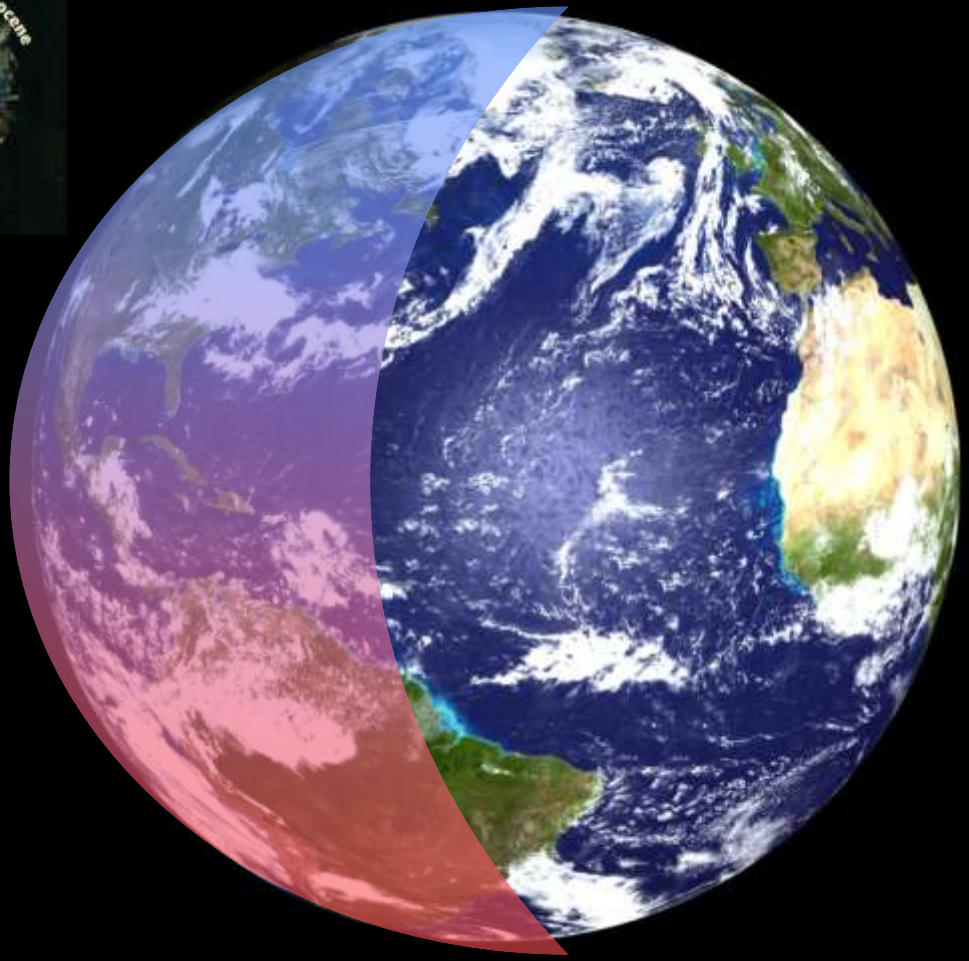
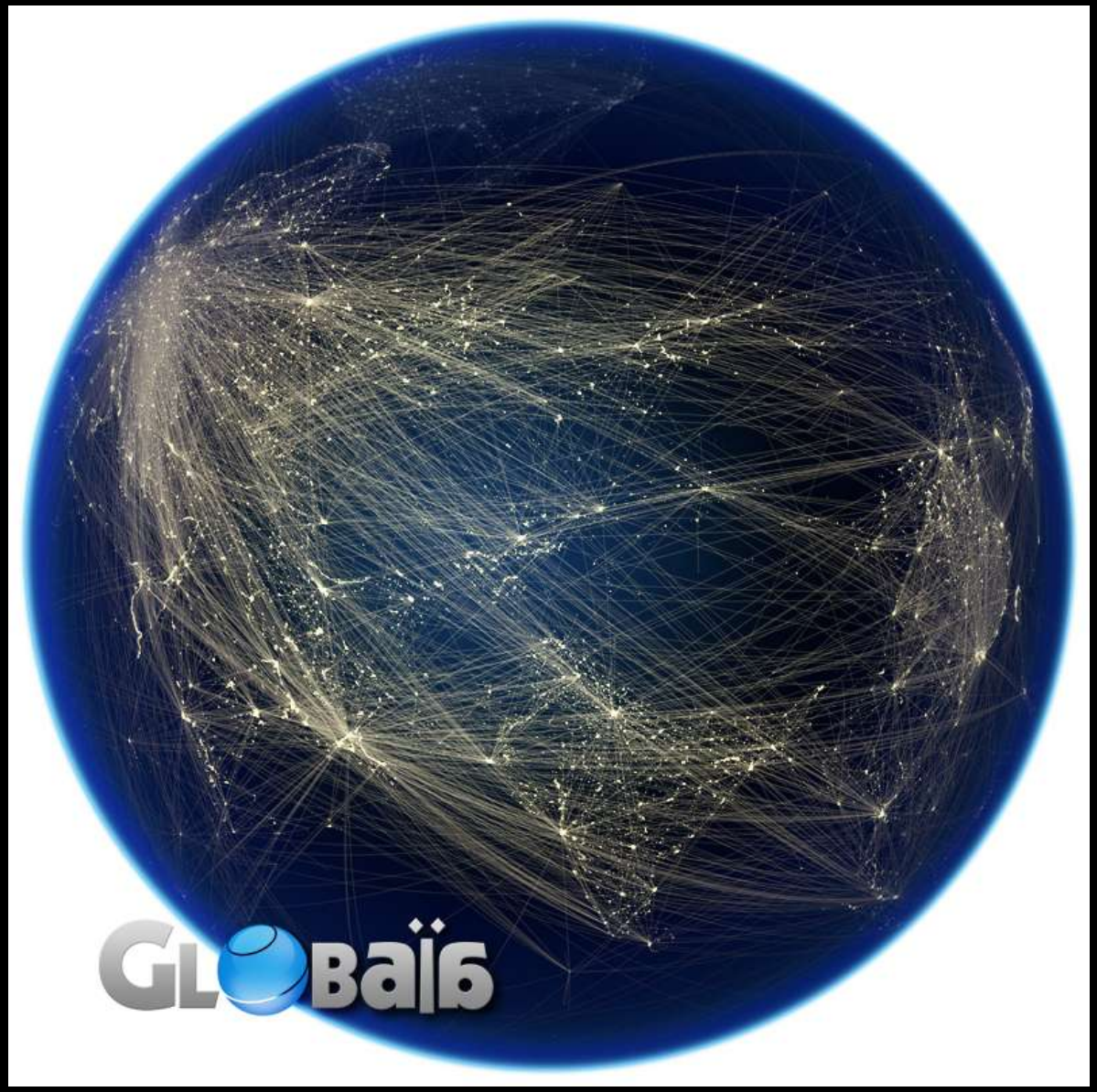
The Dawn of the Anthropocene

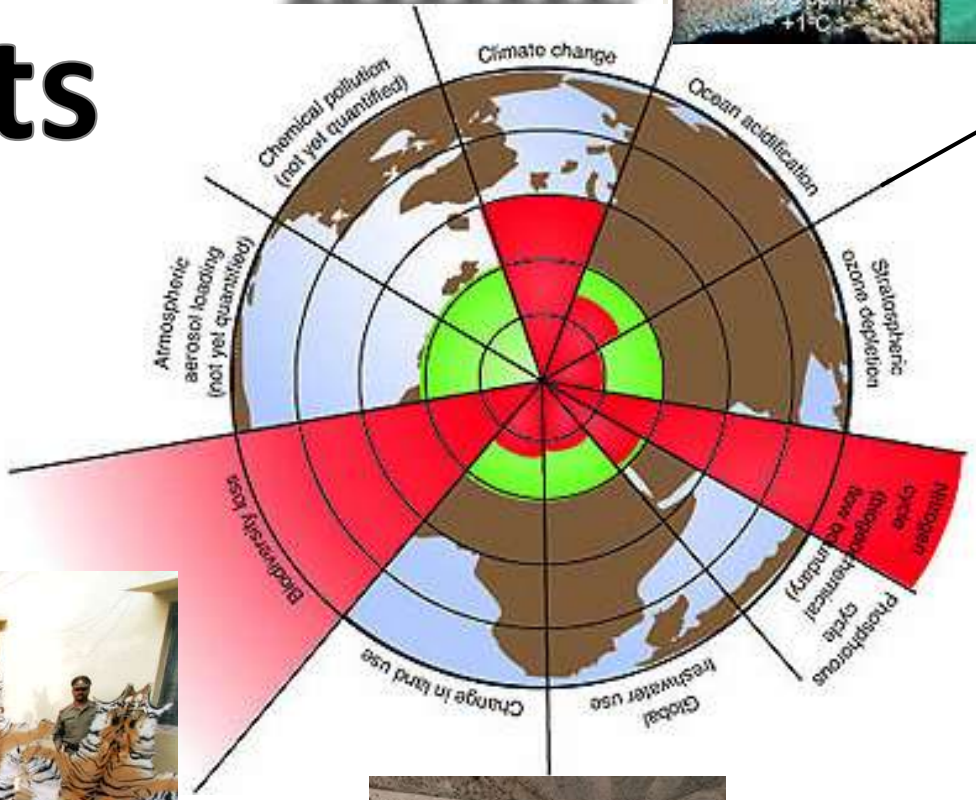


- Only in the 20th century, the population grew from 1.65 to 6.5 billion people, and may reach 9 billion within the next 50 years.
- Humanity is now living beyond the planet's ecological means
- 50% of the land surface has been transformed most of the primary productivity is captured by people

No Place to Hide



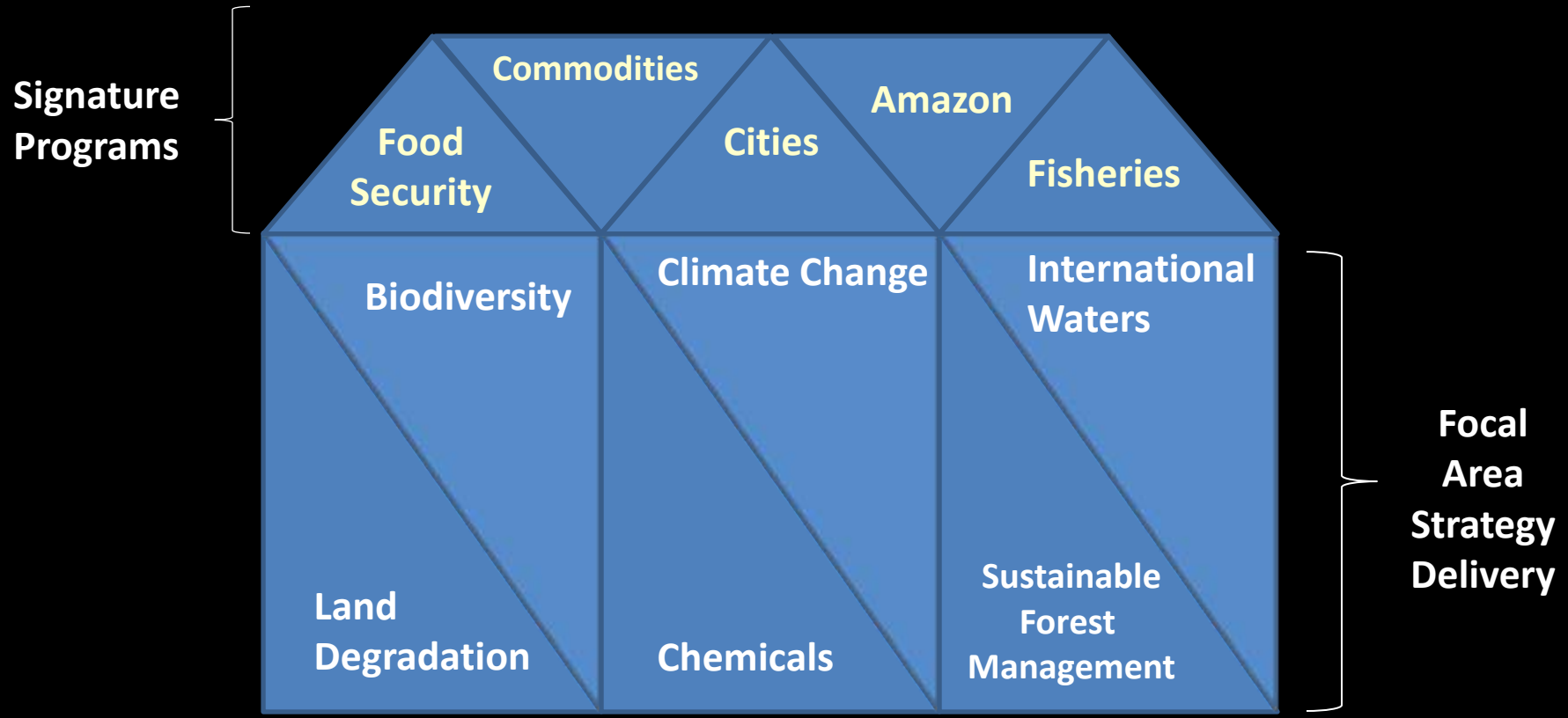
Systemic Threats



Systemic Solutions

GEF-6

Dimensions of Sustainability and Delivery



Time-Bound Agendas

100 to 1000 times the normal rate

All are gone, all but one.
No contest, nowhere to run.
No more left, only one.
This is it, this is the
Countdown to Extinction

Rescued from Sure Extinction

Extent and Impact of Protected Areas

- **McDonald's:**

  34,000 restaurants in 119 countries

  Estimated Employees: 1,800,000

- **WalMart:**

  9,000 stores in 15 countries

  Estimated employees: 2,200,000

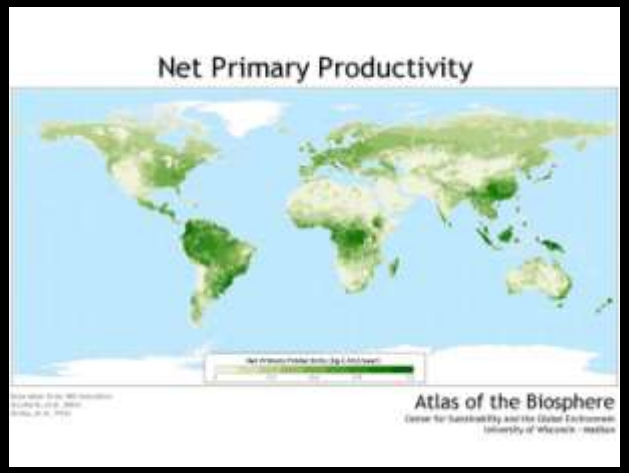
- **Protected Areas:**

- > 164,000 in 188 countries
- > 24 million km2
- 13% of Earth's land surface
- Estimated direct jobs: >2,000,000

World's Protected Areas
One of the Most Successful Global Franchise?

- Global system is larger than the world's largest country – Russia
- Global system is equivalent to the area of China and Brazil together
- GEF alone has invested in 2,809 protected areas covering 7 million square kilometers

17% until 2020



Countdown to Food Insecurity

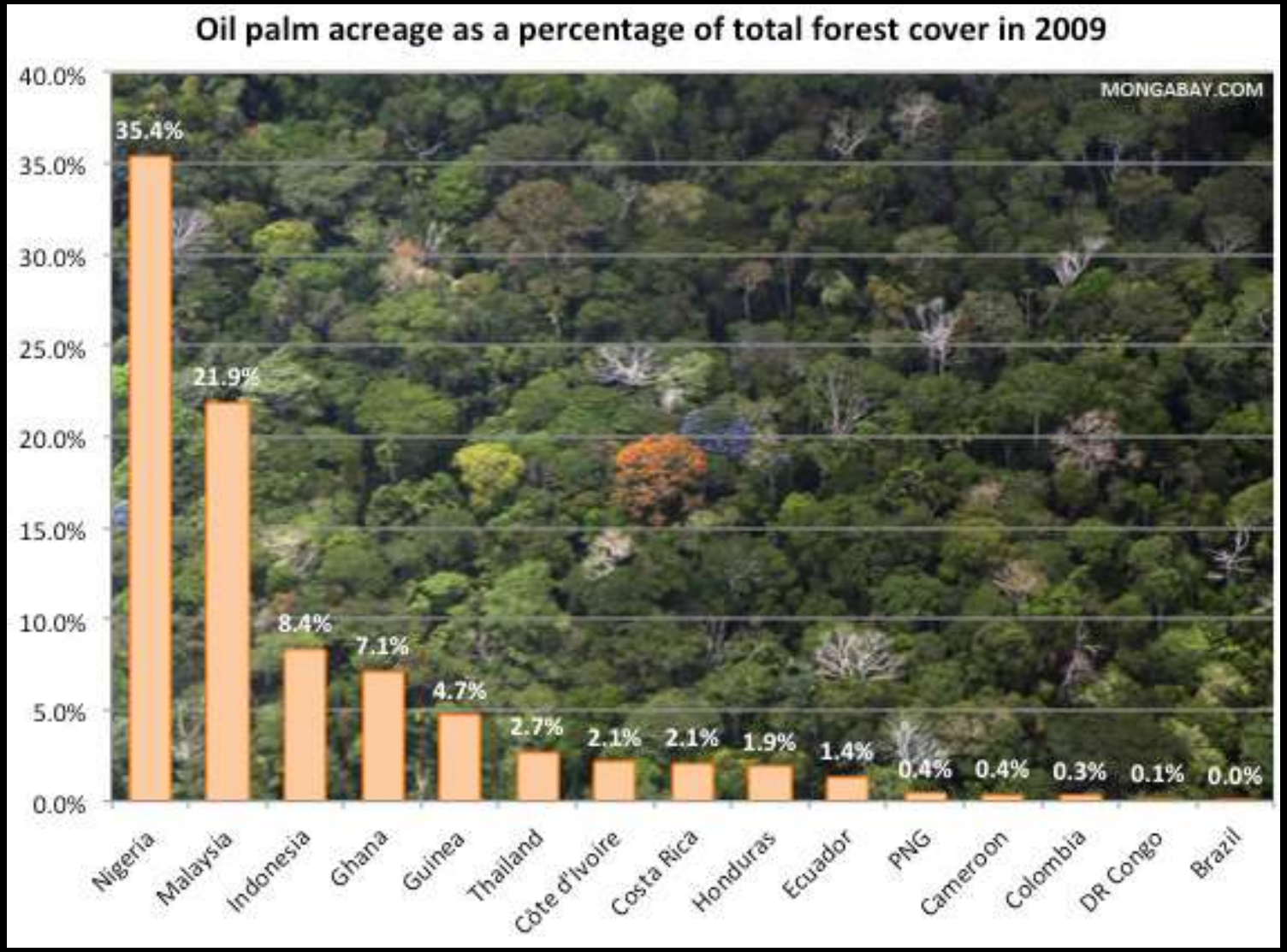
- The global net primary production (NPP) has been consistent at 53.6 Pg per year

- 38 % of the planet's land is under agriculture but 52% of lands are being degraded

- With 9.5 billion people by 2050, 70-100% more food will be needed

Zero Net Land Degradation

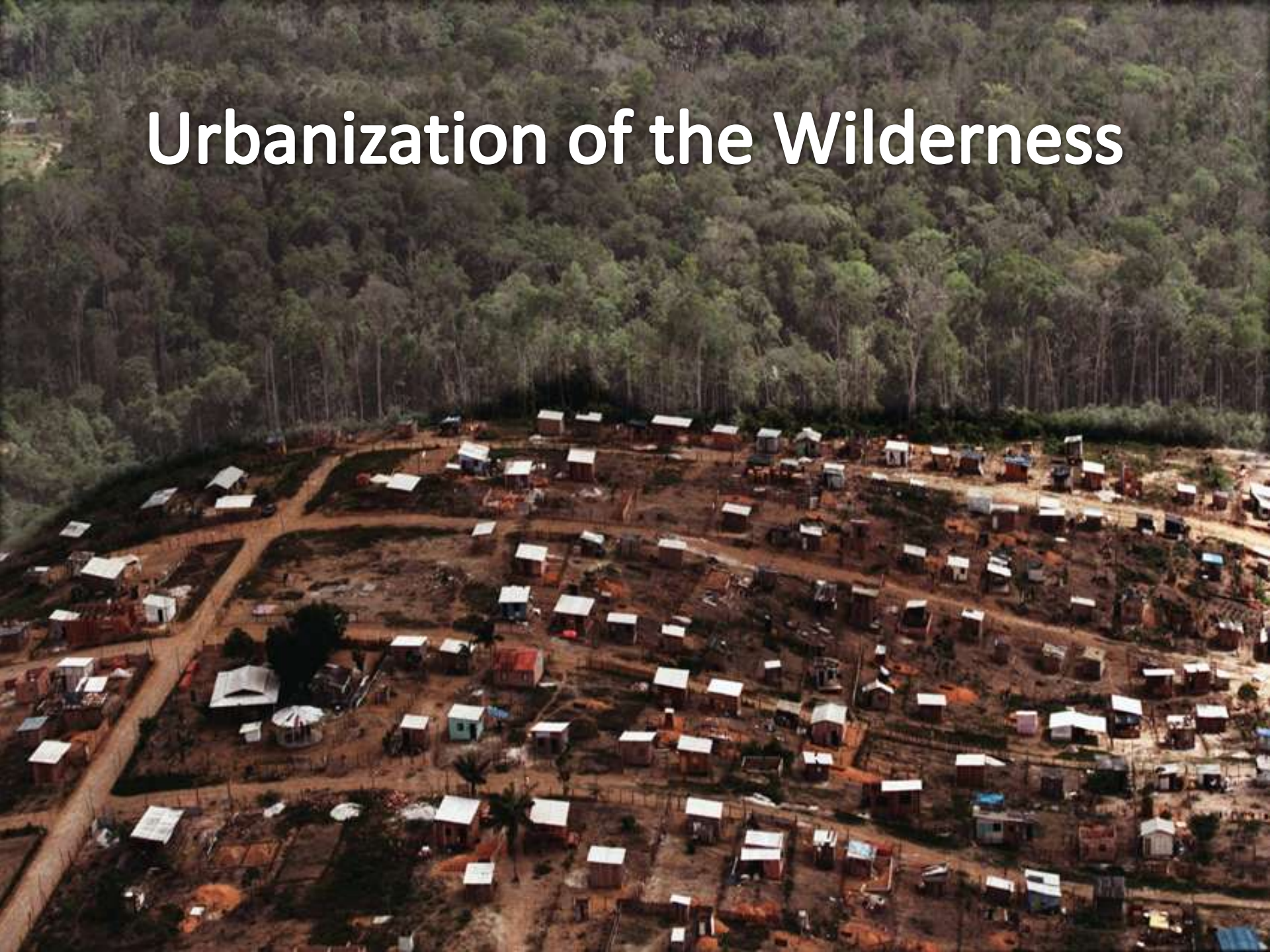
Taking Deforestation Out of the Supply Chain


Oil palm acreage as a percentage of total forest cover in 2009
MONGABAY.COM
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
35.4%
21.9%
8.4%
7.1%
4.7%
2.7%
2.1%
2.1%
1.9%
1.4%
0.4%
0.4%
0.3%
0.1%
0.0%
Nigeria
Malaysia
Indonesia
Ghana
Guinea
Thailand
Côte d'Ivoire
Costa Rica
Honduras
Ecuador
PNG
Cameroon
Colombia
DR Congo
Brazil

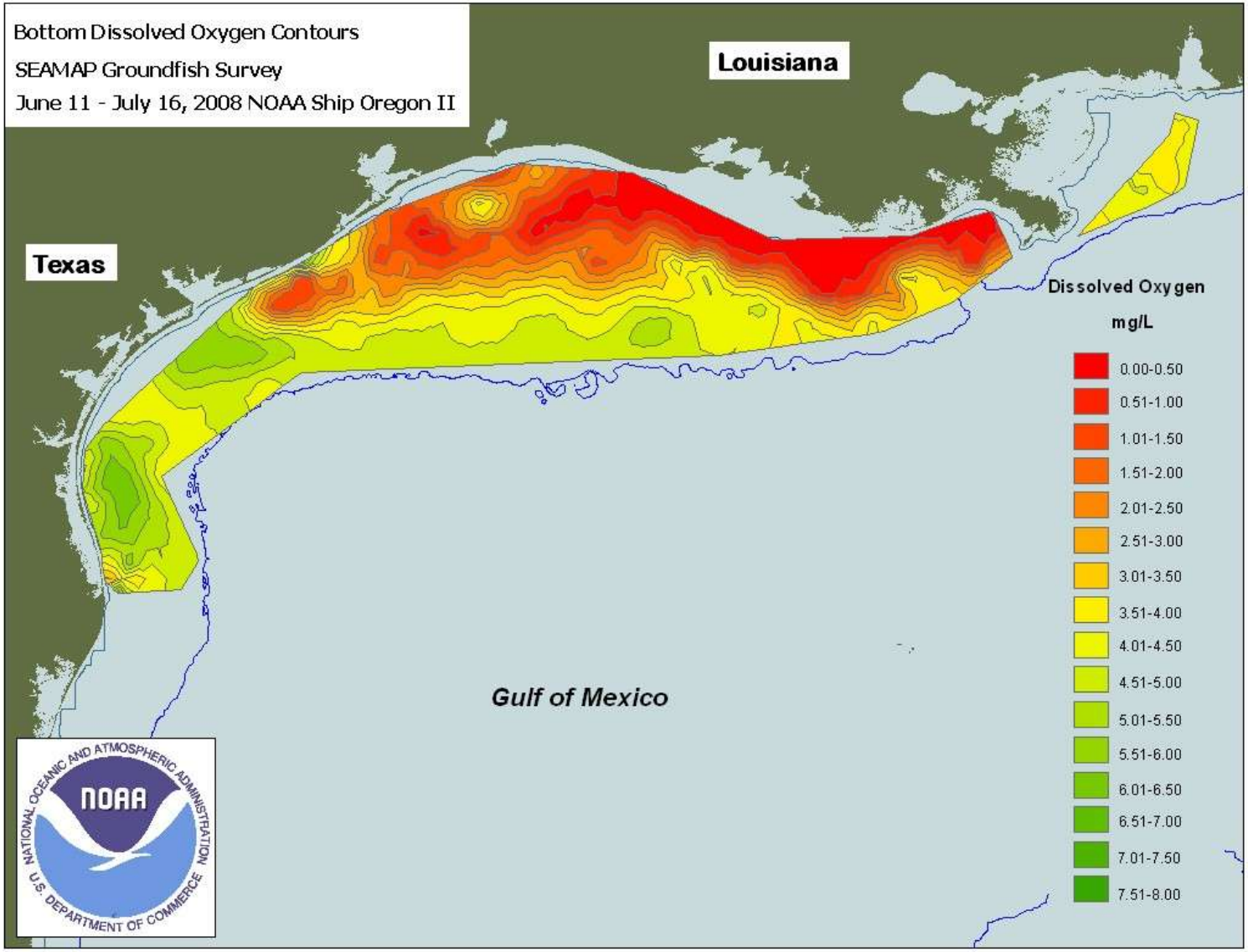
Emerging Issues

Countdown to the Dieback

Urbanization of the Wilderness



COUNTDOWN TO FISHERIES DEPLETION


Bottom Dissolved Oxygen Contours
SEAMAP Groundfish Survey
June 11 - July 16, 2008 NOAA Ship Oregon II
Louisiana
Texas
Gulf of Mexico
Dissolved Oxygen
mg/L
0.00-0.50
0.51-1.00
1.01-1.50
1.51-2.00
2.01-2.50
2.51-3.00
3.01-3.50
3.51-4.00
4.01-4.50
4.51-5.00
5.01-5.50
5.51-6.00
6.01-6.50
6.51-7.00
7.01-7.50
7.51-8.00
NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

A 10-year target to bring 50% of fisheries under sustainable management while increasing economic benefits by US$20B annually

10% until 2020

Groundwater Resources of the World
- Transboundary Aquifer Systems -
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ATLANTIC
INDIAN
OCEAN
Special Edition