

#MissingMinefields

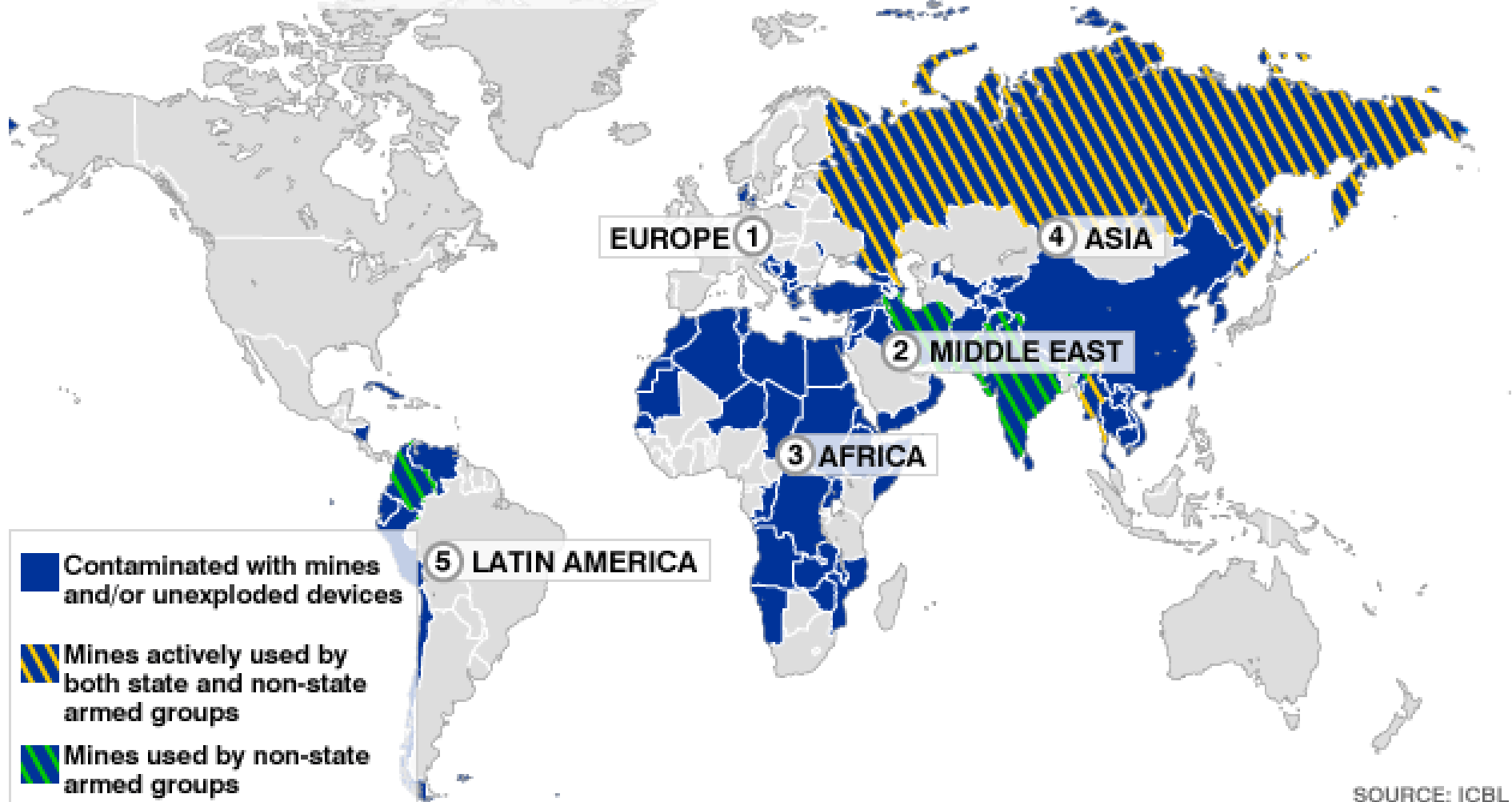
Missingminefields.github.io

Jonathan Witcoski
@mappingthings

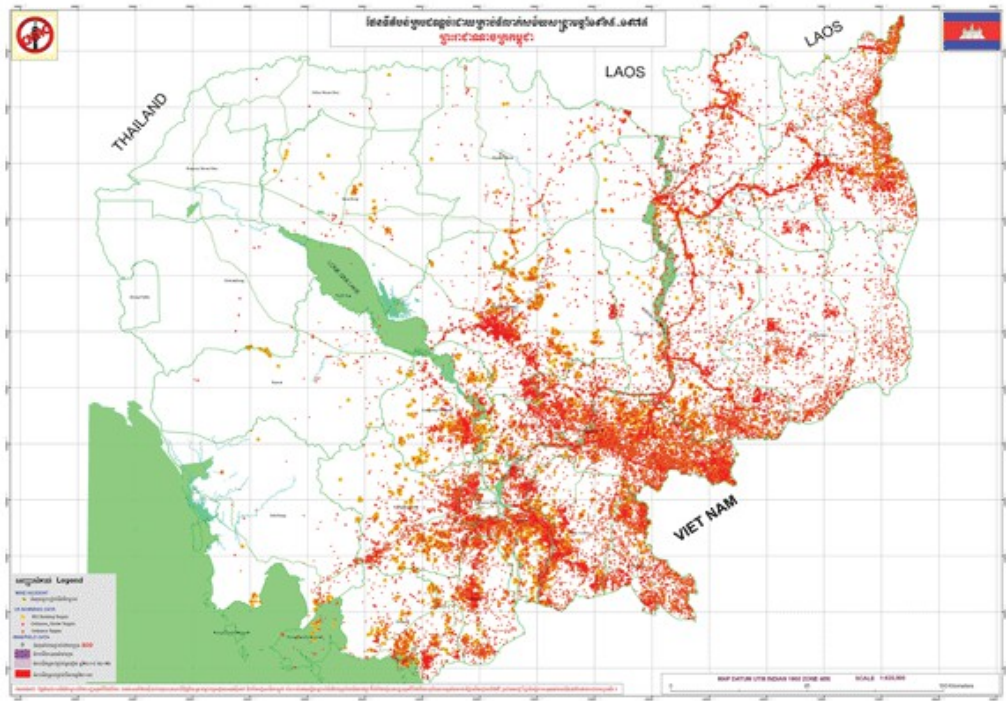
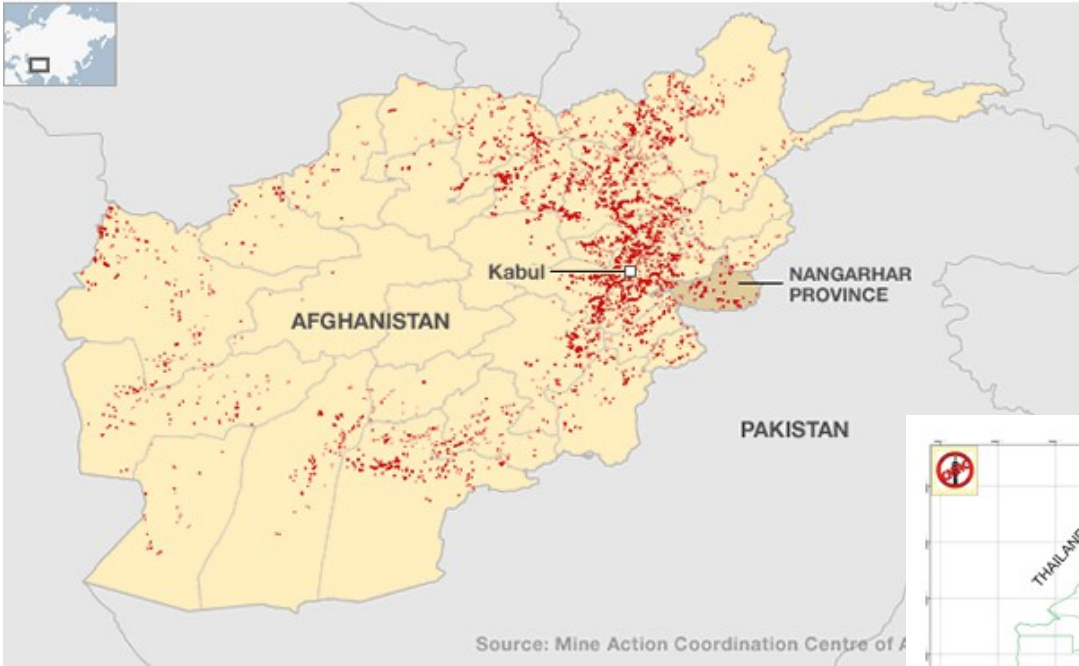


How Prolific are Minefields?

COUNTRIES AROUND THE WORLD AFFECTED BY MINES



Minefields in Afghanistan



How are they tracked?

STANLEY MINEFIELD AND AREA CLEARANCE SITUATION MAP AS AT 01 JAN 86

This map supersedes previously produced Stanley Minefield situation map dated 01 SEP 85



All parts of the Falkland Islands may contain dangerous materials and ammunition. **Do not touch anything suspicious.** Place a marker nearby and report it to the
JOINT SERVICES EOD
OPERATIONS CENTRE
Manned 24 hours a day.

Tel: Civil 460 2M Band: Bomb Disposal,
BFFI 2194 Stanley



Category 1 - GREEN. These areas have been exhaustively checked by the Royal Engineers and are believed to be safe.



Category 2- BLUE. There is no evidence at all that these areas contain minefields or booby traps. However they may contain unexploded bombs, ammunition, missiles etc.



Category 3 - RED. These areas are known to contain mines or booby traps. **DO NOT ENTER.** This includes all minefields that have a water line as a boundary.

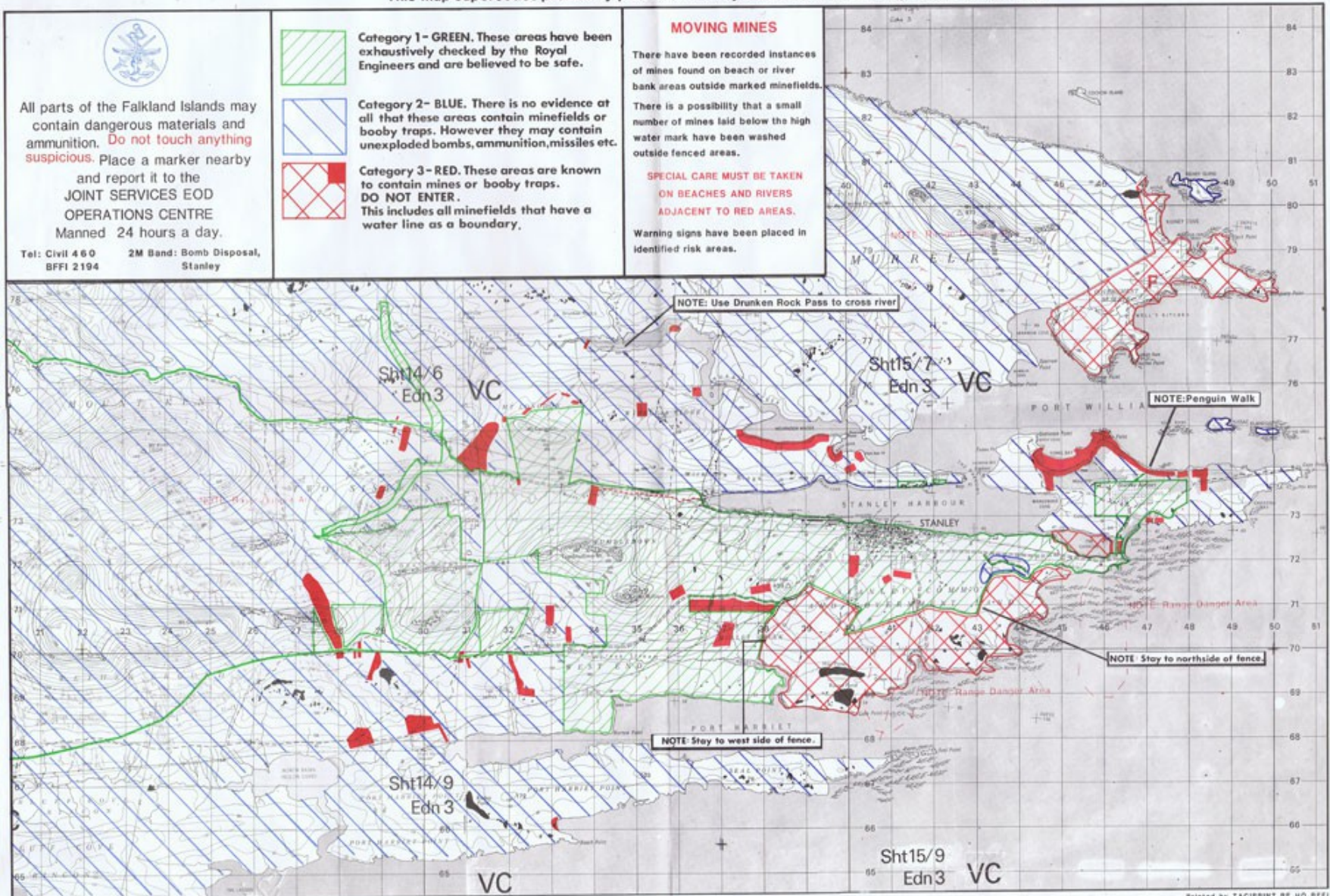
MOVING MINES

There have been recorded instances of mines found on beach or river bank areas outside marked minefields.

There is a possibility that a small number of mines laid below the high water mark have been washed outside fenced areas.

SPECIAL CARE MUST BE TAKEN
ON BEACHES AND RIVERS
ADJACENT TO RED AREAS.

Warning signs have been placed in identified risk areas.



BASIC MAP Scale 1:50,000 Series H731 Part Sheet Nos 14 and 15

Printed by TAGIPRINT RE HQ BFFI
12/85/5000/85832

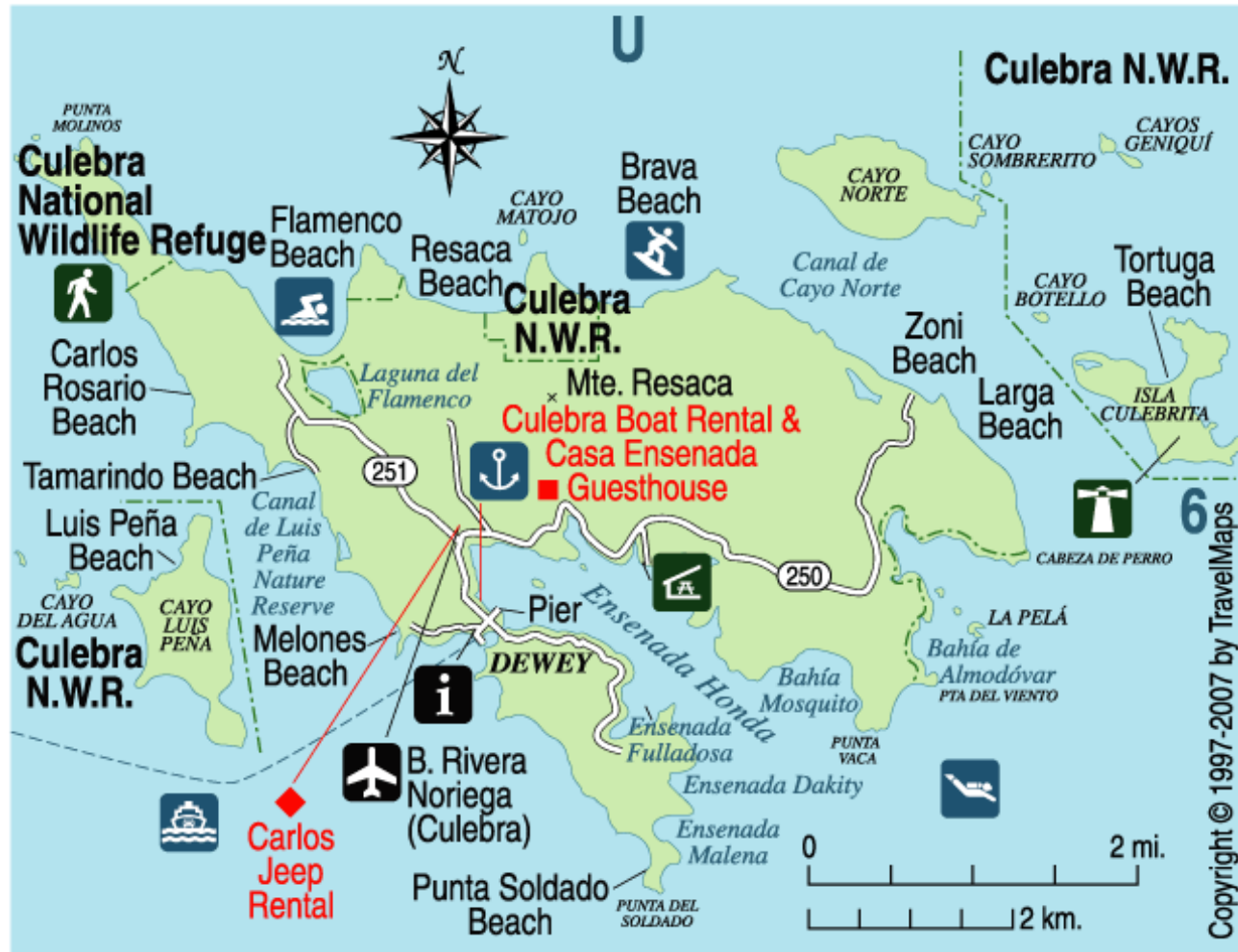


Study Area: Culebra, PR



Culebra

Culebra Island Map



Flamenco Beach



Flamenco Beach, Culebra
Find it at UncommonCaribbean.com

Department of Defense



Study Relating to the Presence of Unexploded Ordnance in a Portion of the Former Naval Bombardment Area of Culebra Island, Commonwealth of Puerto Rico

**Conducted Pursuant to Section 2815 of the Ike Skelton
National Defense Authorization Act for Fiscal Year 2011,
Public Law 111-383**

April 20, 2012



Legend

TRANSFER TO U.S. FISH AND WILDLIFE SERVICE
(23 MAR 78). USFWS PART OF LOT 91 (RESTRICTED AREA)

QUITCLAIM DEED TO COMMONWEALTH OF
PUERTO RICO (20 DEC. 82). COMMONWEALTH
OF PUERTO RICO PART OF LOT 91 (RESTRICTED AREA)

FLAMENCO CAMPGROUND

FLAMENCO BEACH

CARLOS ROSARIO TRAIL

CARLOS ROSARIO BEACHES



*U. S. ARMY CORPS OF ENGINEERS
JACKSONVILLE DISTRICT*

**CULEBRA ISLAND
PROPERTY # 102PR0068
CULEBRA ISLAND, PUERTO RICO**

PROJECT: JUNE 2011

PLATE NO.

1

Figure 1. Map of Study Area (Quitclaim Deed Boundary)

Danger Signs, Flamenco Beach



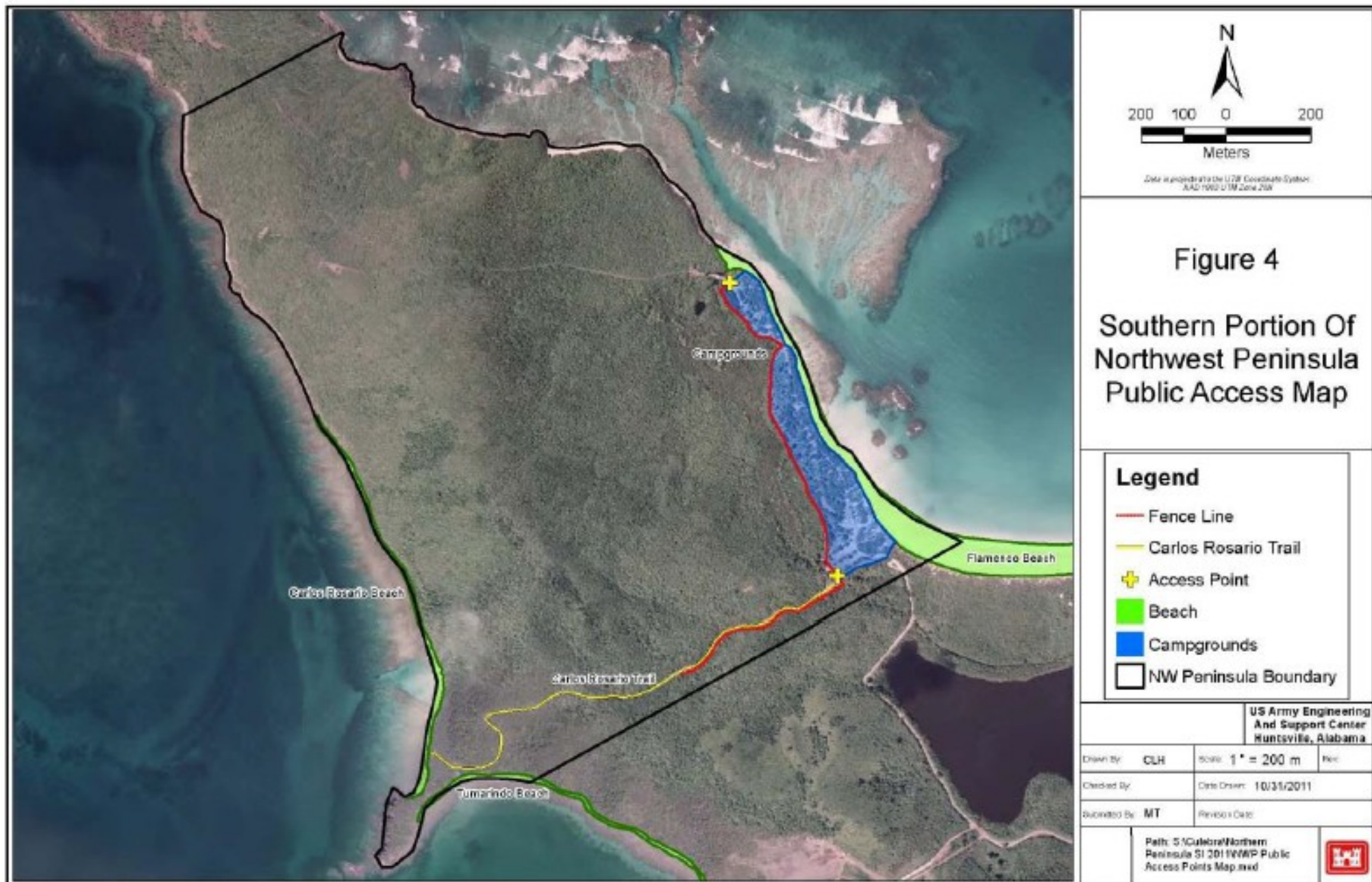


Figure 4. Public Access Map

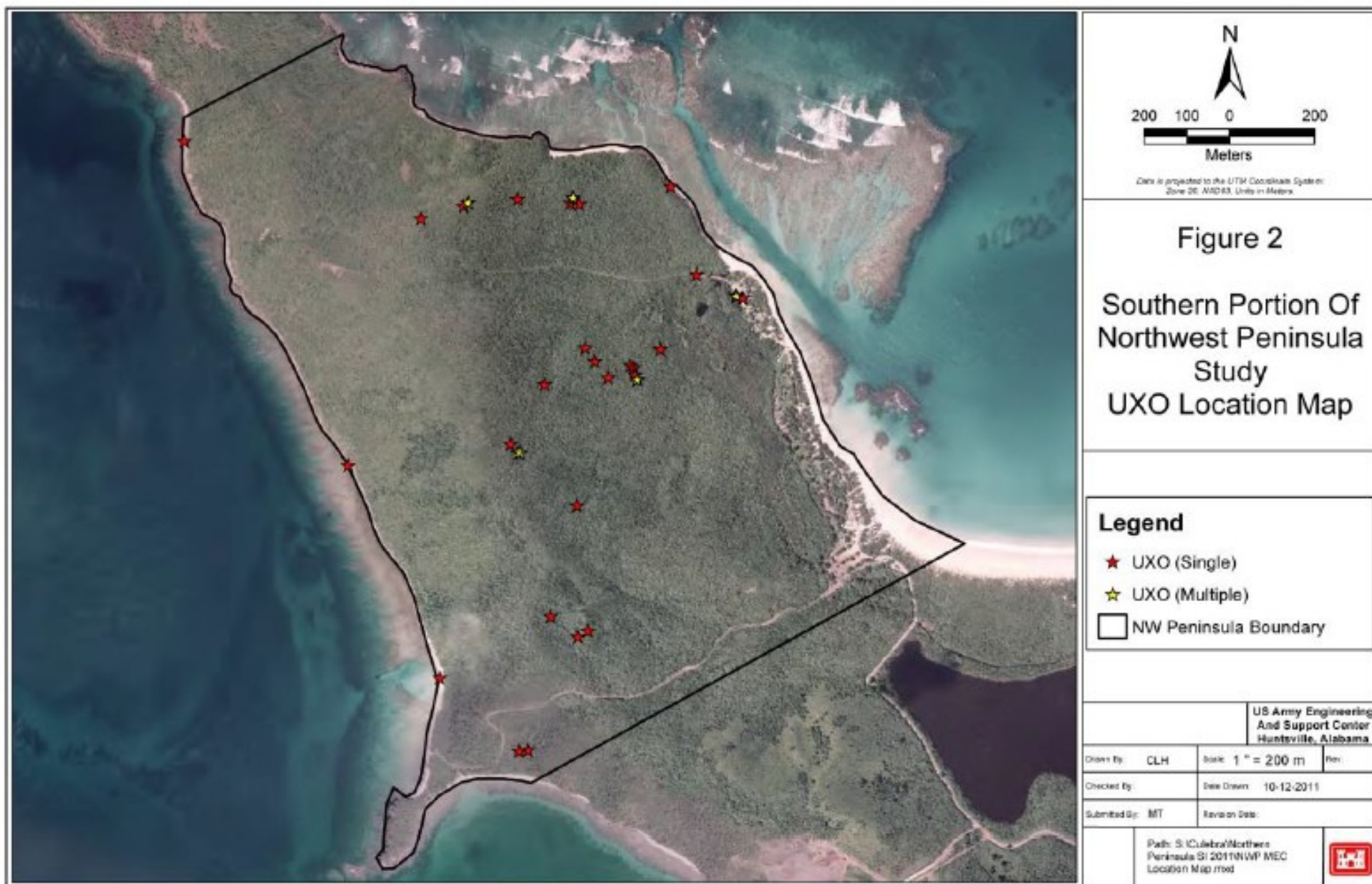


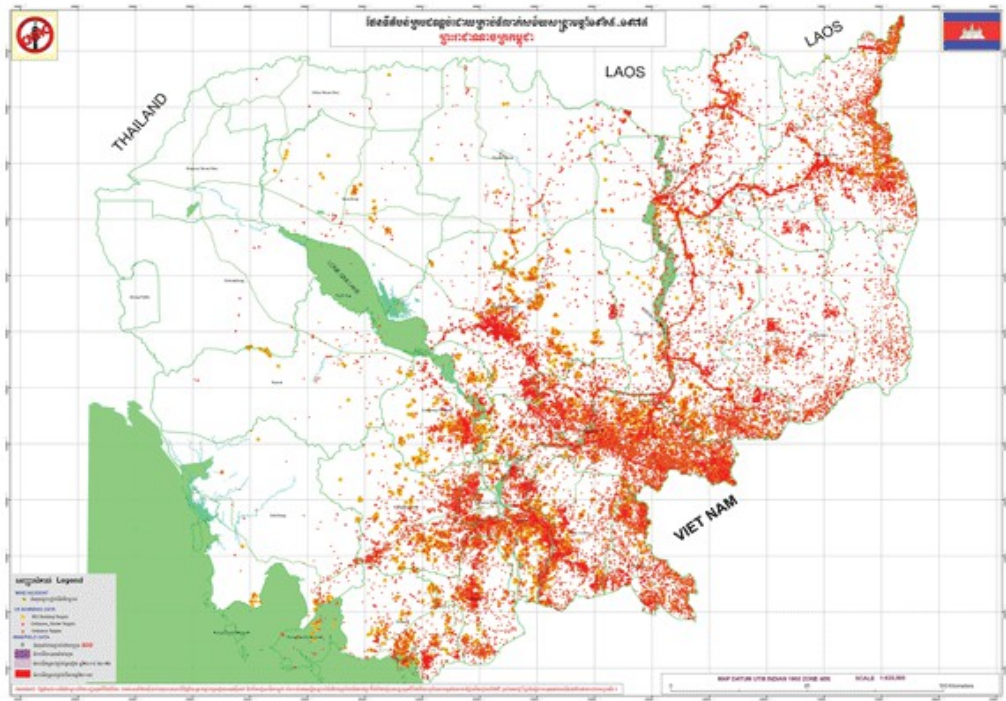
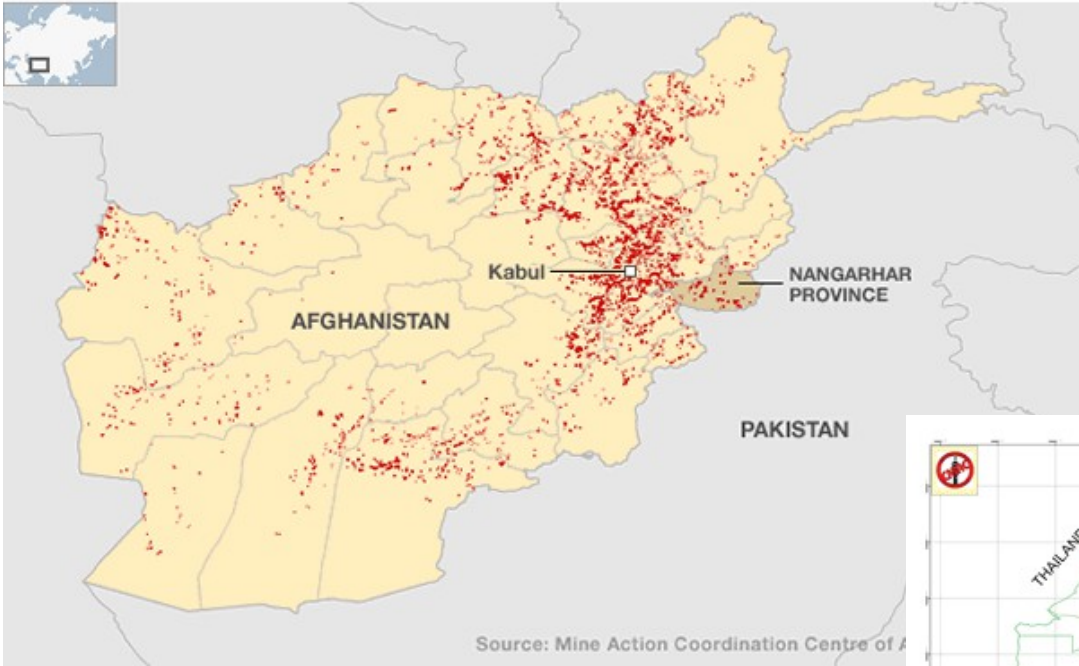
Figure 2. Locations of Individual or Multiple UXO



Table 1. Estimated Cost for UXO Removal from the Study Area

Area	Estimated Cost per Acre	Estimated Acreage	Estimated Subtotal Cost by Density Area
High density	\$115,211	115.19	\$13,271,155
High density, with steep slope	\$161,296	38.36	\$6,187,315
Medium density	\$104,454	65.48	\$6,839,648
Medium density with steep slope	\$146,236	22.96	\$3,357,579
Low density	\$96,366	90.24	\$8,696,068
Low density, with steep slope	\$134,912	75.77	\$10,222,282
Estimated Cost-to-Complete (CTC) for Removal Activities		408	\$48,574,047*
*Additional cost of \$490K required to prepare environmental documentation to implement removal activities.			

Minefields in Afghanistan



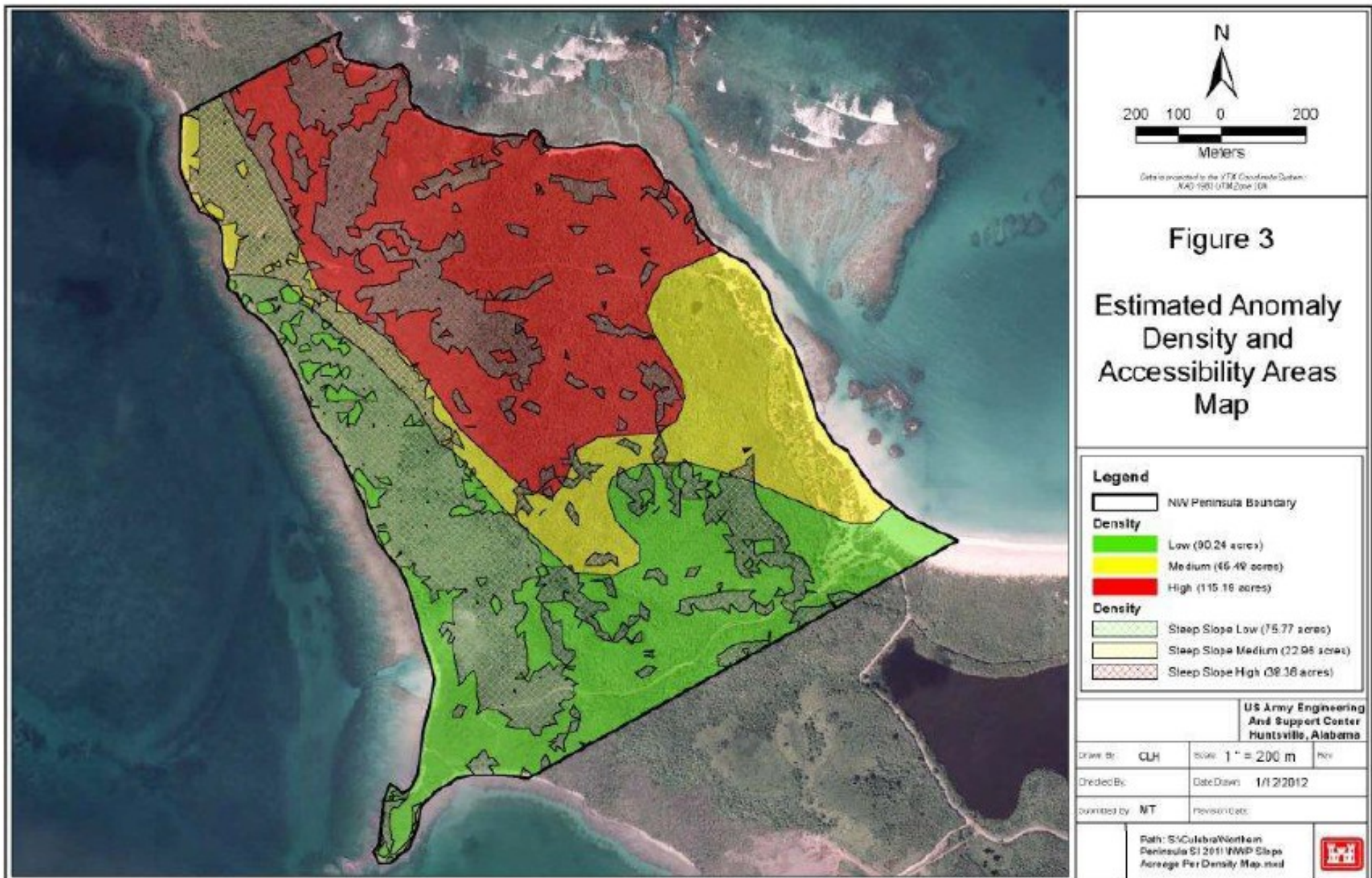
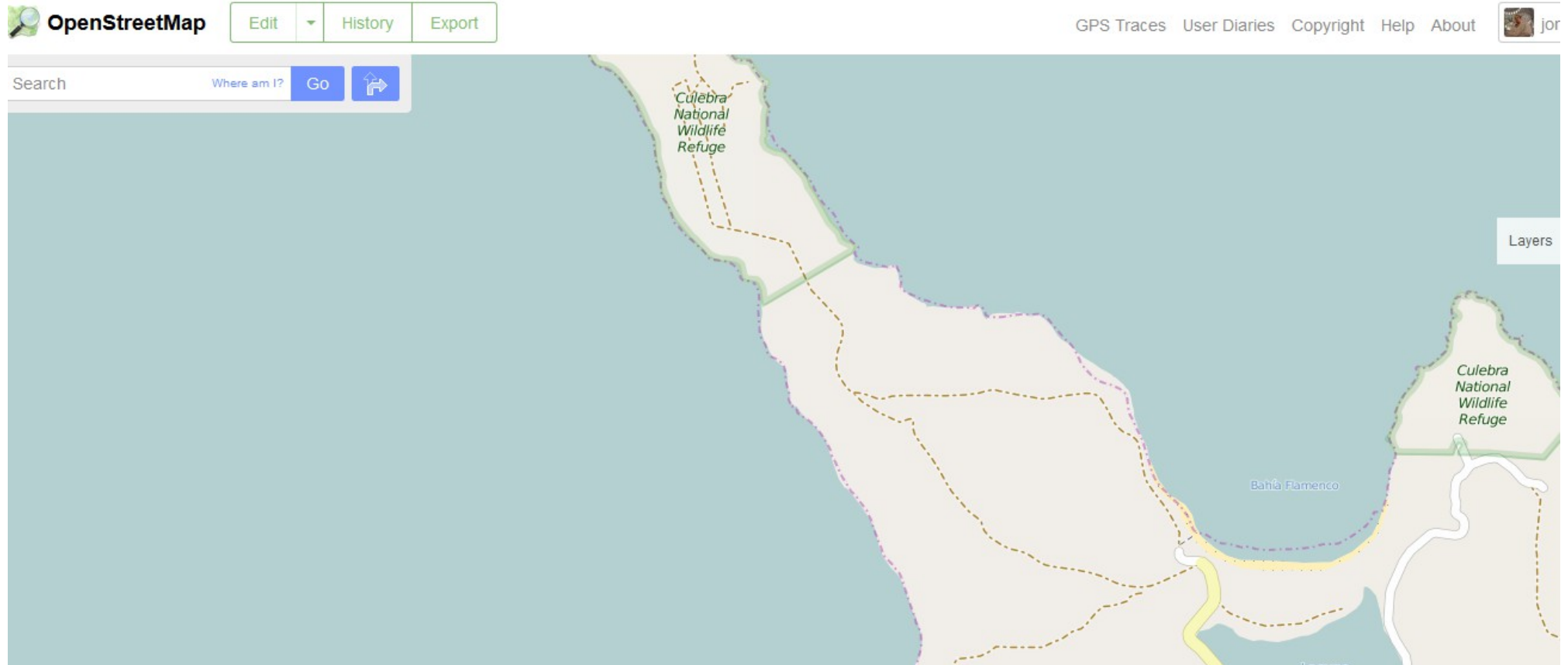


Figure 3. Estimated Anomaly Density and Accessibility Areas Map

Current OpenStreetMap



Tagging minefields



hazard=minefield

No English language description for this tag in the wiki. (See also the "Wiki" tab.)

Overview





Combinations

Map

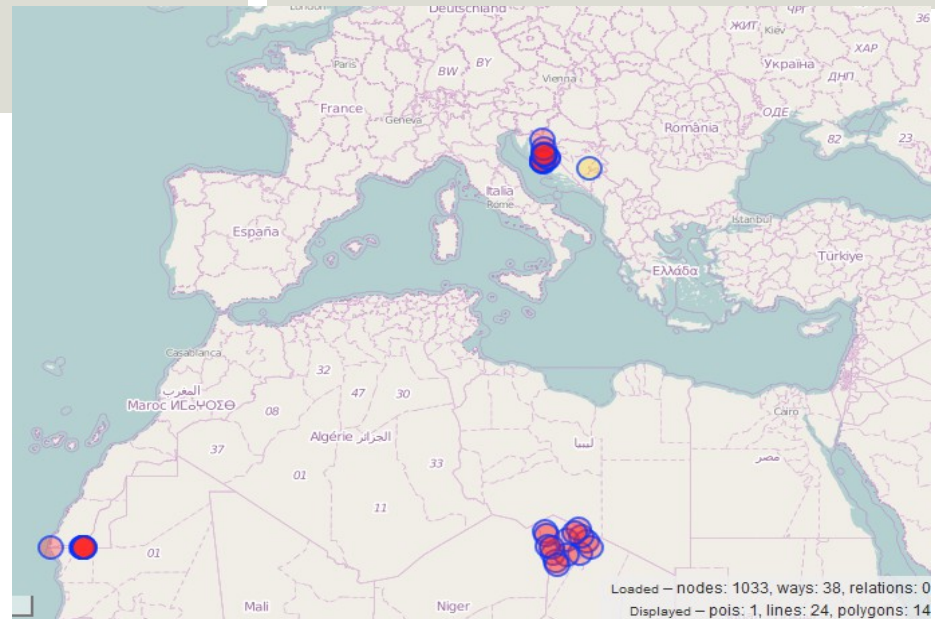
Wiki

Projects

Overview

Type	Number of objects	
 All	39	0.00%
 Node	1	0.00%
 Way	38	0.00%
 Relation	0	0.00%

Value	Count	
children	795	17.14%
erosion	313	6.75%
wild_animals	306	6.60%
moose	300	6.47%
yes	193	4.16%
animal_crossing	126	2.72%
curve	103	2.22%
cyclists	98	2.11%
rock_slide	98	2.11%
slippery_road	88	1.90%
side_winds	88	1.90%



landuse=minefield

No English language description for this tag in the wiki. (See a

Overview





Combinations

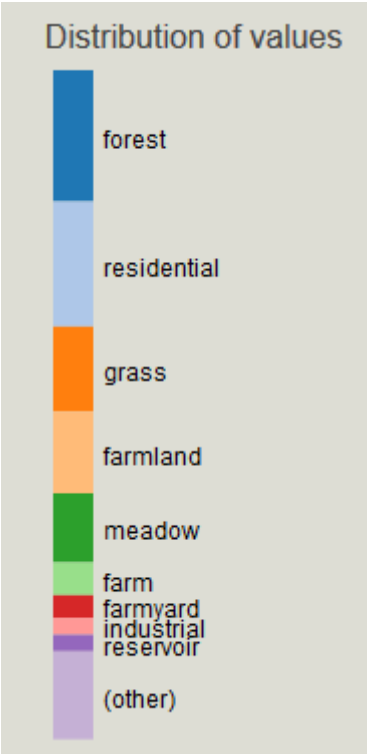
Map

Wiki

Projects

Overview

Type	Number of objects	
 All	0	0.00%
 Node	0	0.00%
 Way	0	0.00%
 Relation	0	0.00%



military=minefield

No English language description for this tag in the wiki. (See [here](#) for more information.)

Overview





Combinations

Map

Wiki

Projects

Overview

Type	Number of objects	
 All	0	0.00%
 Node	0	0.00%
 Way	0	0.00%
 Relation	0	0.00%

military=danger_area

An exclusion zone around something like a firing range

Overview





Combinations

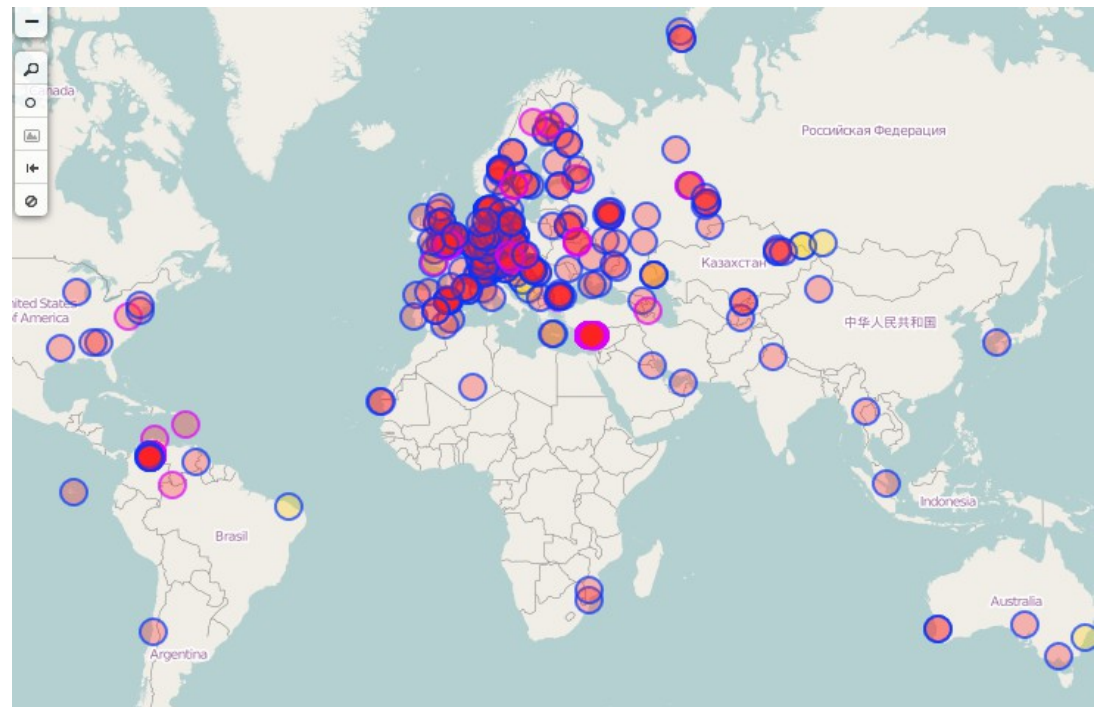
Map

Wiki

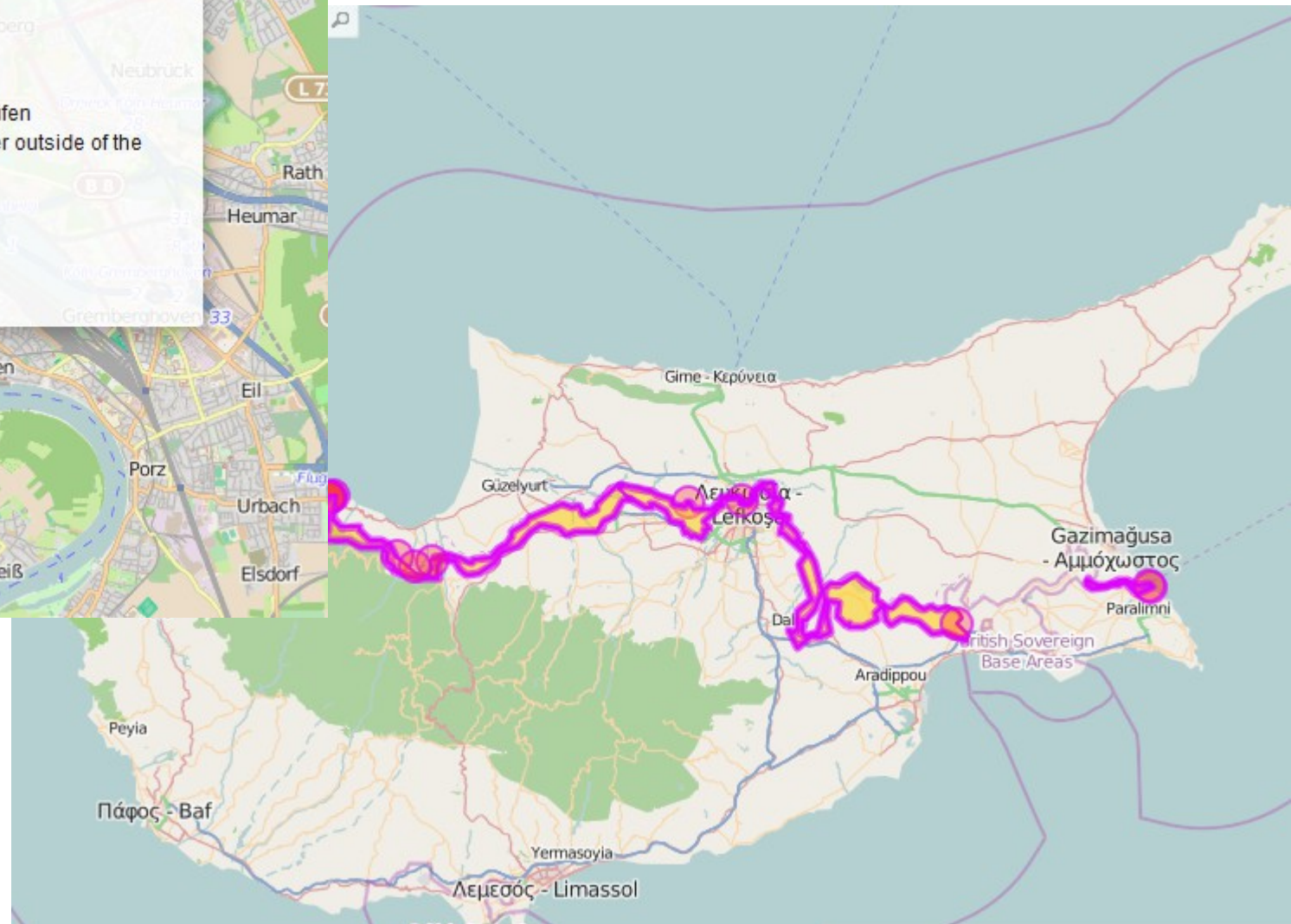
Projects

Overview

Type	Number of objects	
 All	469	0.00%
 Node	15	0.00%
 Way	418	0.00%
 Relation	36	0.00%



Military=danger_area





+

Jonathan

oved from its original location over a secure connection. [Dismiss](#)

View: [Translation](#) [Original](#)

Create Account [Re](#)

[Reading](#) [Edit](#) [Revision history](#)

coordinates: 50 ° 54 '1.1 "N, 7 ° 0' 32"

Westhovener Aue

The **Westhovener Aue** also **Westhovener Wigge** ^[1] called, is a recreation area and a former military training ground on [the Rhine](#) in [Cologne](#) district [Westhoven](#) .

- Home
- Community portal
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Contents
1 Location
2 Flora
3 Fauna
4 History
4.1 defensive ring
4.2 Nazism and World War II
4.3 Postwar
4.4 retention area and recreation
4.4.1 Dismantling of the training area
4.4.2 Dismantling of the barracks site
5 See also
6 References



Lake in the Westhovener Aue

Edit feature

Name
Former Naval Bombardment Area

Source
<http://www.saj.usace.army.mil/Portals/44/docs/FUDS/Cul...>

Add field: Address, Elevation, Note...

All tags (4)

description	prohibition outside...		
military	danger_area		
name	il Bombardment Area		
source	http://www.saj.usa...		



[View on openstreetmap.org](#)



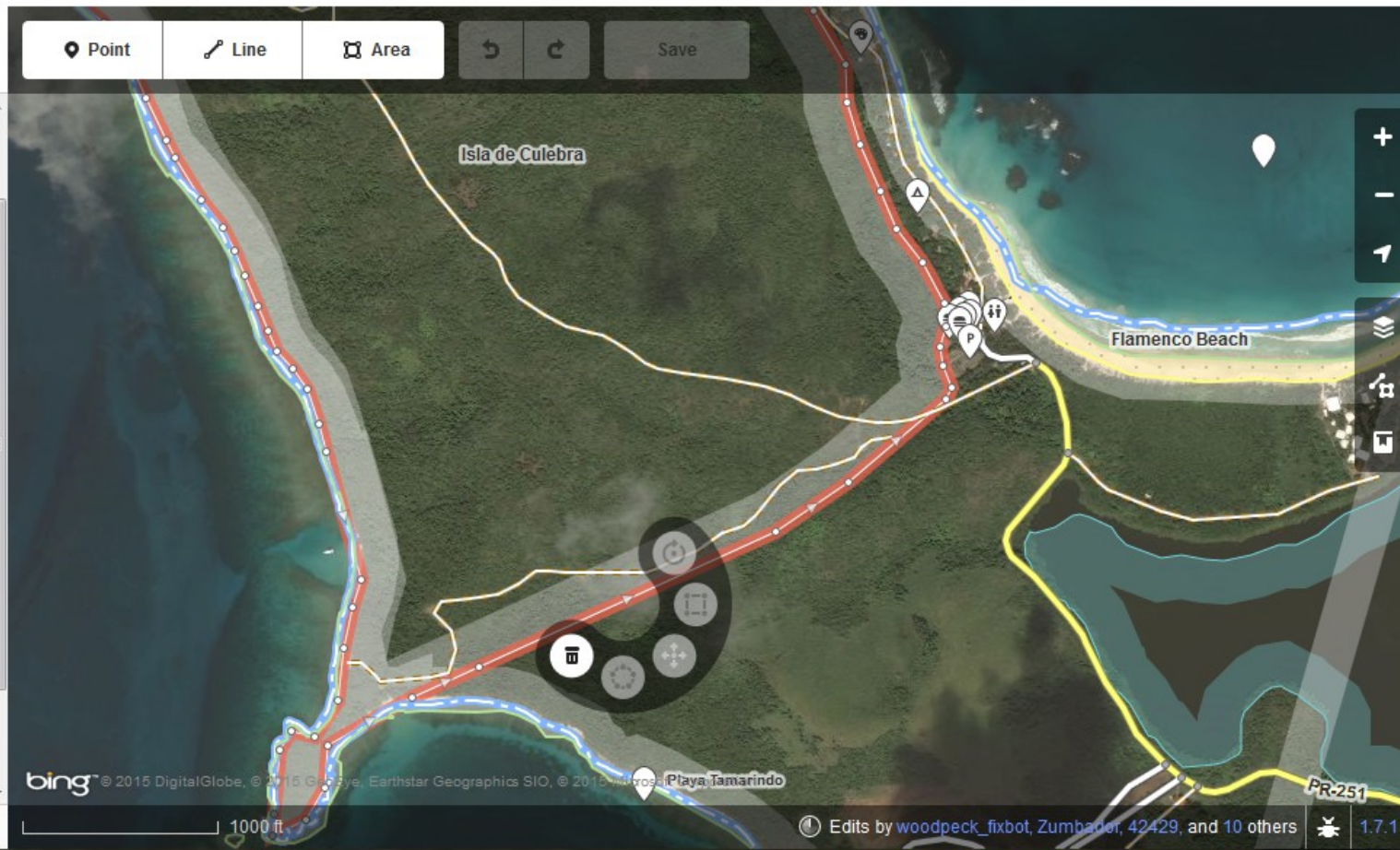
Point

Line

Area



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Discussion

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Cycle Map

Transport Map

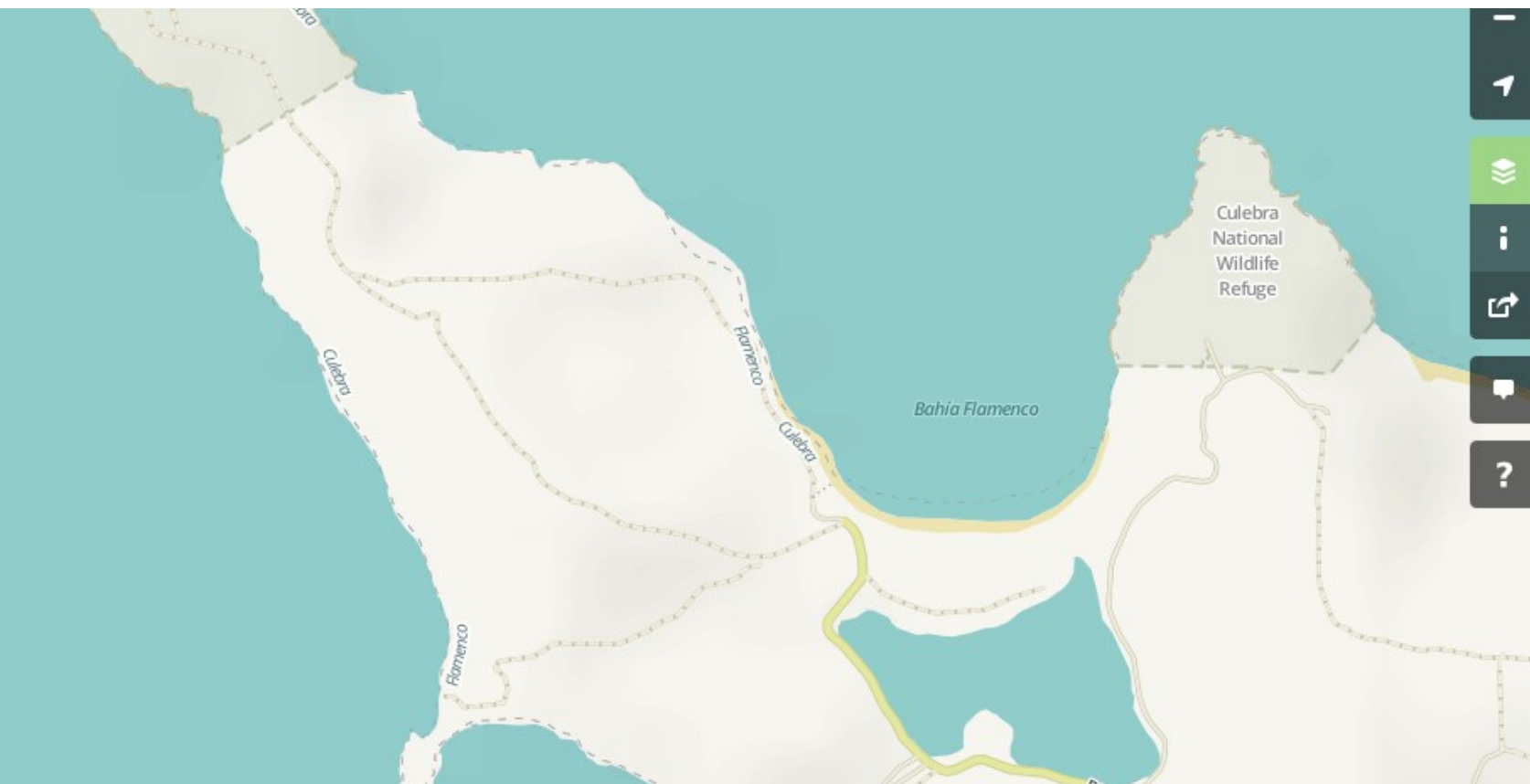
MapQuest Open

Humanitarian

Enable overlays for troubleshooting the map

☐ Map Notes

☐ Map Data



Standard

Cycle Map

Transport Map

MapQuest Open

Humanitarian

- Enable overlays for troubleshooting the map
- ☐ Map Notes
 - ☐ Map Data

UNDP Bosnia

- http://issuu.com/unitednations_bih/stacks/e6e5a1e37d274627bf8b9173d67e7eb8

issuu.com/unitednations_bih/stacks/e6e5a1e37d274627bf8b9173d67e7eb8

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UNDP in BiH

Mine and Landslide Situation in BiH (Flood Update, 29.5.2014.)



Zavidovići, rijeka Bosna

UNDP in BiH



Lopare, rijeka Gnjica

UNDP in BiH



Maglaj, rijeka Bosna

UNDP in BiH



Bratunac, rijeke Drina i
Kravica

UNDP in BiH



Discussion.. conclusion

- Minefields/Unexploded Ordnance Areas datasets are well mapped but not publicly available
- Minefields and other military hazardous areas are tagged as Military=Danger_Area
- Military=Danger_Area not in the OSM cartography
- At what point is it appropriate to tag a minefield?

#MissingMinefields

Missingminefields.github.io

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