

# Exploring Ocean Futures

By Sherman Lai



## Outline

- What is Ocean Futures?
- Ecopath with Ecosim
- Dataset
- Goals
- Solution
- Progress
- Time line
- Comments?

## Ecopath with Ecosim

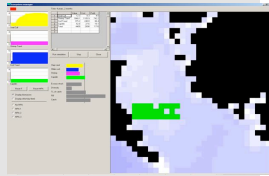
- Scientific tool for ecosystem management
- 18 years of development by scientist
- Describes an ecosystem
  - Snapshot
  - Time dynamic
  - Spatial dynamics

## Dataset

- Individual Scenario
  - Input variables
    - Fishing effort (4)
    - Marine protected areas (4)
  - Output variables
    - Value, Cost, Profit per fishery (4)
    - Biodiversity (4)
- Scenario comparison
  - Value, Cost, Profit
  - Biodiversity

## Goals

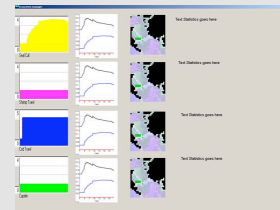
- Extend Current interface for laymen;
- Clear use of modes;
  - Exploration;
  - Run;
  - Discussion.



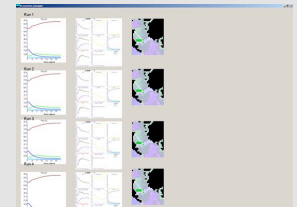
## Exploration



## Run

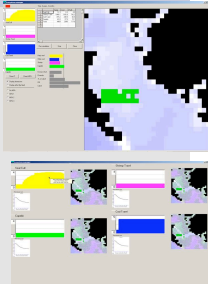


## Discussion



## Solution

- Smarter use of layering;
- Small multiples;
- Overview plus detail;
- Smarter use of color;
- Blank comparator;
- Bank to 45 degrees.



## Progress

- Currently developing the COM interface to combine .Net and VB6;
- Strong idea of required variables;
- Calling redraw delegate.

## Time line

- Nov 11<sup>th</sup> - Gather variables required for simulation runs. Create more variables if required.
- Nov 18<sup>th</sup> - Develop class framework for drawing maps, fishing effort graph, biomass plots, biodiversity plots.
- Nov 20<sup>th</sup> - Completion of exploration mode.
- Nov 25<sup>th</sup> - Completion of run mode.
- Dec 2<sup>nd</sup> - Completion of discussion mode.
- Dec 9<sup>th</sup> - Completion

## Comments??? ^\_^

- Use of lens or Blink Comparator?