Measuring Our Footprint

DARTMOUTH-HITCHCOCK MEDICAL CENTER

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and

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CleanMed

Chicago,
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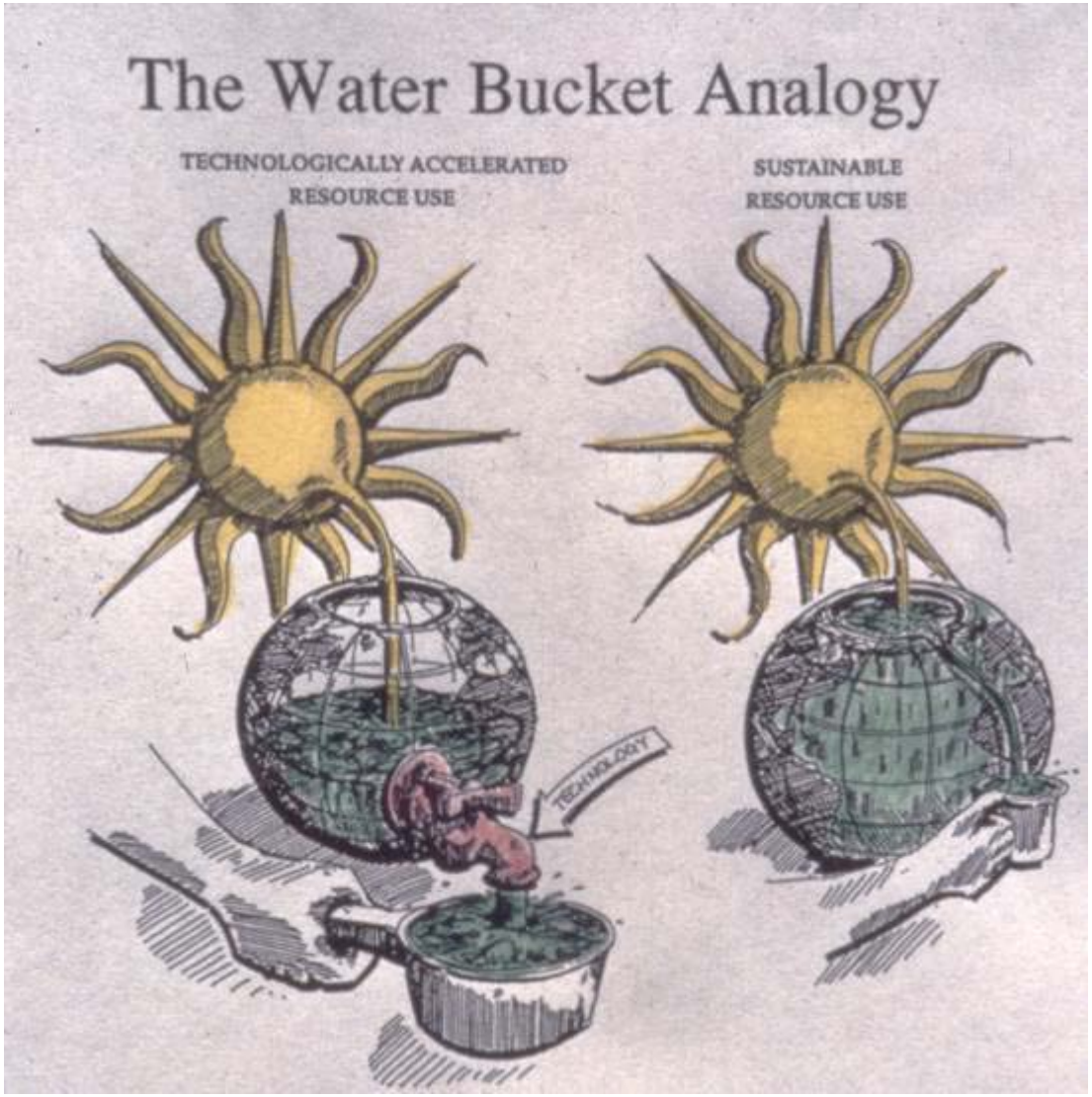
“Sustainability?”

Humanity’s Consumption

Compared to

Biospheric Production



Ecological Footprinting

"… a resource management tool that measures how much land and water area a human population requires to produce the resources it consumes and to absorb waste under prevailing technology."

- Global Footprint Network

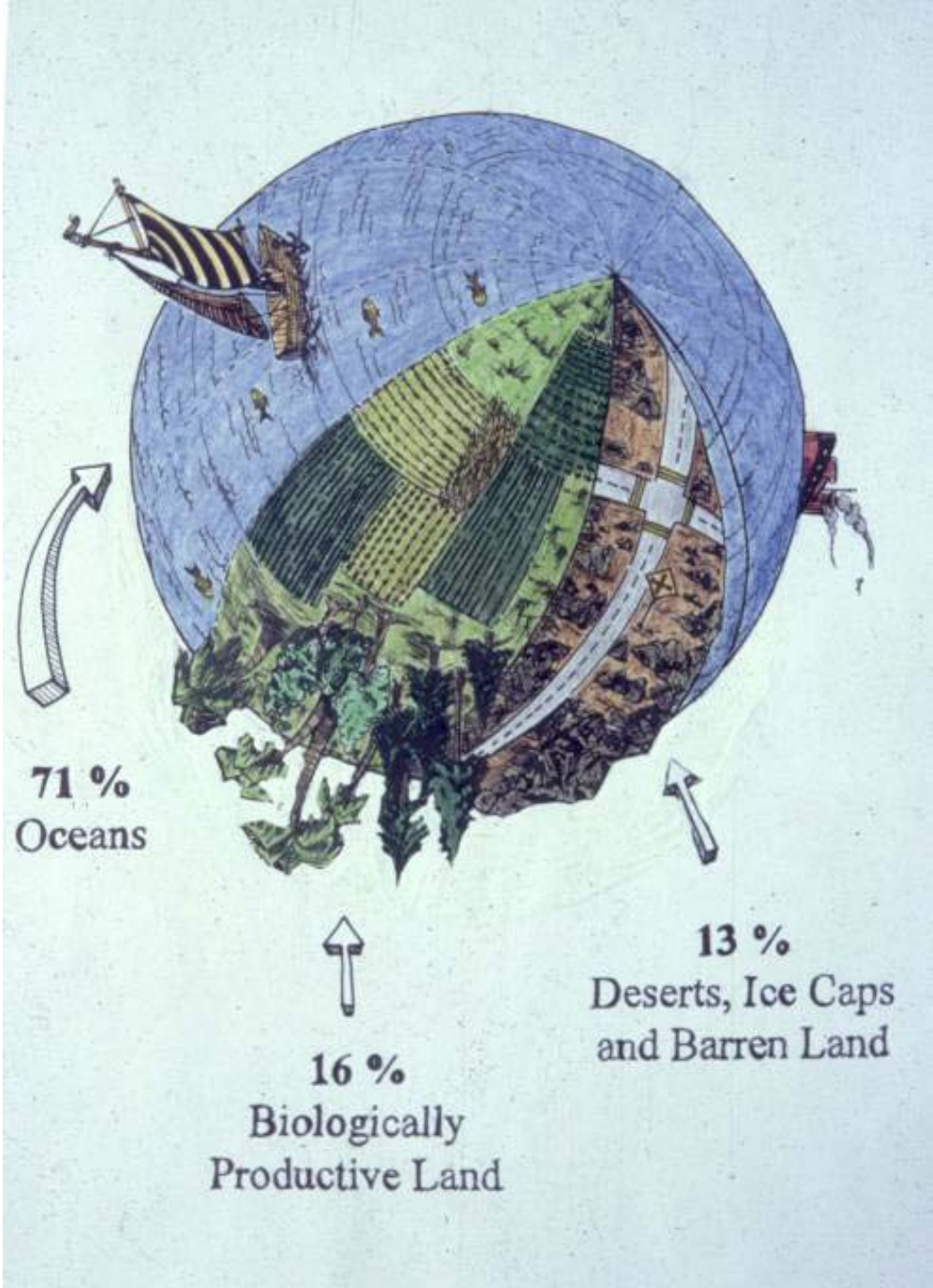
Mathis Wackernagel, PhD, *Executive Director*

How much Earth is there?

33 billion bio-productive acres
(and shrinking)

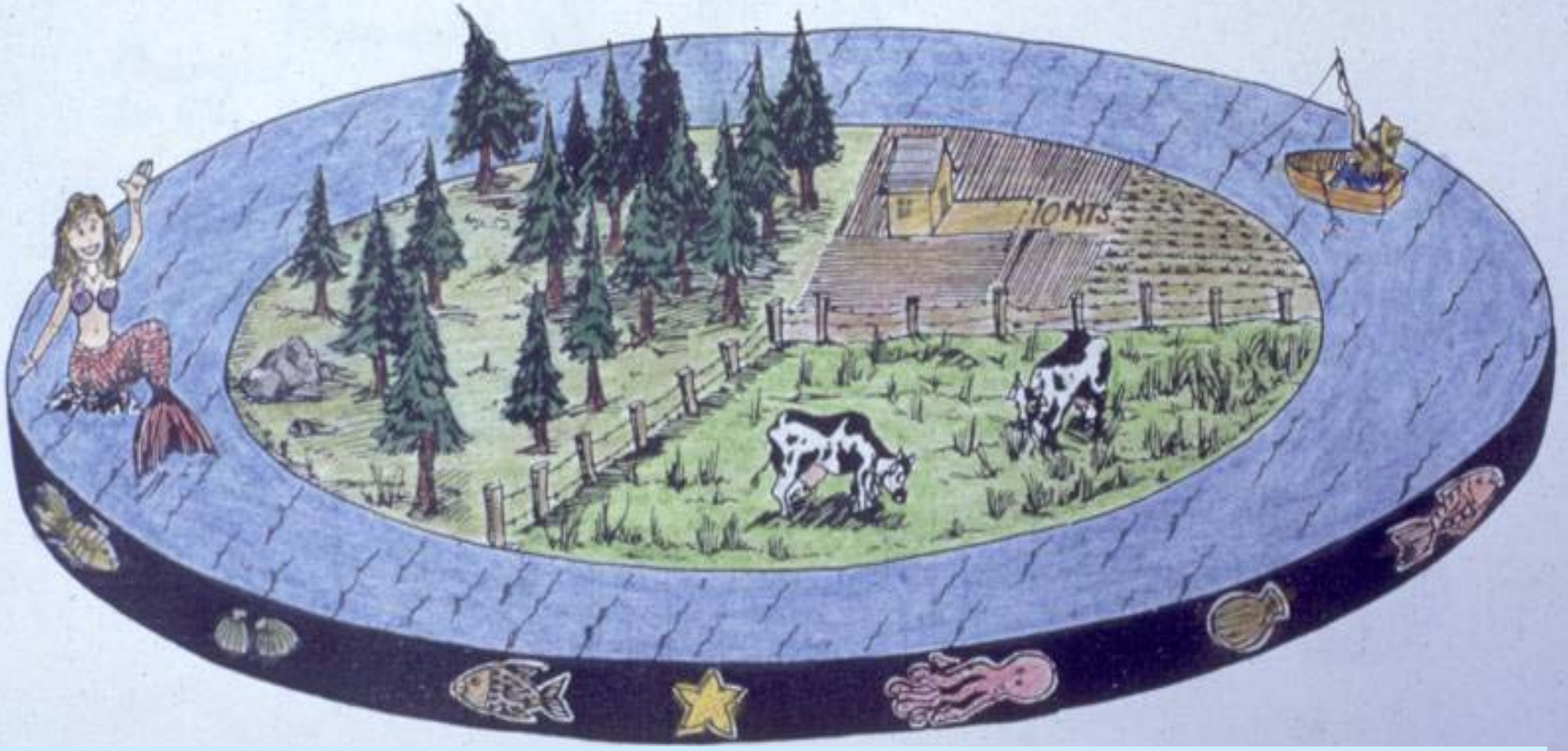
divided by

6.5 billion people
(and growing)



Ref: The Ecological Footprint Atlas 2008. Oakland: Global Footprint Network.

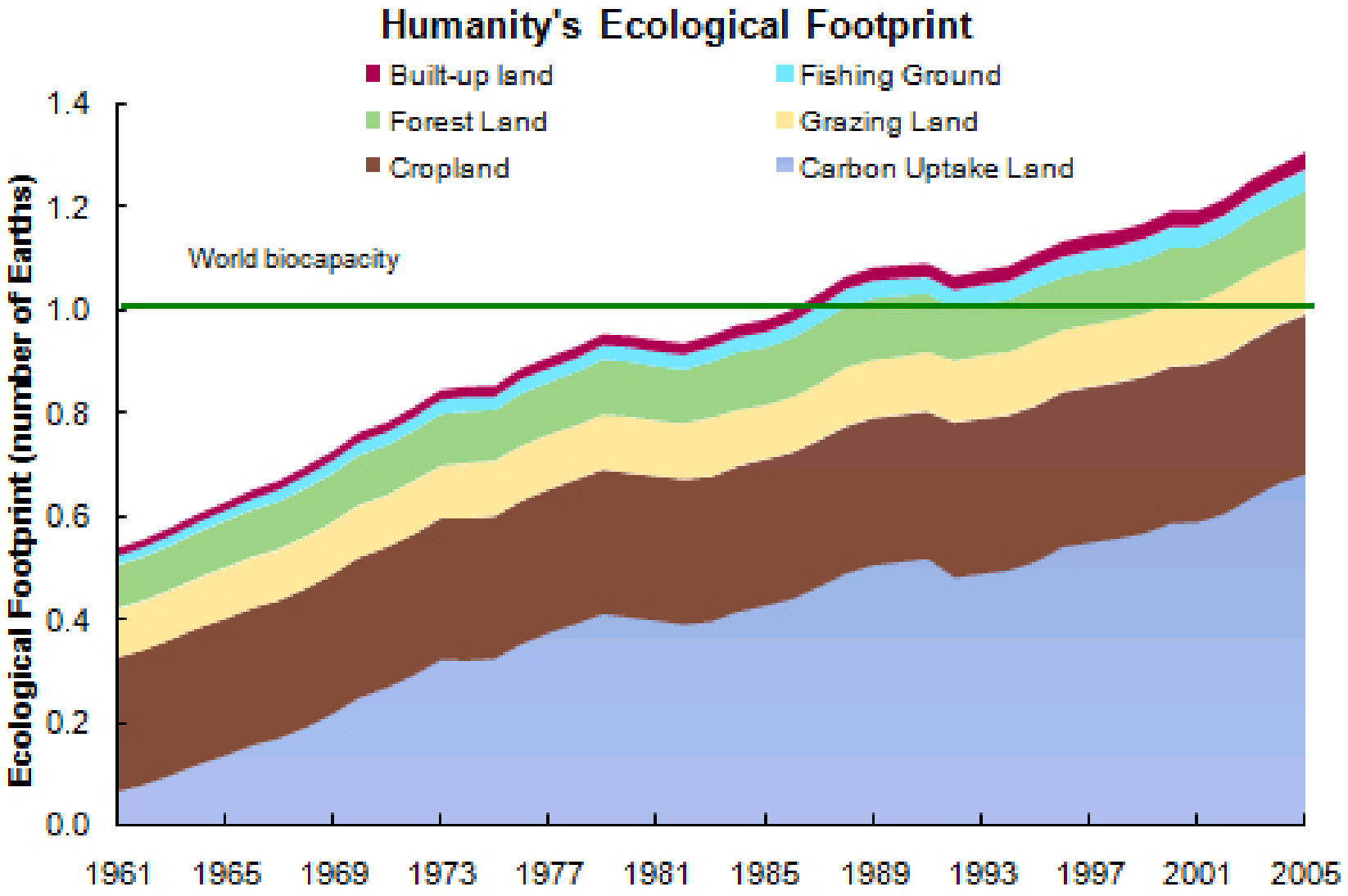
Personal Planetoid



We each get no more than 5.1 acres

Excluding the needs of the estimated 25 million other species!

Overshoot: We're drawing down natural capital



Source: The Ecological Footprint Atlas 2008. Oakland: Global Footprint Network.

The ***Ecological Footprint*** [1] is a measure of:

the human demand on natural resources

vs.

the earth's capacity to regenerate itself *measured in global acres*

*Typical **US acute care hospital** approx. 15-20 x sustainable level* Ref.2

United States
24 global acres per person
4.7 x sustainability level

60% of US footprint is CO_2 from fossil fuels

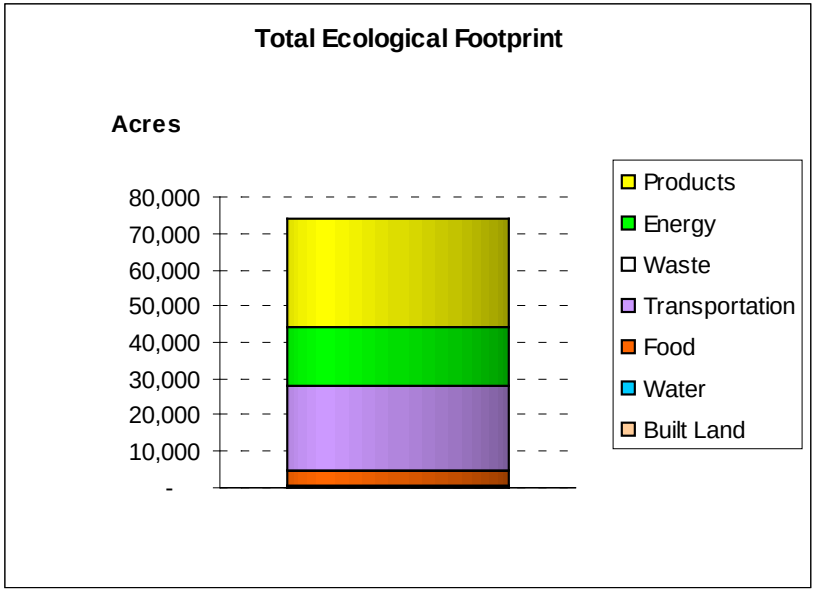
Current world average
6.6 global acres per person
1.3 x sustainability level

Max. sustainability level
5.1 global acres per person

Ref 1: The Ecological Footprint Atlas 2008. Oakland: Global Footprint Network. Ref 2: Guenther and Vittori Sustainable Healthcare Architecture pp.368-370
This slide compliments of Hubert Murray, Partners HealthCare

DHMC's Footprint

	MTCO2e	Acres	%
TOTAL	**175,036**	**73,995**	**100%**
Products	85,346	29,949	40%
Energy	45,021	15,799	21%
Waste	498	175	0.2%
Transportation	44,170	23,250	31%
Food	in development	4,329	6%
Water	in development	119	0.2%
Built Land	in development	375	0.5%



More than 1,000 times our physical footprint of 70 acres