

TITLOW ARTIFICIAL REEF PROJECT

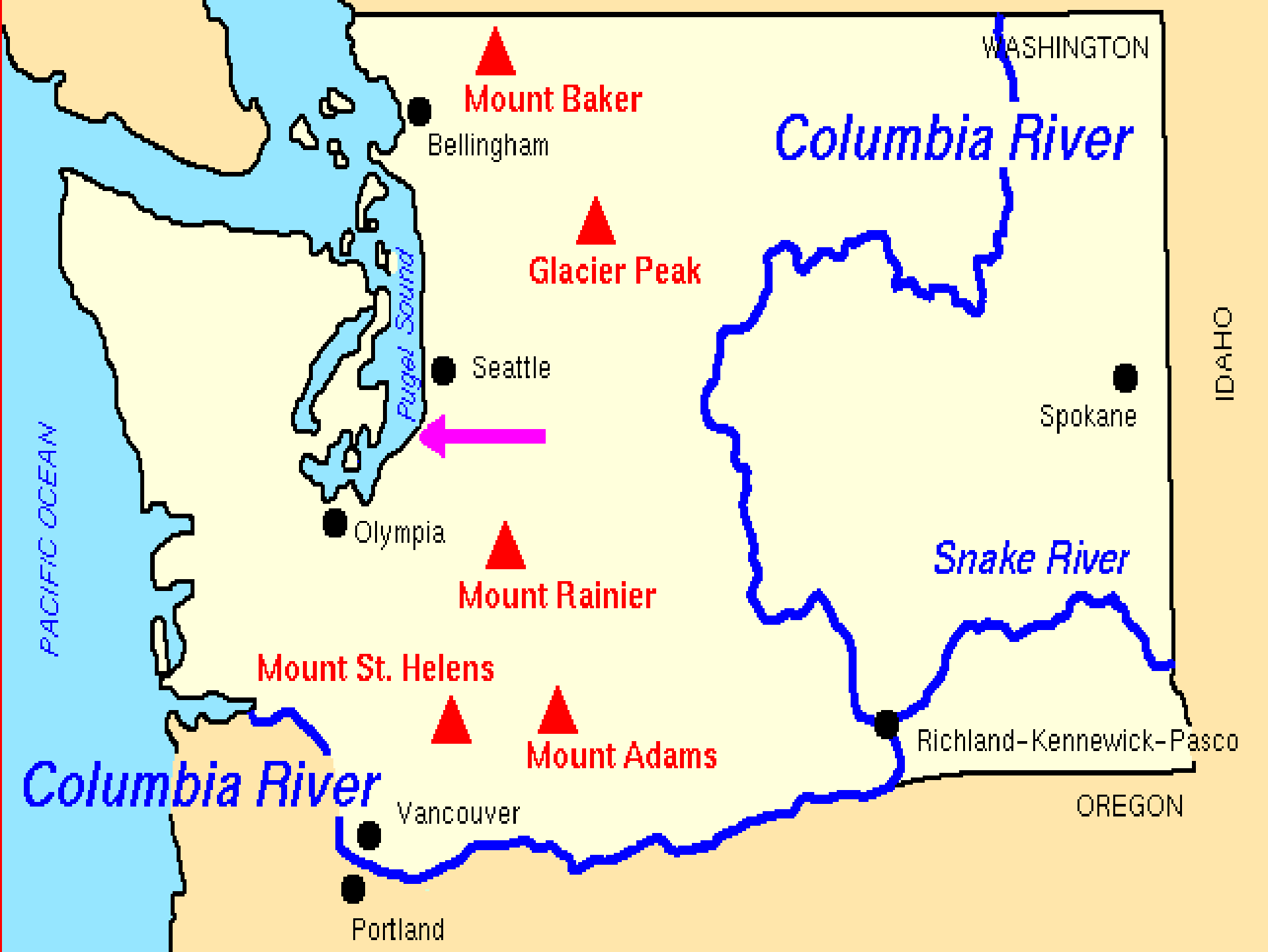


*Bellarmino Preparatory School
Marine Chemistry Program
Tacoma WA*

Anna Comfort and Matt Holroyd

Titlow Beach Background

- Marine Preserve
 - Located South of Narrows Bridge, Tacoma WA
- Popular Dive Site
 - Abundant marine life on wooden pilings and old ferry dock
- Pilings are to be removed
 - Toxic chemicals bio-accumulate up the food chain
 - Many animals cannot tolerate the toxic pilings so selective biology on the pilings (Department of Fish and Wildlife)



WASHINGTON

Mount Baker
Bellingham

Columbia River

Glacier Peak

Seattle

IDAHO

Spokane

PACIFIC OCEAN

Puget Sound

Olympia

Mount Rainier

Snake River

Mount St. Helens

Mount Adams

Richland-Kennewick-Pasco

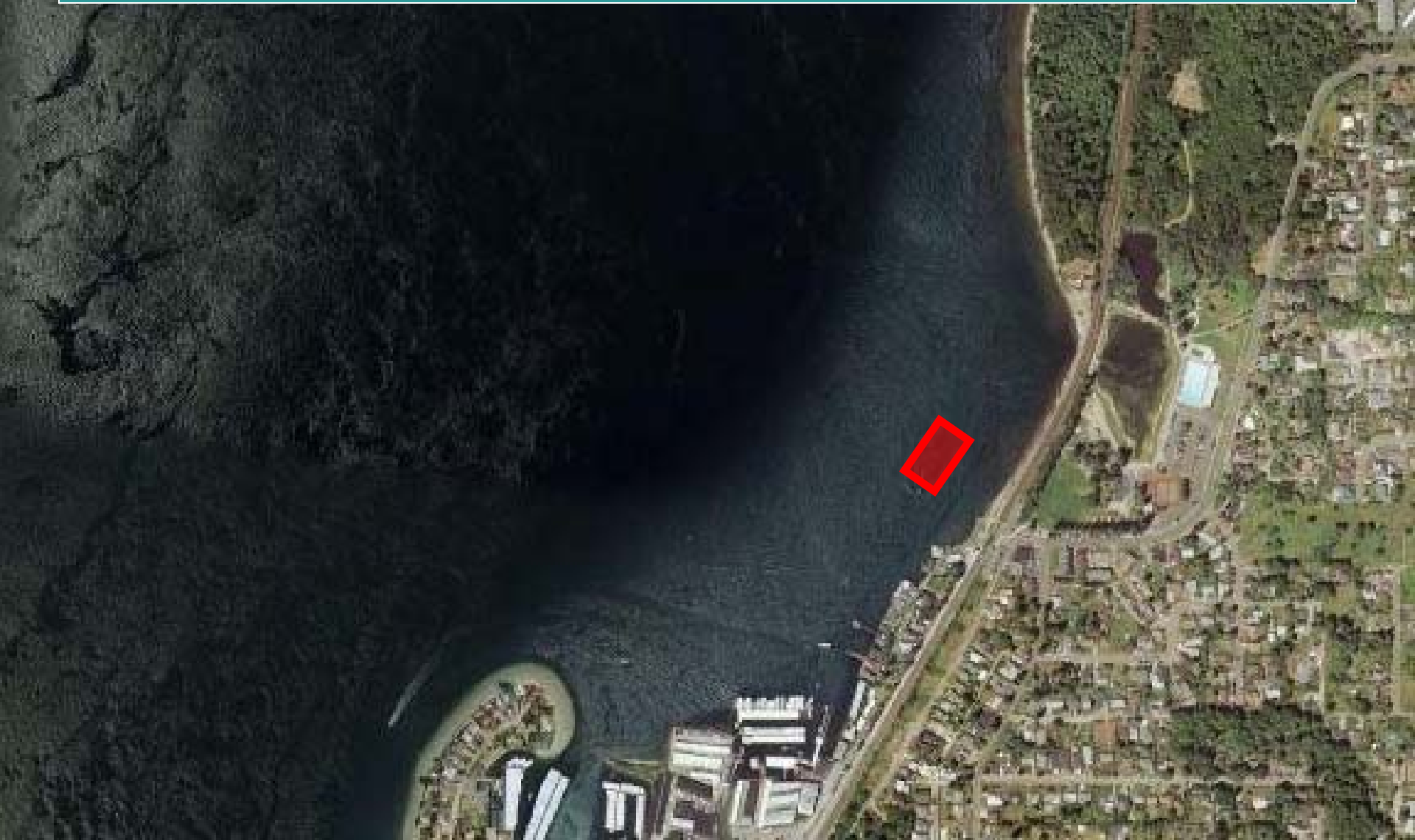
Columbia River

Vancouver

OREGON

Portland

Proposed Titlow Beach Offshore Artificial Habitat Area

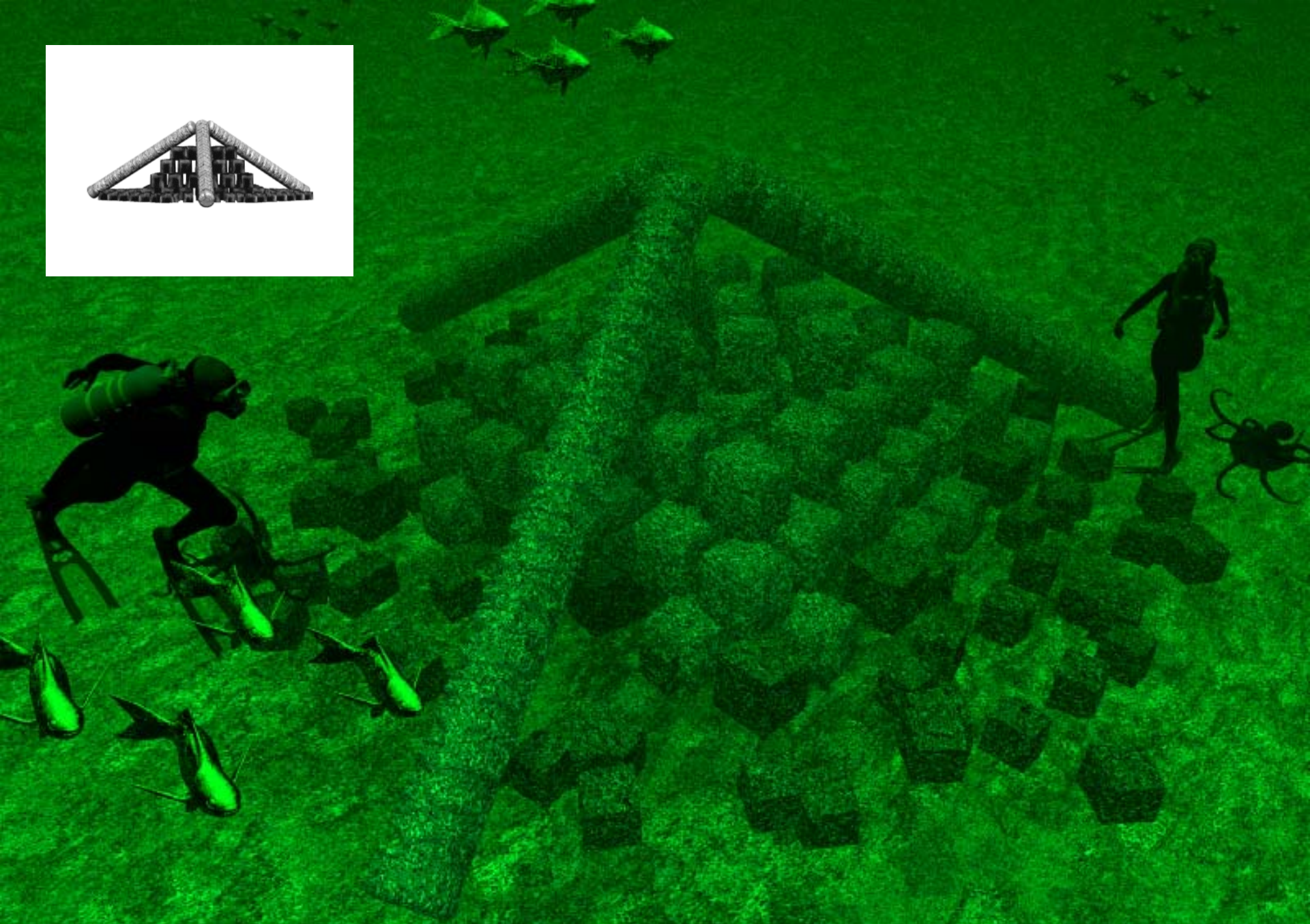


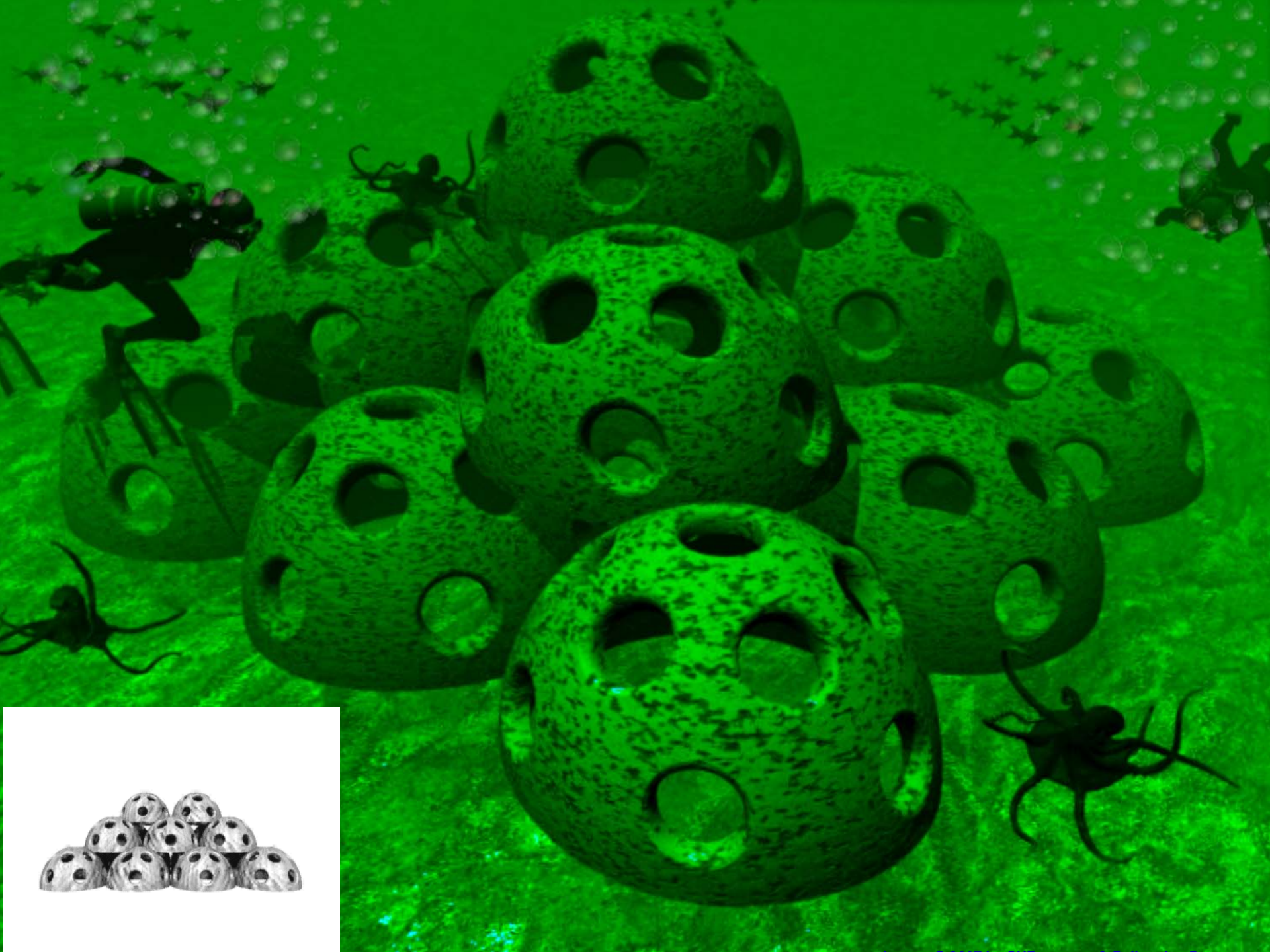
Community Partnerships

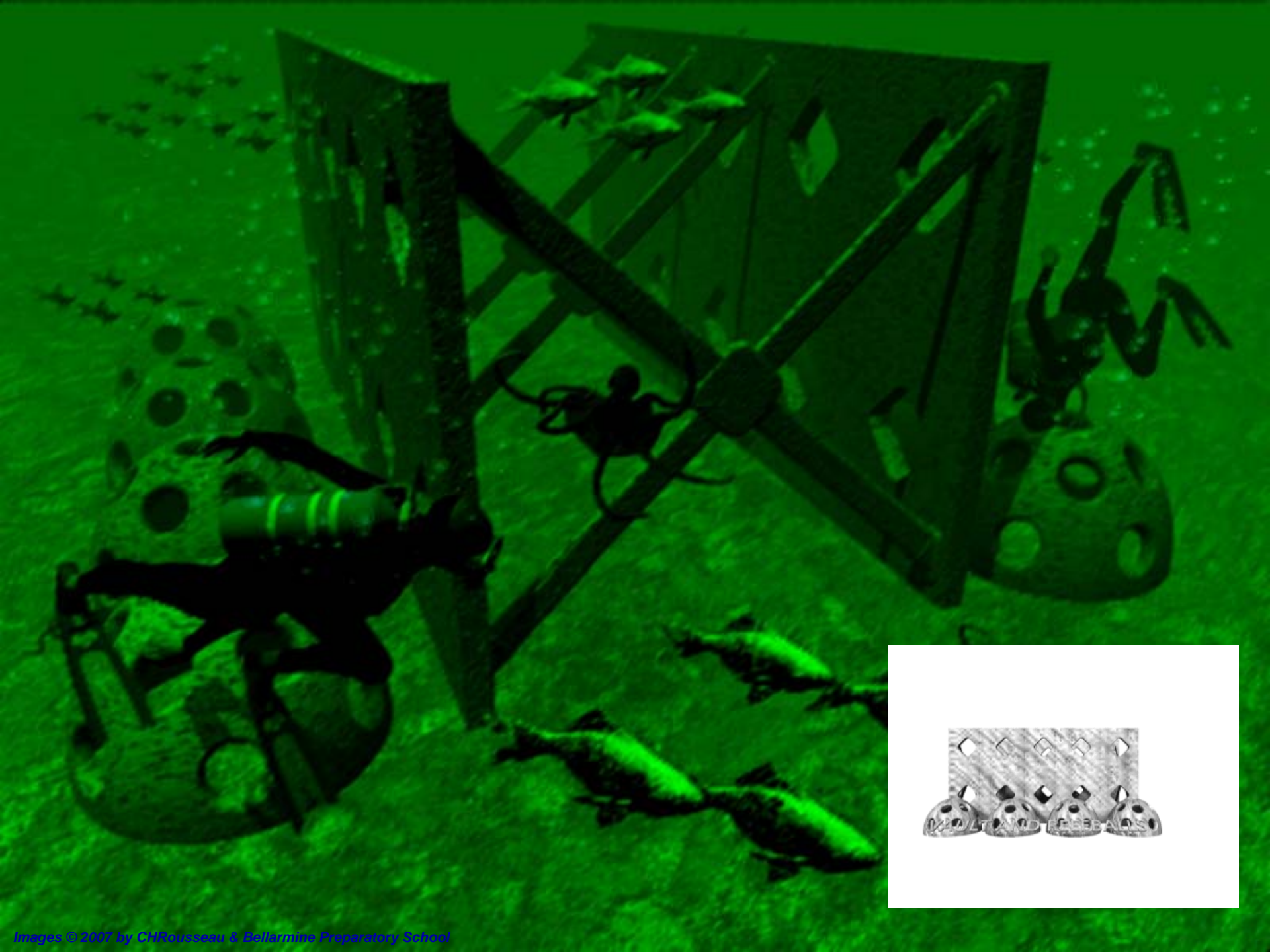
- Initiated by the Washington State Scuba Alliance
- Bellarmine Preparatory School's Marine Chemistry Program
- Endorsed by Metro Parks Tacoma

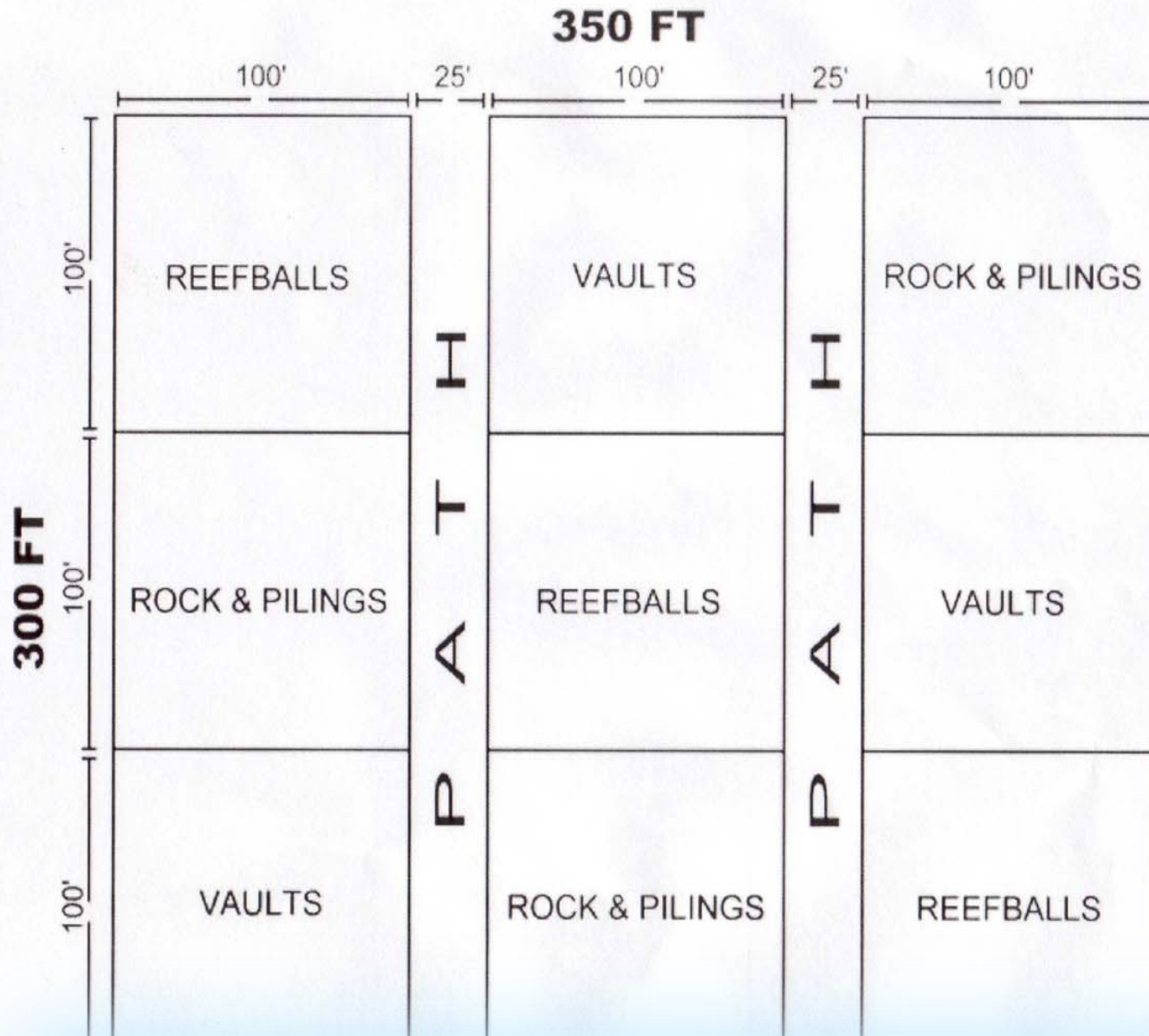
What We Hope to Achieve

1. Replace toxic habitat with environmentally friendly material
2. Provide a safe place that is well-liked by divers and marine life
3. Provide awareness of Puget Sound's abundant marine life
4. Educational opportunity to observe marine life in a natural non-aquarium setting
5. Opportunity to statistically compare different habitat structures

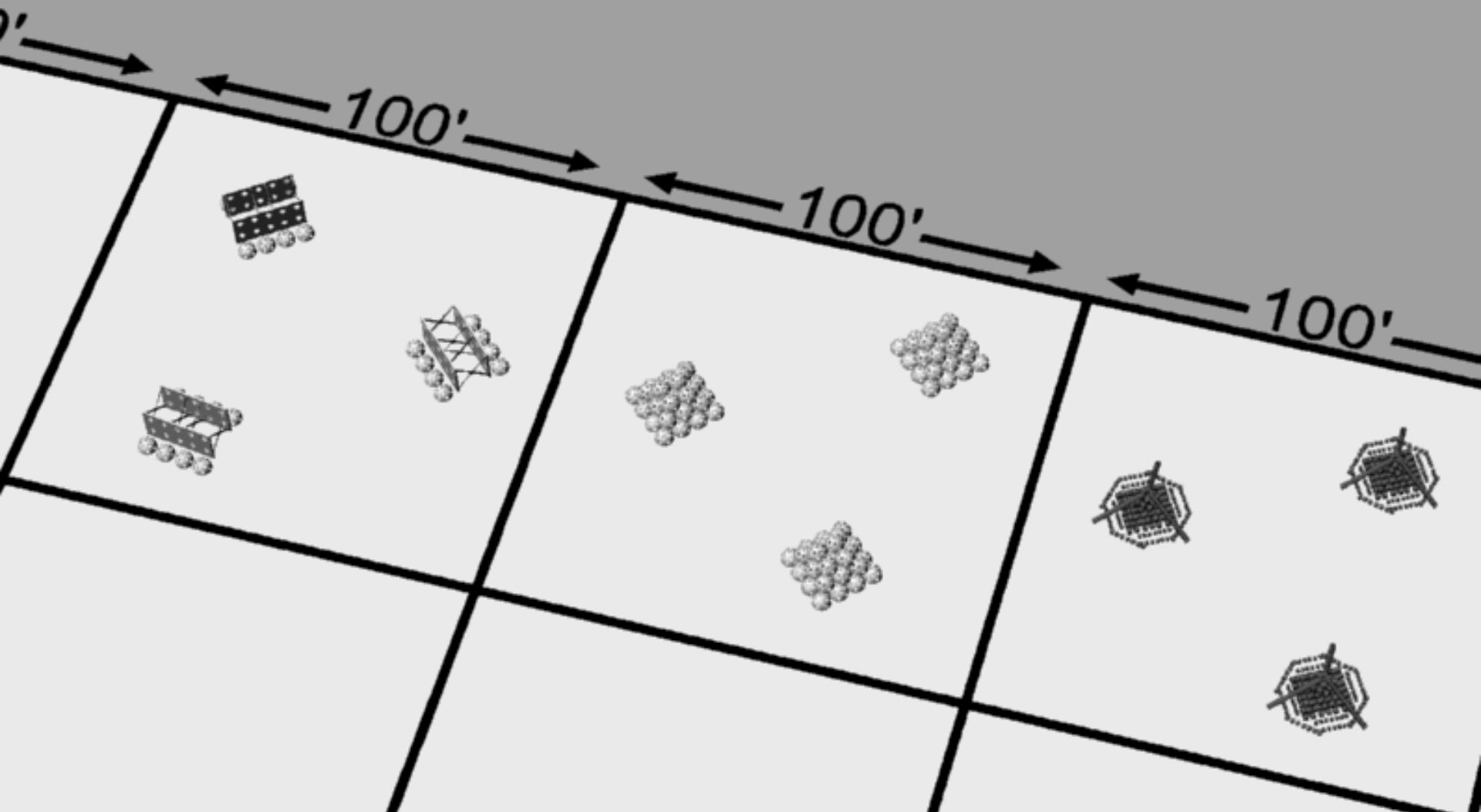








Proposed Habitat Area Grid



Proposed Grid Sectors are 100' x 100'



Proposed Habitat Area Grid



Advantages of GIS

- Allows for the manual insertion of spatial referenced data
 - Site Boundaries
 - Grid
- Measures and Locates points, lines, and polygons. Takes away manual labor

Advantages of GIS

- Can be accessed and itemized for specific users
- Specific users include:
 - Divers
 - Students
 - Local Marine Biologists
- Primary focus to create an environment for science of all levels

Thank you

