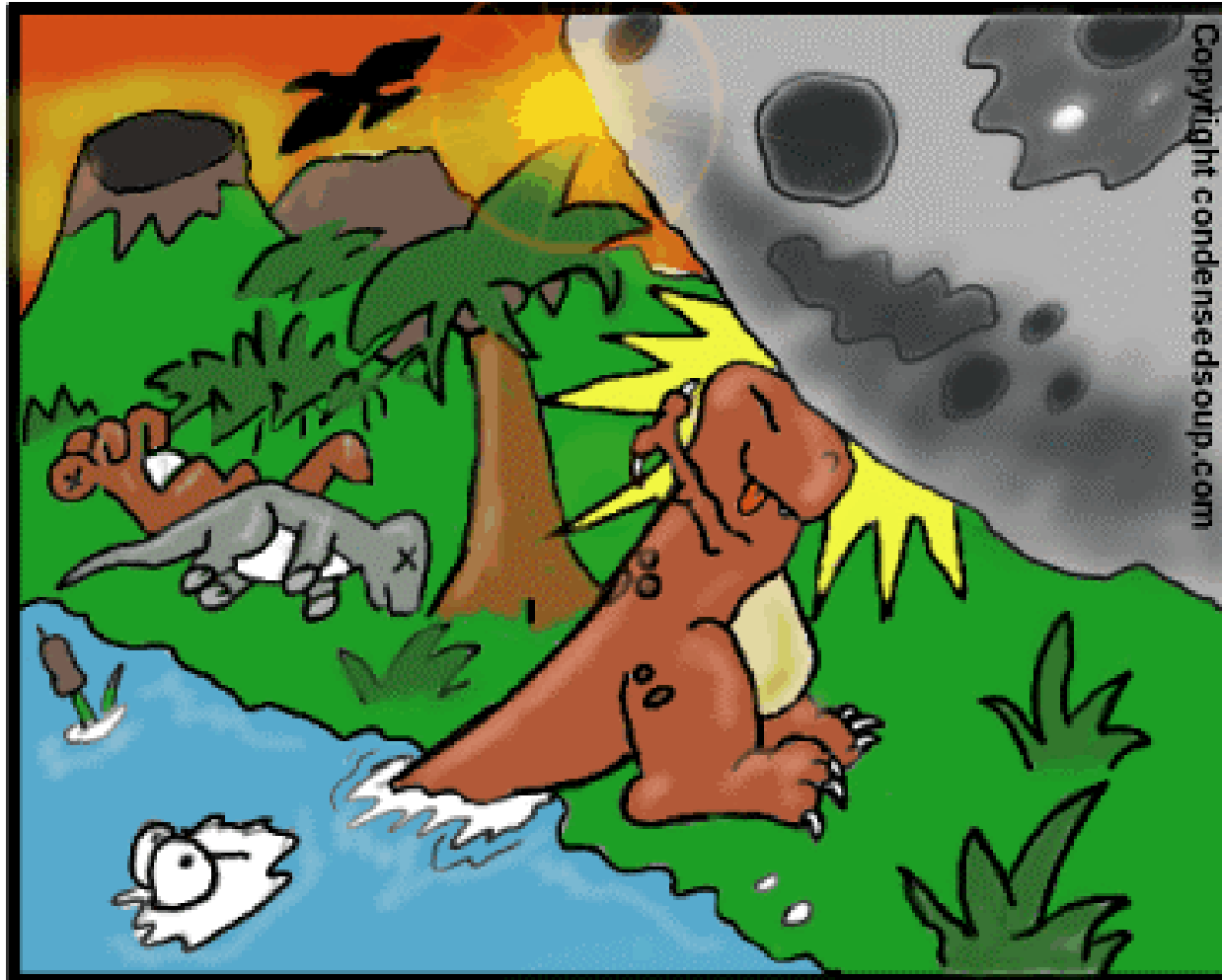


Overview of the SOLEC Indicator Process

Harvey Shear
Environment Canada

Great Lakes Water Quality Agreement

- 1987 Protocol to GLWQA
 - Lake ecosystem objectives and ecosystem health indicators
- SOLEC indicators are based on sound science.....



Scientists have discovered that the moon is moving away from the earth at a tiny yet measurable distance every year. If you do the math, you can calculate that 85 million years ago the moon was orbiting the earth at a distance of about 35 feet from the earth's surface. This would explain the death of the dinosaurs. The tallest ones, anyway....

There's
Science
and

There's

Sound

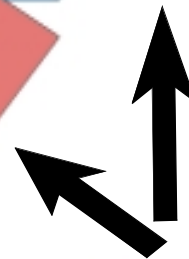
Science...



MEASURES
(data point)



INDICATORS



What Is an Indicator List?

A compilation of indicators

- necessary
- sufficient
- feasible

to characterize the state of the
Great Lakes ecosystem

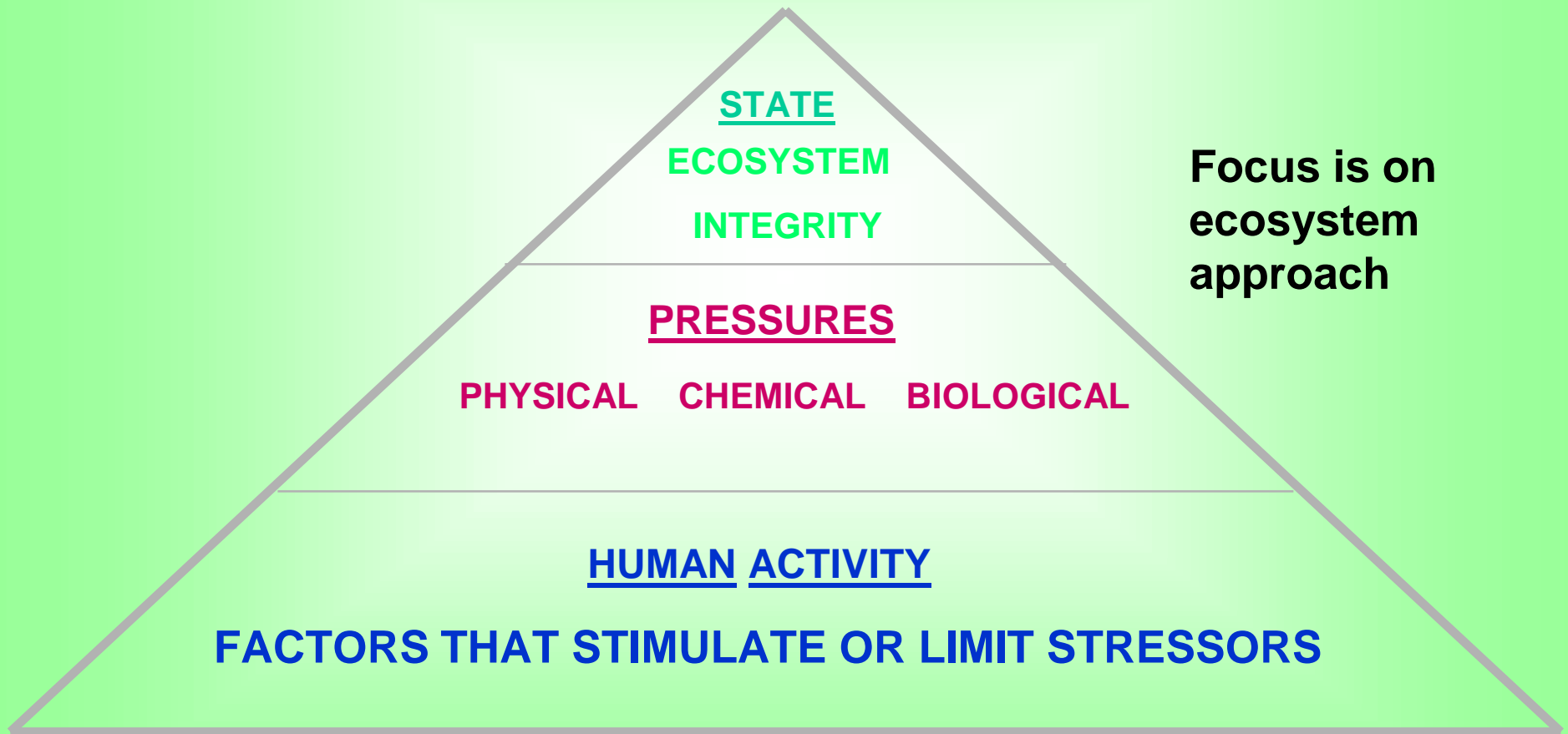
Why Create an Indicator List?

- Gives an overview of conditions in the Great Lakes
- Provides consistency of information
- Leads to efficient allocation of resources
- Reach consensus on information needed

The Indicator Selection Process

- Used **State-Pressure - Human Activity** model
- Indicators are interconnected
 - e.g. Wetland area / wetland bird diversity and abundance

Indicator Framework: State, Pressure, and Human Activity



The Indicator Selection Process

- Over 850 possible existing indicators considered
- Scientific review reduced the list to 80
- Presented and discussed at SOLEC 98
- Indicator list revised and sent out for review May 1999
- Version 4 of list online
- Indicator list is evolving; it is not static

The Indicator Selection Process

- Indicator categories are based on the ones presented in 1998
- SOLEC process is open
- SOLEC list is in transition
- Indicators for inland areas have not been dealt with yet
- Indicators need end points

INDICATORS

Global

Continental

Basinwide

Lakewide

Local, AOC

1

2

5

10

15

Nutrients
Contaminants
Fish & Wildlife
Population trends
Habitat status / trends
Etc.

Remediation planning
Climate change
Land use changes
Stewardship
Sustainability plans
Etc.

Reporting Frequency (years)

How Did We Get to This Point?

- Experts put together short summaries for 31 indicators
- Writers and presenters were asked to assess the indicators

Development of Indices

- Aggregate indicators - eventually report out on 10-20 indices rather than 80 indicators
- A sample of 2 proposed indices will be presented this morning
- Future work on indicators will lead to the development of additional indices

Morning Details

- Eight presentations based on indicator list
 - Water
 - Coastal wetlands
 - Land
 - Human Health
 - Beach closures
 - Drinking water
 - Fish consumption
 - Societal

Morning Details

- Index Development
- Summary and Charge

