Protected Areas as Natural Climate and Development Solutions @JamisonErvin





1. WE ARE WITNESSING AN UNRAVELING OF THE PLANET



FOUR TRENDS THAT DEFINE OUR FUTURE

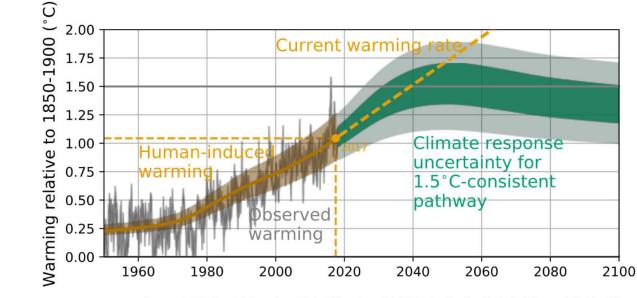
Species decline from Living Planet Report

2

Index value (1970 = 1)

1970

Atmospheric CO2 from 1.5c Climate Report



Source: IPCC Special Report on Global Warming of 1.5°C, Chapter 1 – Technical Annex 1.A, Fig. 12

WWF, 2018. Living Planet Report

1990

..........

1980

2010

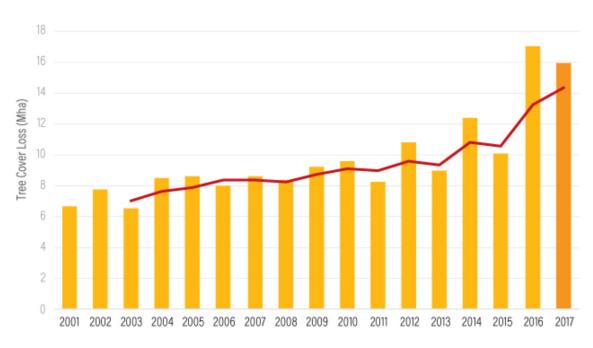
2000

IPCC. 2018. UNFCCC 1.5 C Report.

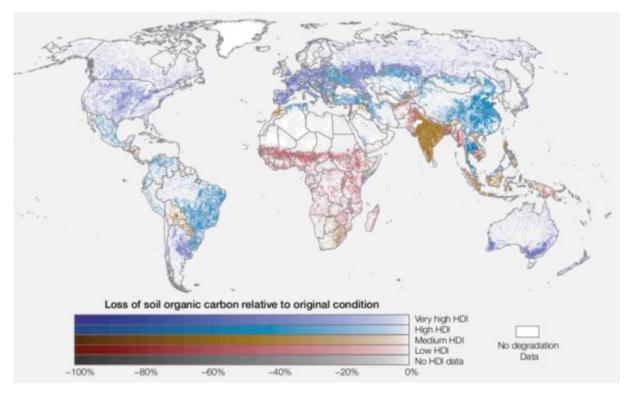
FOUR TRENDS THAT DEFINE OUR FUTURE

Trends in tropical tree cover loss

Tropical Tree Cover Loss



Loss of soil organic carbon



WRI, 2018. Global Forest Report

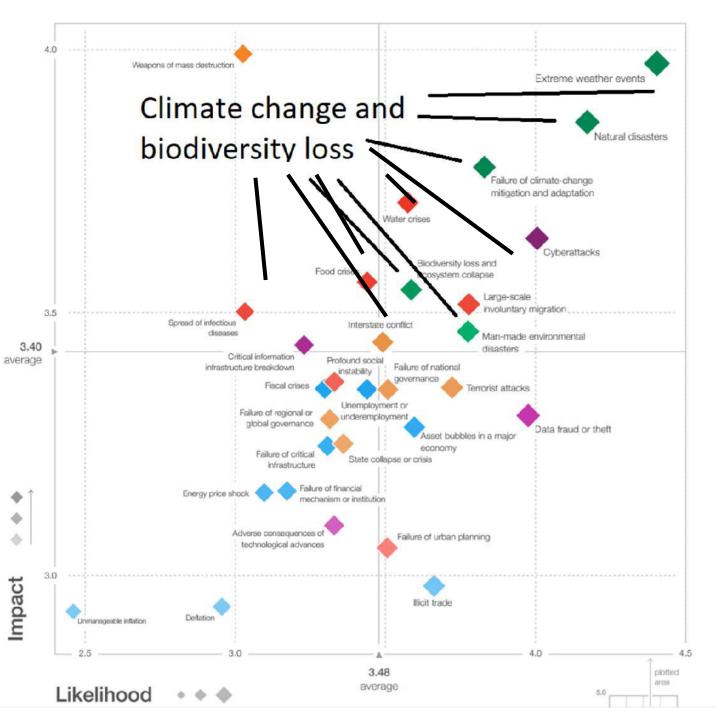
IPBES, 2018. Global Land Degradation Report

2. THIS UNRAVELING HAS ENORMOUS CONSEQUENCES



CONSEQUENCES FOR HUMANITY

 10 of 16 global risks are linked to climate change and/or biodiversity loss

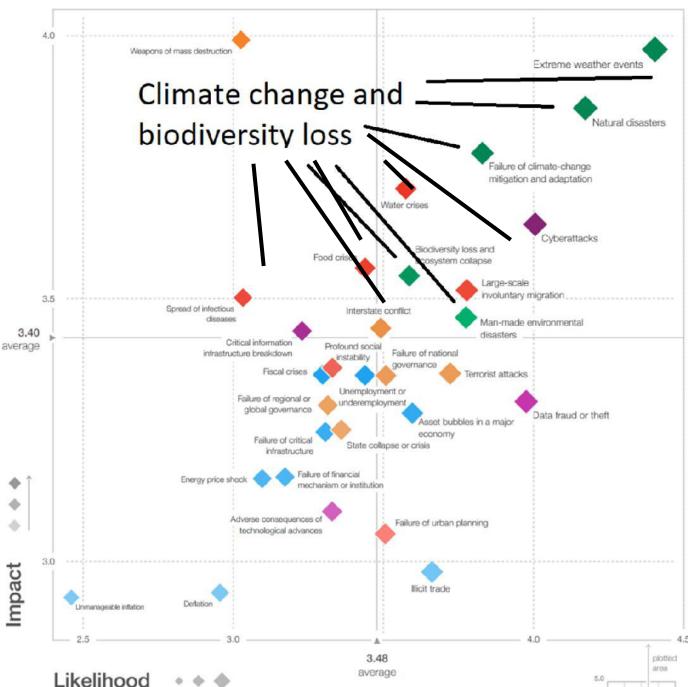


WEF, 2018. Global Risks Report

CONSEQUENCES FOR HUMANITY

- Extreme weather
- Natural disasters
- Involuntary • migration
- Water crises
- Spread of diseases
- Food crises

Impact WEF, 2018. Global Risks Report



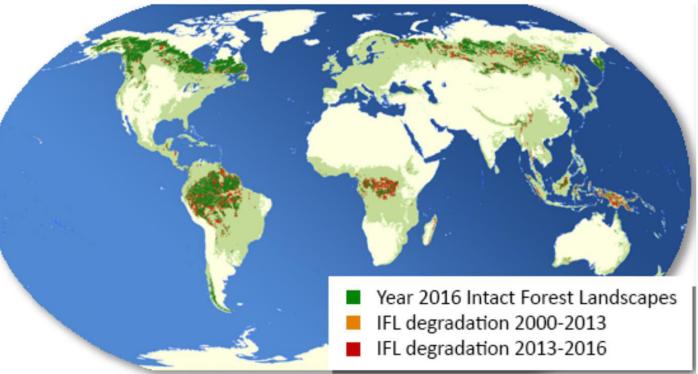
3. IT'S WORSE THAN WE THINK



WE ARE LOSING FOREST INTACTNESS

- The world lost 7.2% of intact forest landscapes since 2006 (2 x California)
- There are >50 million forest fragments
- Tropical forests are flipping from carbon sinks to carbon sources

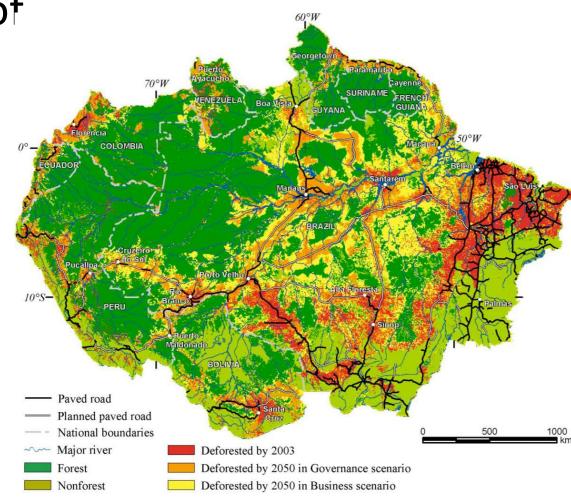
World's Intact Forest Landscapes, 2000-2013



Download the IFL map in GIS/Google Earth format

THE FUTURE IS COMING

- By 2050, 25 million kilometers of new roads will be built
- By 2030, food demand will increase by 35%, driving deforestation
- By 2050, average patch size will decrease from 17 ha to .25 ha
- We are fast approaching critical climate tipping points



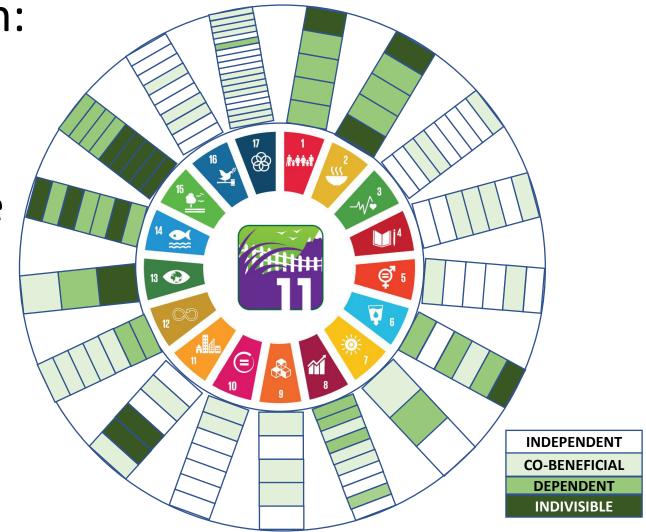
4. WE HAVE EFFECTIVE SOLUTIONS AT HAND



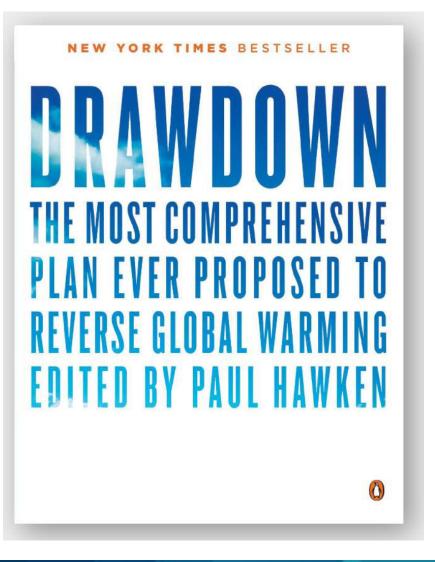
PROTECTED AREAS SOLVE CLIMATE-RELATED PROBLEMS

Protected areas strengthen:

- Food security?
- Water security Ũ
- Livelihoods and jobs
- Health crises \$?
- Peace >??
- Security from disasters
- Energy 🌢
- Carbon sequestration ♣?



PROTECTED AREAS ARE A CLIMATE SOLUTION

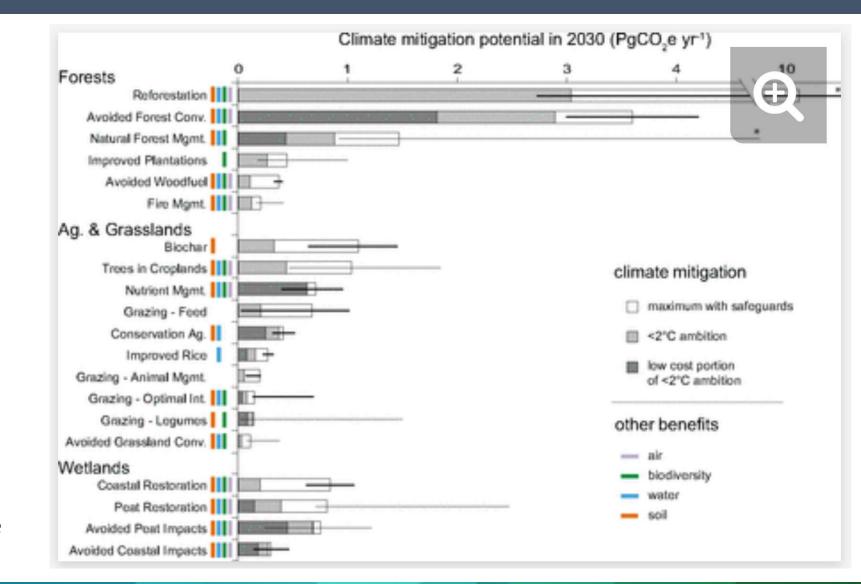


- Protecting tropical forests is the 5th most effective climate solution (61 gt/yr)
- Protecting temperate forests are #12
- Protecting peatlands are #13
- Restoring forests is #15

PROTECTED AREAS ARE A CLIMATE SOLUTION

Protecting forests, grasslands and wetlands can provide >1/3 of our climate mitigation solution

Griscom et al. 2017. Natural Climate Solutions. PNAS



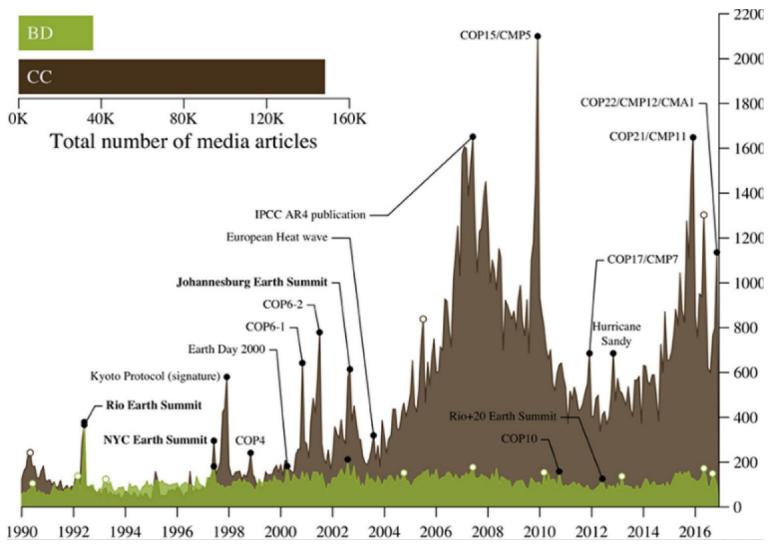
5. BIODIVERSITY IS NOT RECOGNIZED AS A CLIMATE SOLUTION



BIODIVERSITY AND CLIMATE CHANGE

 Biodiversity is the step-sister of climate change

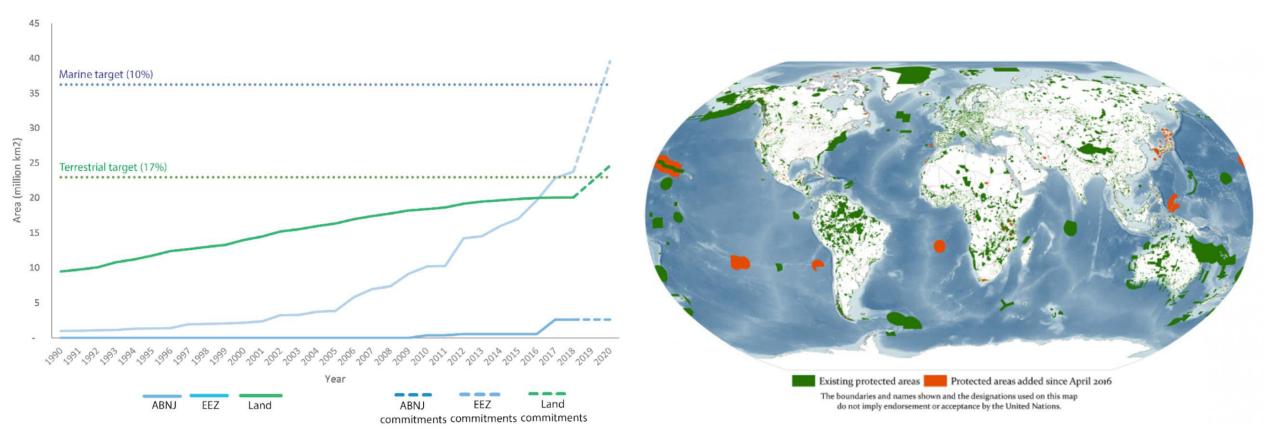
Biodiversity receives
2% of the media
coverage and 3% of
finance compared to
climate change



6. THERE IS REASON FOR HOPE

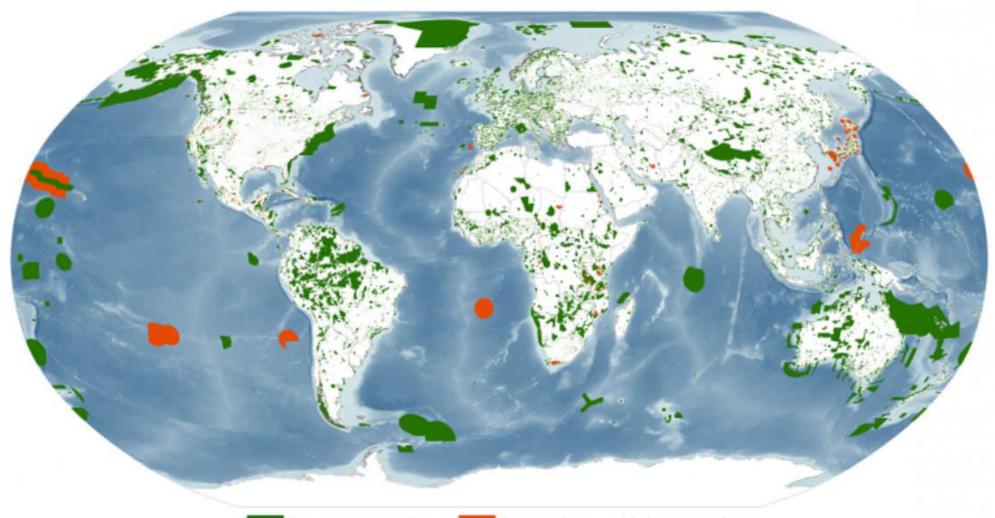


PROTECTED AREAS CONTINUE TO INCREASE



UNEP-WCMC, 2018. Protected Planet Report

BUT IS THE 17%/10% TARGET ENOUGH?



Existing protected areas

Protected areas added since April 2016

The boundaries and names shown and the designations used on this map do not imply endorsement or acceptance by the United Nations.

7. WE NEED BOLDER COMMITMENT AND ACTION



PROTECT WHAT'S LEFT

• We must protect remaining ecosystem fragments as climate refugia

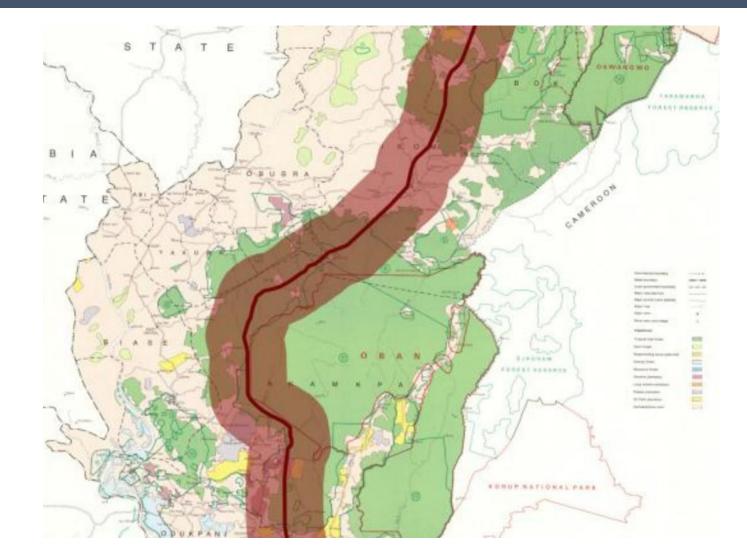
• We must protect large, intact landscapes to avoid tipping points





STOP FRAGMENTING LARGE PATCHES

 We must ensure that the 25 million kilometers of future roads do not further fragment intact ecosystems



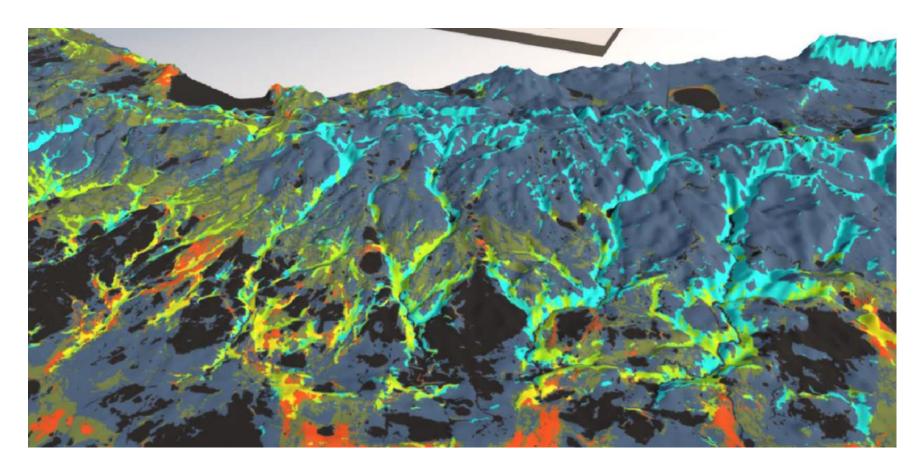
END DEFORESTATION WITHIN/BEYOND PROTECTED AREAS

- 80% of deforestation is driven by just 4 commodities:
 - Beef
 - Soy
 - Palm oil
 - Timber
- Much of this is illegal



ESTABLISH CLIMATE CONNECTIVITY CORRIDORS

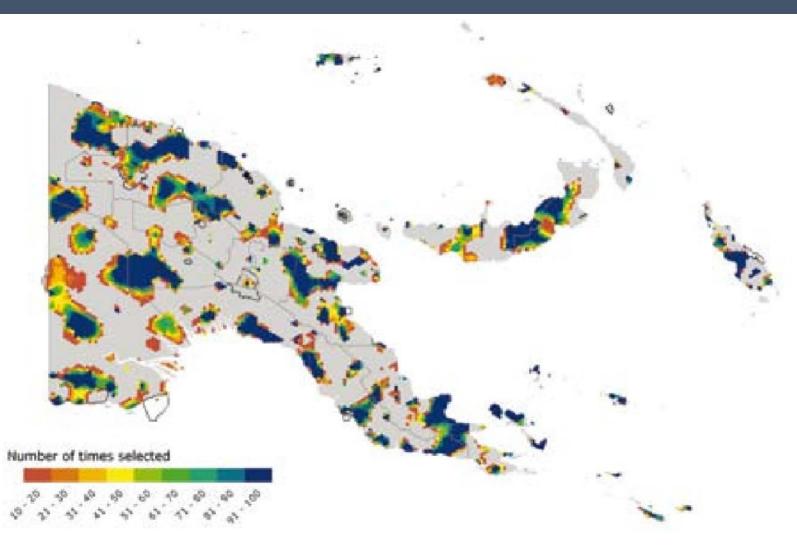
- Climate is changing faster than the ability of species to adapt
- We need to anticipate movement



California Adaptation Forum

DESIGN CLIMATE-PROOF PA SYSTEMS

Focus on the stage, not just the actors



PNG Department of Environmental Conservation

SECURE INDIGENOUS LAND RIGHTS

- 5: % indigenous peoples
- 65: % forest areas claimed by indigenous peoples
- 10: % indigenous forest rights recognized
- 34: % global carbon stocks on indigenous forests in tropical forests



THE POST-2020 FRAMEWORK MUST:

- Expand protected area coverage and system design to provide a global climate safety net
- Include much stronger elements of climate connectivity, intactness, fragmentation
- Safeguard indigenous land rights, especially forests

- Radically expand finance and investment for protected areas as a viable climate and development solution
- Set ambitious apex targets related to nature-climate tipping points
- Upscale ambition for complementary restoration goals to restore nature's carbon stocks