



WRI INDONESIA

Global Forest Watch Experience in Indonesia

Restore+ Project Kick Off Meeting, IIASA Laxenburg, 18 – 20 April 2017

GFW – Growing Partnership Initiative

The 4th Annual GFW
Partnerships Meeting, 8 – 9
February 2017
WRI, Washington DC

**GLOBAL
FOREST
WATCH**

A GROWING PARTNERSHIP
globalforestwatch.org/partners



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**GLOBAL
FOREST
WATCH
CLIMATE**

**GLOBAL
FOREST
WATCH
FIRES**

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COMMODITIES**

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FOREST
WATCH
WATER**



WRI INDONESIA

GLOBAL FOREST WATCH

BETTER FOREST
INFORMATION.
BETTER FOREST
MANAGEMENT.



WRI INDONESIA

FOREST DATA CHALLENGES

NOT RELIABLE

NOT UP-TO-DATE

DISPERSED

EXPENSIVE

VERY TECHNICAL

NOT INTERACTIVE



DATA

SPACE AGENCIES
NATIONAL
REGIONAL
LOCAL
CROWD

GLOBAL FOREST WATCH

MAKES COMPLEX DATA
EASY TO UNDERSTAND &
DECISION-RELEVANT
.....
IN NEAR-REAL-TIME

USERS

GOVERNMENTS
BUSINESS
CIVIL SOCIETY
COMMUNITIES

NEAR REAL TIME - HIGH RESOLUTION - GLOBAL COVERARGE

TRANSFORMING INFORMATION INTO TRANSPARENCY AND ACTION



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Annual Tree Cover Loss Data

GLOBAL
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WATCH

FOREST CHANGE LAND COVER LAND USE CONSERVATION PEOPLE STORIES COUNTRY DATA

FOREST CHANGE

- Tree cover loss
(annual, 30m, global, Hansen/UMD/Google/USGS/NASA)

Displaying loss with **> 30 %** canopy density.

Tree cover loss is not always deforestation. ?

NOTE: 2015 tree cover loss is only for the tropics.

2015 data coverage

Map navigation controls: zoom in (+), zoom out (-), home, full screen, refresh, search.

Tree cover loss (zoom in for most accurate viewing)

Timeline slider from 2001 to 2015. Current selection: 2015.

Story #1 Encroachment in Leuser Ecosystem

THE LEUSER ECOSYSTEM

GLOBAL FOREST WATCH

FOREST CHANGE

LAND COVER

LAND USE

CONSERVATION

FOREST CHANGE (1)

HIGH RESOLUTION IMAGERY (1)



Tree cover loss, zoom in for most accurate viewing



2001

2002

2003

2004

2005

2006

2007

2008

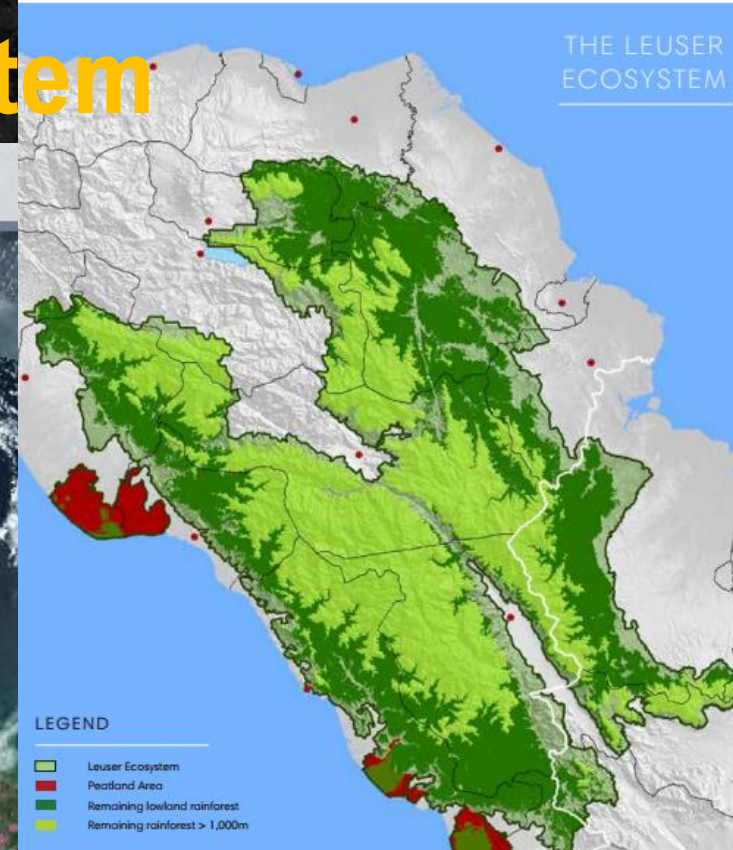
2009

2010

2011

Google Earth Engine CARTO urthecast

Show footer



Leonardo DiCaprio: We Must Save the Last Place on Earth Where Orangutan, Tigers, Rhinos and Elephants Coexist

Leonardo DiCaprio is using his clout to protect the struggling Leuser Ecosystem, a precious rainforest in Sumatra, Indonesia that's under threat from industrial development for palm oil.

Encroachment in Leuser Ecosystem (2001-2014)

GLOBAL
FOREST
WATCH

FOREST CHANGE

LAND COVER

LAND USE

CONSERVATION

PEOPLE

STORIES

COUNTRY DATA

FOREST CHANGE (1)

HIGH RESOLUTION IMAGERY (1)



Tree cover loss (zoom in for most accurate viewing)

Lat/long: 5.885684, 97.811111



Encroachment in Leuser Ecosystem (2001-2014)



Forest Watcher Mobile App (Testing Phase)



Purpose:

To put GFW information in the hands of local decision-makers by harnessing their capacity to monitor forests using mobile technology and creating a model that can be replicated across the globe.

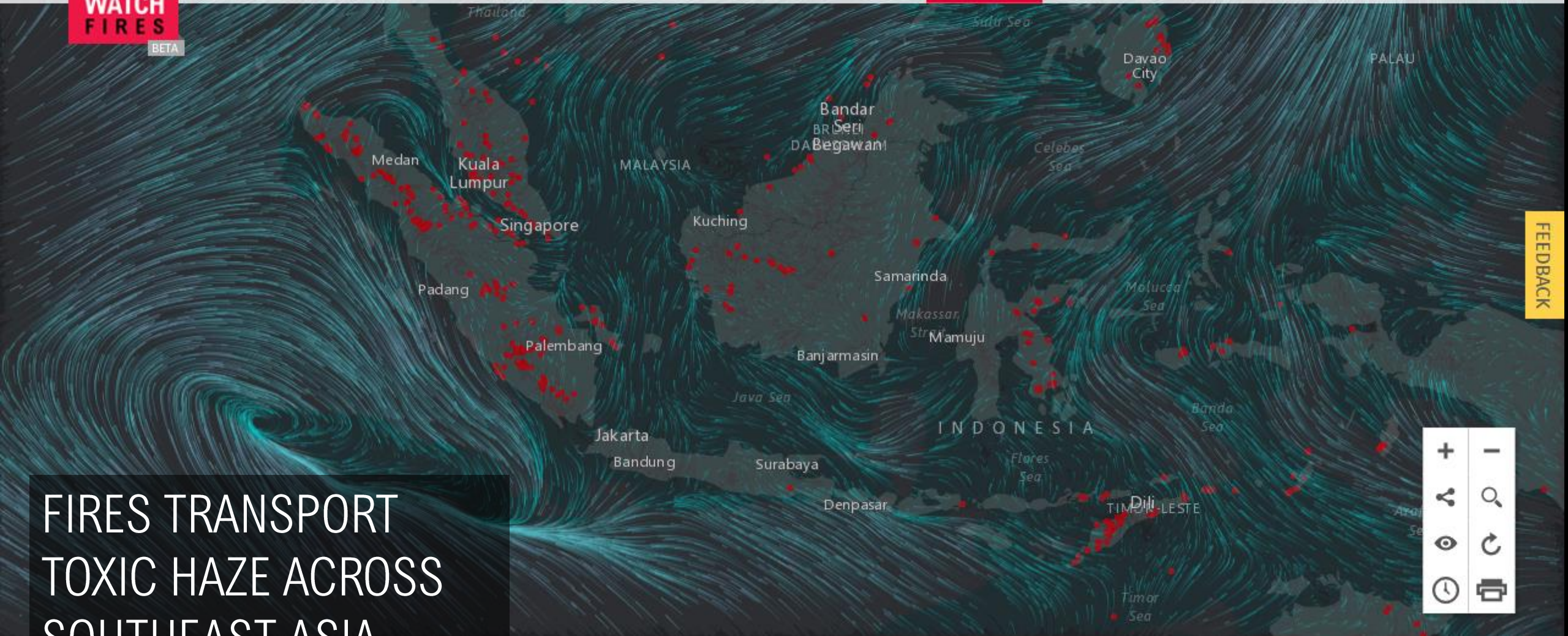
Goal:

To improve forest conservation on the ground by enabling local stakeholders with limited and occasional Internet connectivity to access GFW data and collect ground information using mobile and cloud technologies.

Story #2

**2015 FIRE SEASON –
WORST IN ALMOST
20 YEARS, DUE TO
EL NINO
COUPLED WITH
ANTHROPOGENIC
FACTORS**





FEEDBACK

Map navigation controls including zoom in (+), zoom out (-), home, search, location, and refresh icons.

FIRES TRANSPORT
TOXIC HAZE ACROSS
SOUTHEAST ASIA

Latitude/Longitude
1.9748, 100.5689

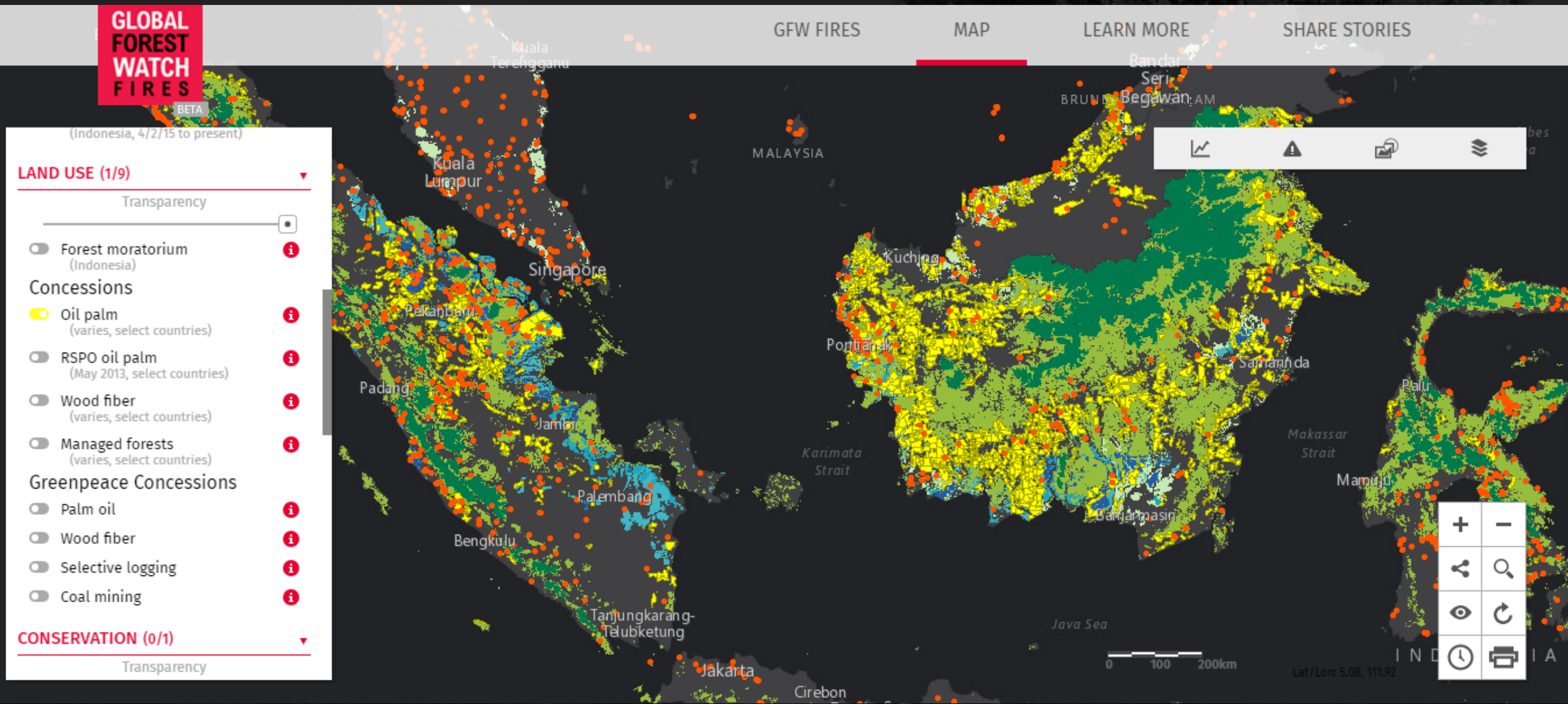
Sign up for alerts

Map navigation controls: zoom in (+), zoom out (-), home, full screen, layers, search, and other tools.

OVER 200,000 PEOPLE HAVE PARTICIPATED IN GFW CAMPAIGNS WITH OVER 6,000 FIRES AND BURN SCARS MAPPED



Forest and Peat Fires Analysis : GFW Way



Forest and Peat Fires Analysis : GFW Way



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GOVERNANCE

Enter a term



[After Record-Breaking Fires, Can Indonesia's New Policies Turn Down the Heat?](#)

After Record-Breaking Fires, Can Indonesia's New Policies Turn Down the Heat?

by  [Arief Wijaya](#), [Susan Minnemeyer](#), [Reidinar Juliane](#), [Octavia Payne](#) and [Andres Chamorro](#) -
September 19, 2016

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For the last several years, forest fires driven by agricultural expansion have spiked every summer in Indonesia, creating smog and **public health crises**, including more than **100,000**



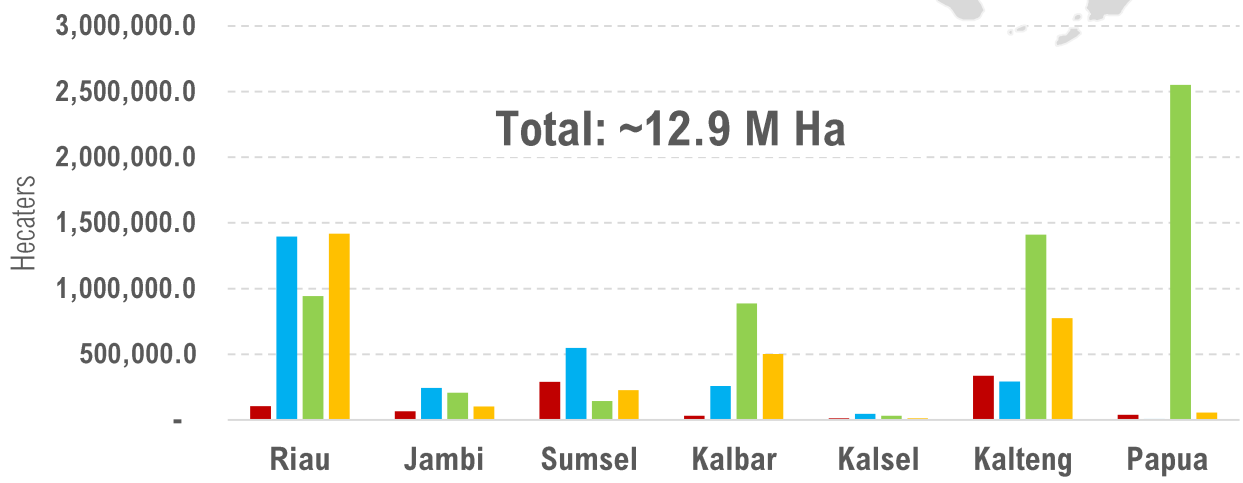
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Peatland mapping

The targeted peatland is divided into 4 (four) classifications and spread across 3 islands and 7 provinces



- 1 Post 2015 peat fires
- 2 Peat dome with canal
- 3 Peat dome without canal
- 4 Peatland with canal



Existing condition:

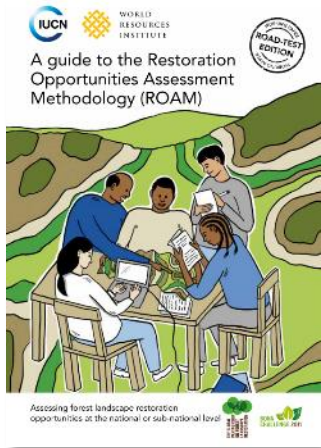
- Degraded peatland, potential for restoration: 6.757.997 Ha
- Intact peatland, potential for protection: 6.174.492 Ha

Restoration

- Restoration priority for 7 provinces by 2020: 2.103.327 Ha
- Degraded peat area potentially for intervention by other institutions outside of BRG: 4.654.670 Ha

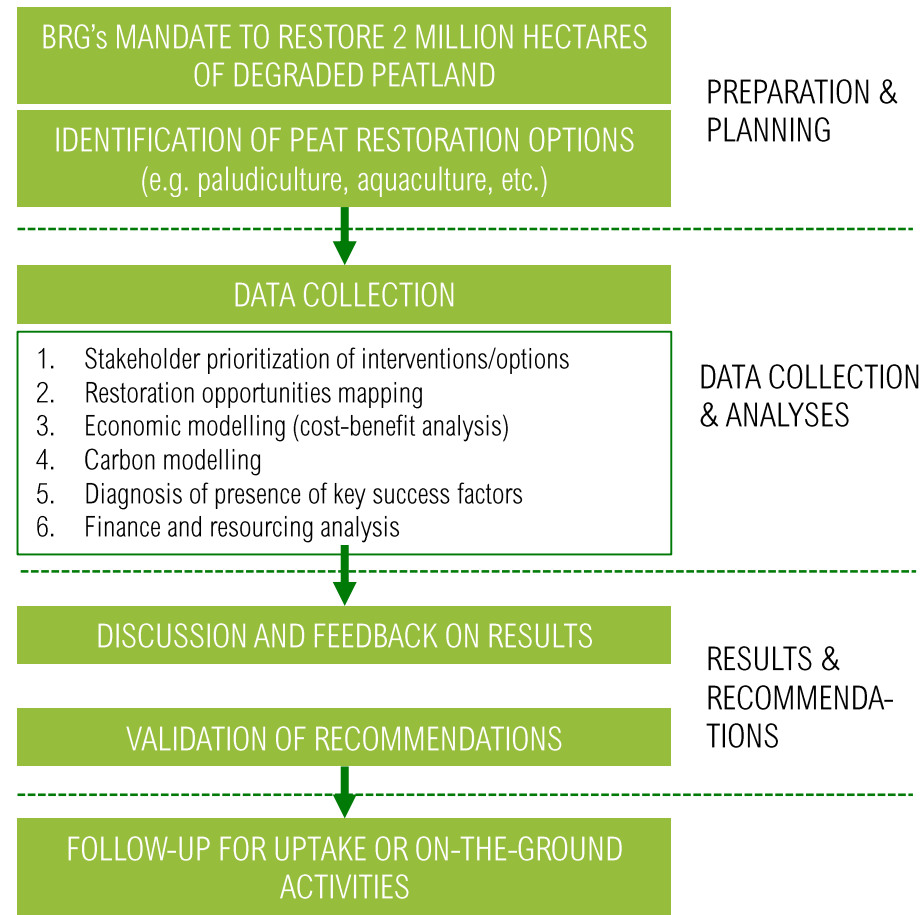
Source: Peat Restoration Agency of Indonesia

Applying ROAM, we will identify scope of restoration and setting up satellite team on the ground



STAKEHOLDER ENGAGEMENT

RESTORATION OPPORTUNITIES ASSESSMENT METHODOLOGY (ROAM) FOR PEATLAND



- 1 **Divide area into specific restoration initiatives**
- 2 **Setup satellite team**
- 3 **Kickoff restoration initiatives**
- 4 **Track status of restoration initiatives**

Vielen Dank! Thank you!

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globalforestwatch.org**