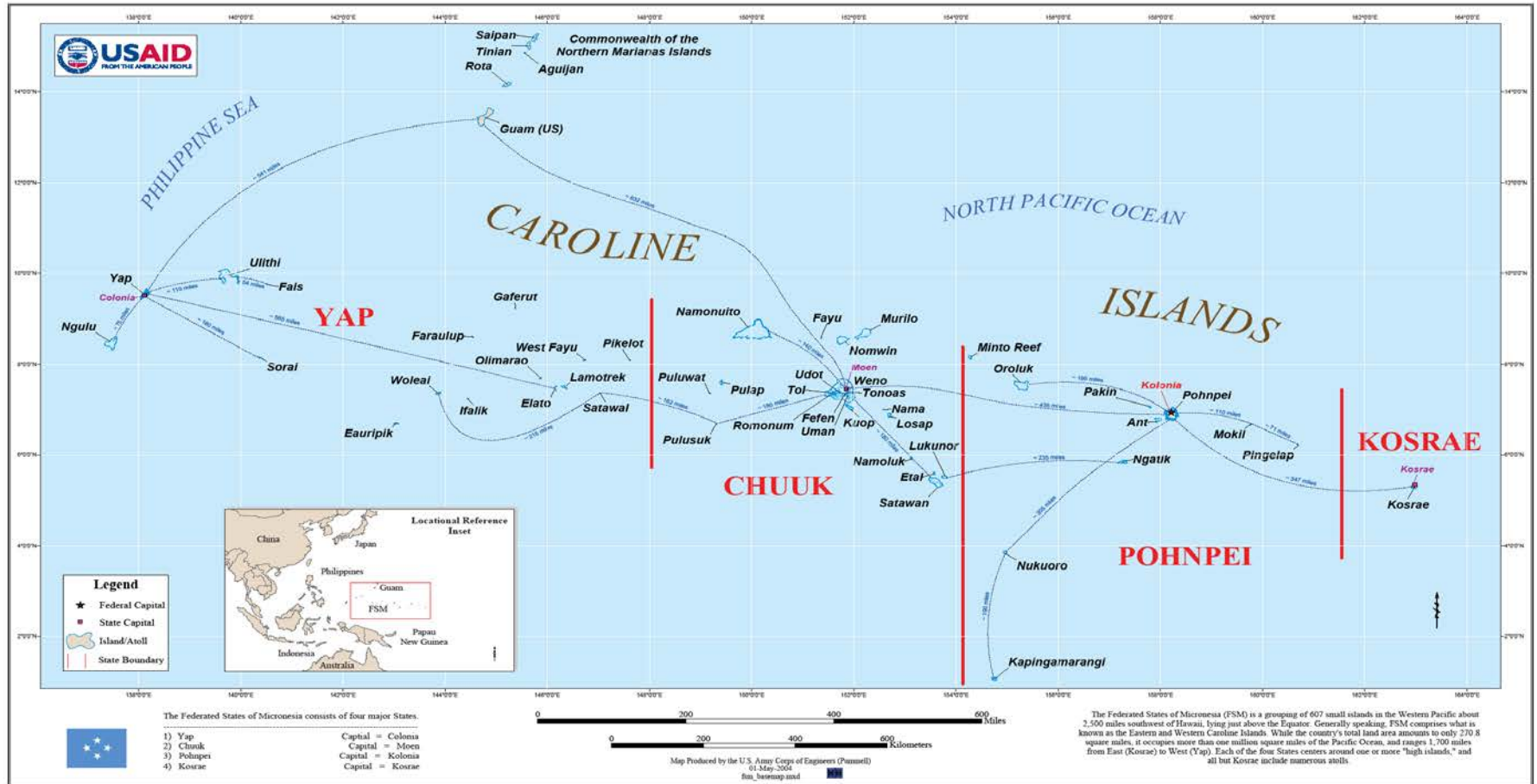


International Organization for Migration (IOM)



**FEMA**

# Federated States of Micronesia



**USAID**  
FROM THE AMERICAN PEOPLE



International Organization for Migration (IOM)



**FEMA**



# DISASTER STRIKES!



**USAID**  
FROM THE AMERICAN PEOPLE



International Organization for Migration (IOM)



**FEMA**



# Falalop Island, Yap State

## March 16, 2015



**USAID**  
FROM THE AMERICAN PEOPLE



International Organization for Migration (IOM)



**FEMA**



# Falalop Island, Yap State

## April 8, 2015



**USAID**  
FROM THE AMERICAN PEOPLE



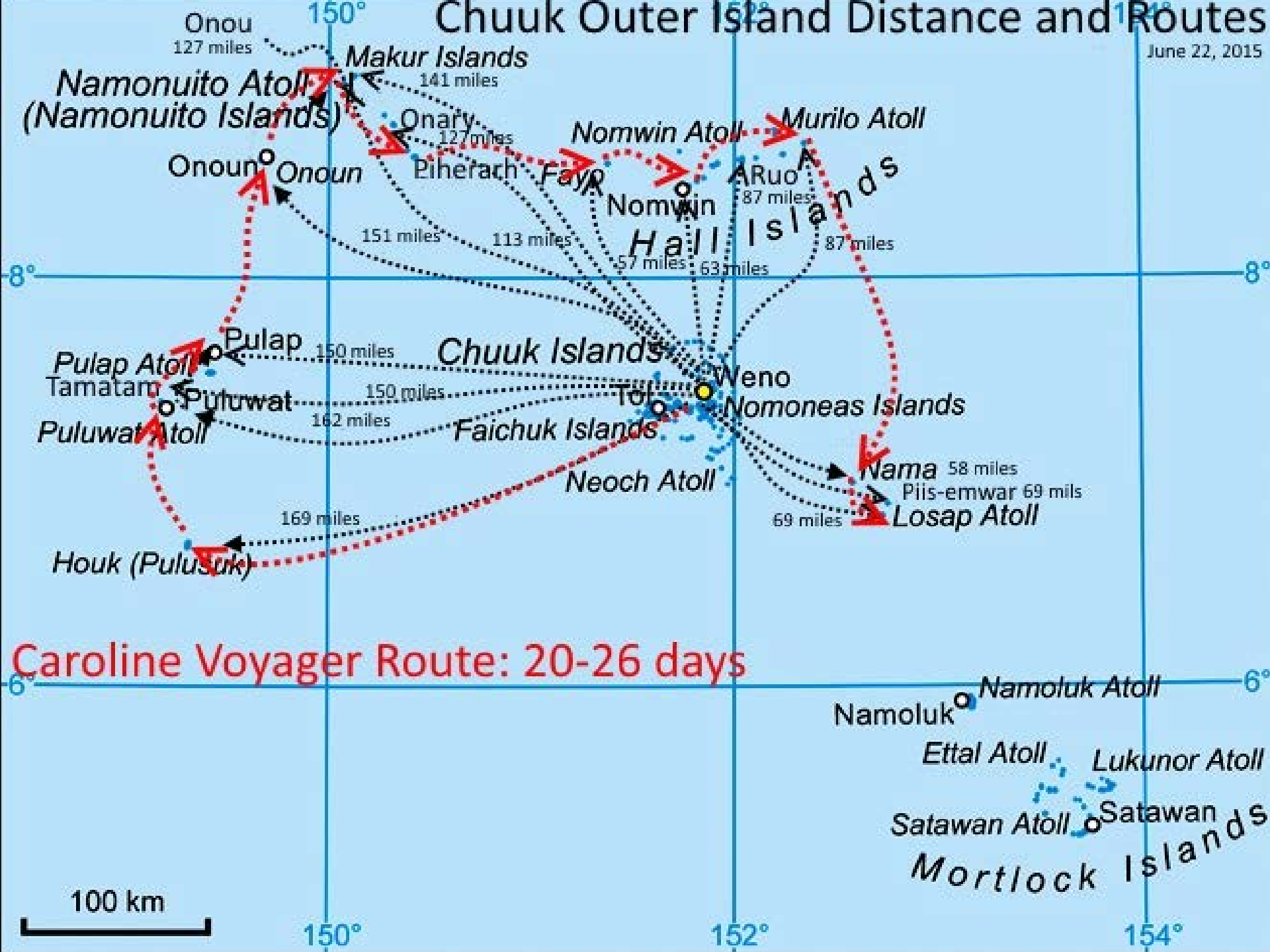
International Organization for Migration (IOM)



**FEMA**

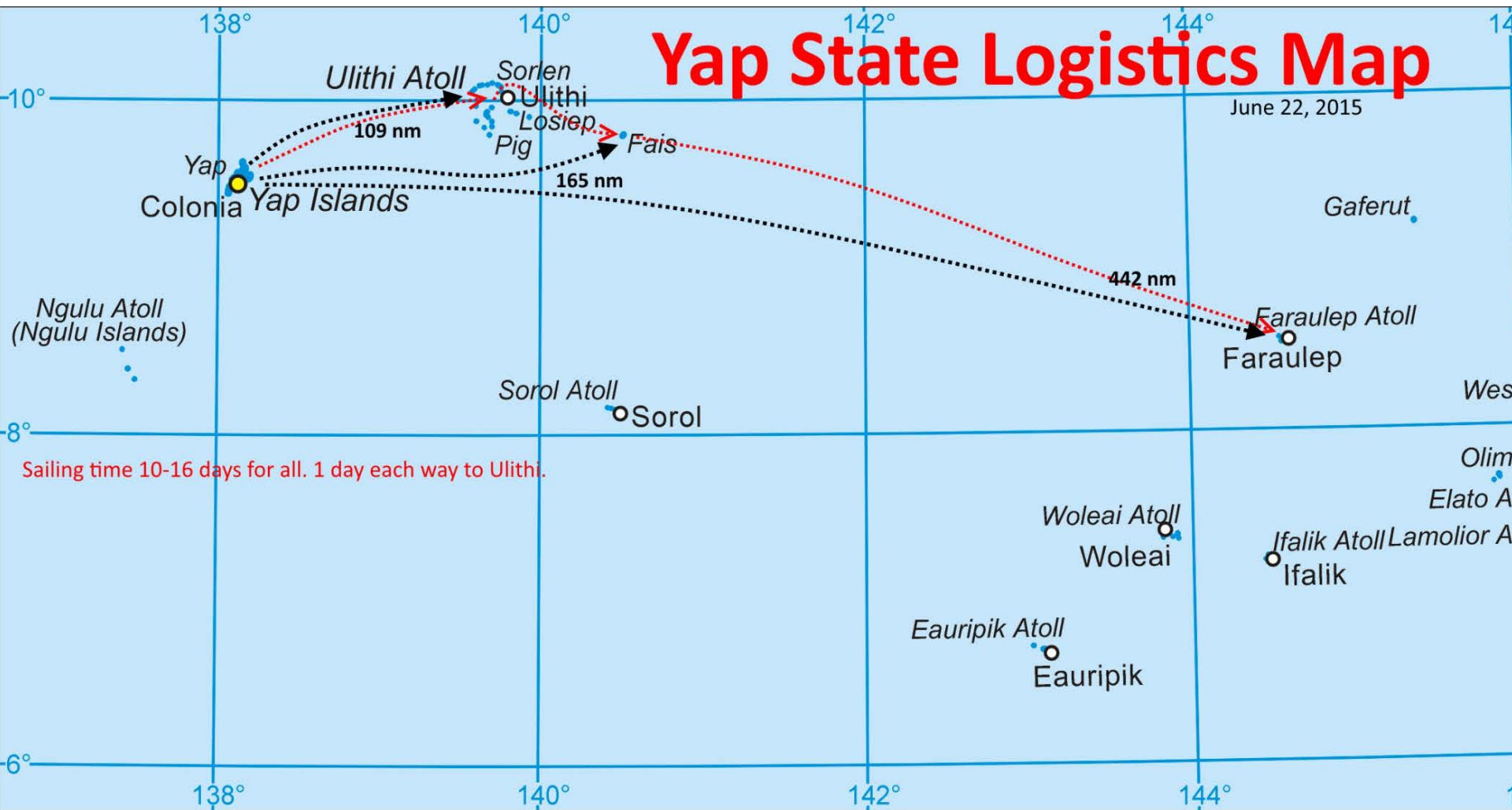
# Chuuk Outer Island Distance and Routes

June 22, 2015



# Yap State Logistics Map

June 22, 2015



**USAID**  
FROM THE AMERICAN PEOPLE



**FEMA**



# Relative Distances Between Island States



**USAID**  
FROM THE AMERICAN PEOPLE



International Organization for Migration (IOM)



**FEMA**



# Diverse communities, structures, and damage...



**USAID**  
FROM THE AMERICAN PEOPLE

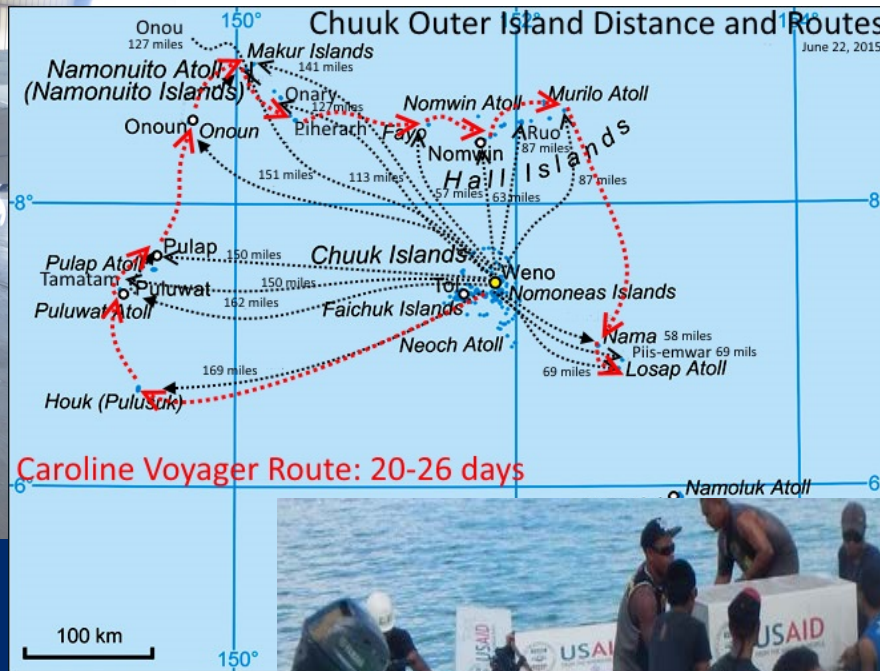


International Organization for Migration (IOM)



**FEMA**





...with challenging logistics



**USAID**  
FROM THE AMERICAN PEOPLE



International Organization for Migration (IOM)



**FEMA**





MOGMOG ISLAND 4/9/15

ARRIVE MOGMOG ISLAND @ 1:00 PM  
THURSDAY 4/9/15

COMMUNITY ASSISTANT: RINO FITIYO  
ASSESSMENT RESULT:

1. MOGMOG ELEMENTARY SCHOOL  
Bldg. 28' x 140' x 20' =  
3920 SF = \$78,400

a. Contents: \$ Desks, chairs, etc  
- \$10,000.00

b. Satellite dish -

2. LIBRARY Bldg 20' x 30'

a. MINOR ROOF Damage - \$5,000.00

b. \$ Contents - \$10,000.00

3. SCHOOL STORE Bldg 24' x 12'  
288 SF x 70 = \$20,160.00



**USAID**  
FROM THE AMERICAN PEOPLE



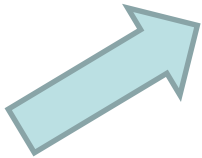
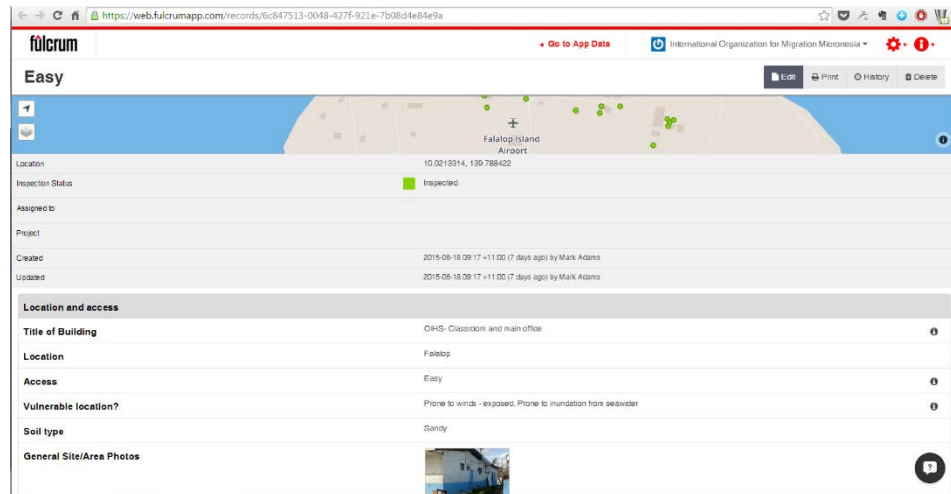
International Organization for Migration (IOM)

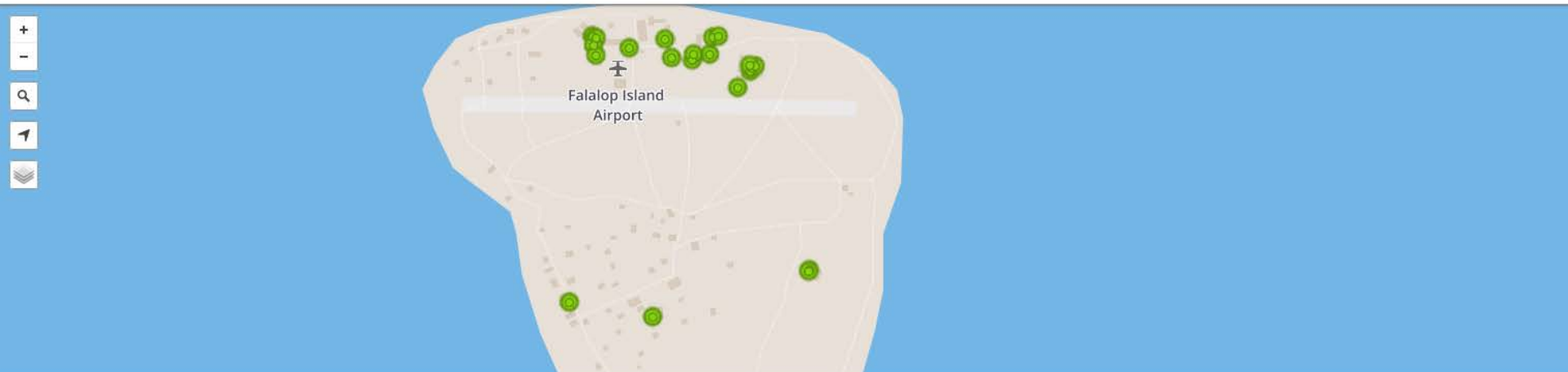


**FEMA**



# Thinking different...





| ↔ | Inspection Status | Version | Created                 | Updated                 | Created By | Updated By | Assigned | Project | Title of Building         | Location | Access | Vulnerable location?     |
|---|-------------------|---------|-------------------------|-------------------------|------------|------------|----------|---------|---------------------------|----------|--------|--------------------------|
| + | Inspected         | 1       | 2015-06-19 19:15 +11:00 | 2015-06-19 19:15 +11:00 | Mark Adams | Mark Adams |          |         | YSPSC - PUMP House        | Falalop  | Easy   | Prone to winds - exposed |
| + | Inspected         | 1       | 2015-06-19 18:57 +11:00 | 2015-06-19 18:57 +11:00 | Mark Adams | Mark Adams |          |         | YSPSC-office              | Falalop  | Easy   | Prone to winds - exposed |
| + | Inspected         | 1       | 2015-06-19 18:56 +11:00 | 2015-06-19 18:56 +11:00 | Mark Adams | Mark Adams |          |         | YSPSC - FUEL storage shed | Falalop  | Easy   | Prone to winds - exposed |
| + | Inspected         | 1       | 2015-06-19 18:56 +11:00 | 2015-06-19 18:56 +11:00 | Mark Adams | Mark Adams |          |         | YSPSC - POWER Plant       | Falalop  | Easy   | Prone to winds - exposed |
| + | Inspected         | 1       | 2015-06-19 18:56 +11:00 | 2015-06-19 18:56 +11:00 | Mark Adams | Mark Adams |          |         | YSPSC-Shop                | Falalop  | Easy   | Prone to winds - exposed |



|          |                        |
|----------|------------------------|
| Location | 8.6899417, 152.3386624 |
|----------|------------------------|

## Main Sleeping Home Damage - Photos

Explain: "I am representing the Chuuk State Government and the purpose of this survey to determine how Typhoon Maysak changed the primary sleeping home of family on the property and your water sources."

Note: if the structure is "fully destroyed," take pictures of where the foundation of the building was, and also of the damaged or disassembled materials.

Take several photos of the main sleeping home

Main Sleeping Home - Photos

Take several photos of RAINWATER HARVESTING - ROOFING, GUTTERING, and WATER CATCHMENT.

RAINWATER HARVESTING - ROOFING, GUTTERING, and WATER CATCHMENT - Photos

Take other significant property damage photos

## Dates and interviewer info

Enter date of assessment 2015-06-09

Initials of interviewer Mm

## Locational information

Designate the region, municipality, and village of the household you are assessing.

Select the region NW Atolls

Municipality in NW ATOLLS Murillo

Village in MURILLO Saputiw

## Head of Household Info

Explain that you would like to discuss with the head of the household. This the person who makes key decisions and has the primary responsibility for managing household matters and is recognized as such by other household members.

Do you have the primary responsibility for managing household matters on this property? Yes

First Name of Head of Household Charles

Last Name of Head of Household Charest

Take a photo of the person you are interviewing.

Explain: "I need to take a picture of your identification card (if you have one), your social security card, and the person who verifies your identity."

Take a photo of the person who verifies identity of interviewee and, if possible, a photo of their identification card

Photo of individual verifying identification

Explain that if they misrepresent their identity or exaggerate about the level of storm damage that they can be disqualified from receiving any assistance

## Household Structure Survey

Explain that you now have specific questions about the damaged structure. For major damage or fully destroyed homes, ask them to describe the structure before the storm: how big? was it new? already falling apart? You do not need to document their answers, but their response will help you understand the pre-typhoon structure.

How many people slept in this shelter the night before the storm? 8

Is anyone staying in this structure now? Yes

Do you have other people staying in your home after the storm? No

## Water Sources

Explain that now you would like to discuss water sources on the property.

Make sure that you have taken pictures of any rainwater catchments and guttering on houses earlier in the survey; if not, go back to the beginning of the survey and take the photos.

Was your guttering and/or water catchment affected by the storm? Yes

Where did you get your water before the storm? rainwater

Did the storm change your drinking water source? Yes

What is your current water source after the storm? boiled rainwater

Does anyone in your family have more diarrhea since the storm? No

## Special Needs

How many people sleep on this piece of land most nights? 8

Explain that you need to know more about the people who sleep on the property and if they have any special needs, i.e. illness, disability, handicap, pregnancy, breastfeeding, or women with infants. You are going to take each of their names and document their special need on this survey.

## Signature and disclaimer

Collect interviewee signature

Interviewee Signature





status  
☐ No Status Filter

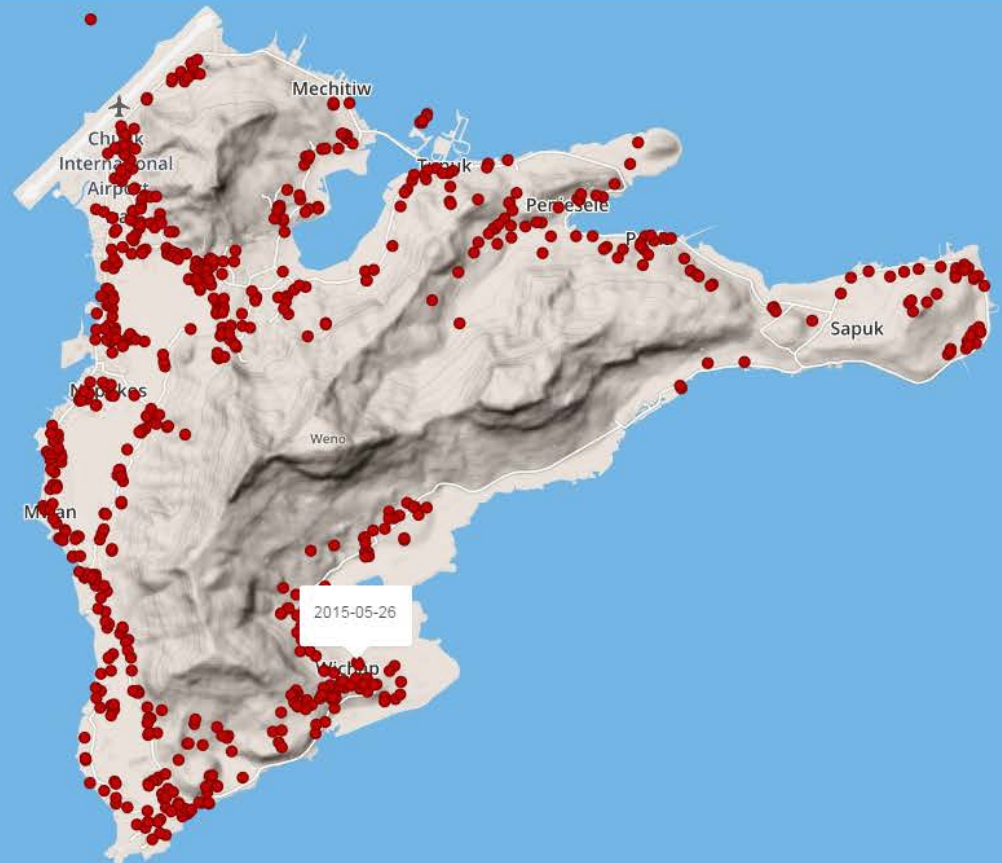
assigned to  
☐ No Assigned To Filter

project  
☐ No Project Filter







Thank You



**USAID**  
FROM THE AMERICAN PEOPLE



International Organization for Migration (IOM)



**FEMA**