

Digital Reefs leverages high-powered computing, cloud technology, gaming engine platforms, and virtual reality experiences to bring 21st century solutions to a uniquely 21st century challenge.

The knowledge exists, the need is acute, the time is now. JOIN US.

### WHY NOW?

Coral reefs support up to one billion people, are home to one-quarter of all ocean species and, in the United States alone, create hundreds of thousands of jobs each year.

The 21st century has brought with it unprecedented global change that challenges traditional management strategies and threatens extinction of the Coral Reef Blue Economy.

New data and new technologies are being developed every day to address these challenges—and more are on the way.

Digital Reefs is the gateway to those solutions.



### WHY HOPE?

Digital Reefs transcends language and socio-economic barriers, delivering intuitive, interactive, actionable data and solutions, uniting all via a common visual language.

Leveraging explosive advances in computational power and cloud technologies, Digital Reefs is universally accessible to stakeholders everywhere, in offices, homes and out on the water, at their desktops, tablets, and mobile devices.

By creating virtual reality experiences with scientific data, we aim to bring Digital Reefs into homes, classrooms, and boardrooms alike, to transform the conversation around coral reefs and the Blue Economy.

We anticipate, within 5 years, Digital Reefs will be scaled up to create a globally interconnected Digital Reefs Network, making it the goto tool for effective management, conservation, and restoration of coral reefs in the 21st century.

#### WHY US?

We are passionate, committed scientists, engineers, tech leaders, and NGOs who have converged across oceans, across cultures, across languages, and across disciplines to ensure our own, collective future on this incredible planet we call home.



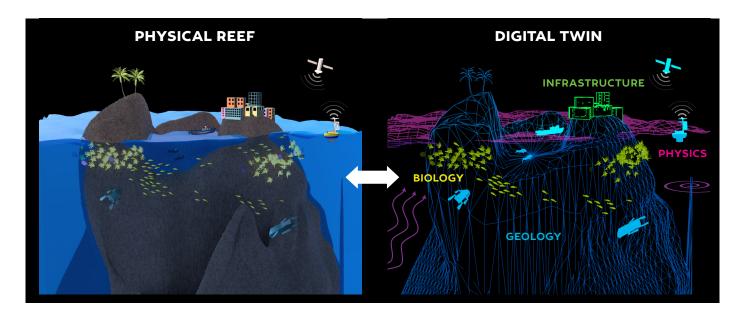














# MODEL & DATA ACQUISITION

- » Bathymetry
- » Hydrodynamics
- » Sensors/Robotics
- » Photogrammetry
- » Ecology



# DATA CURATION

- » Cyber infrastructure
- » Storage
- » Databases
- » Metadata



# DATA INTEGRATION



#### **DECISION SUPPORT**

- » Management
- » Intervention
- » Emergency response
- » Experimental design



## **ANALYSIS**

- » Machine learning
- » Simulation
- » Forecasting

## VISUALIZATION

- » Virtual reality
- » 3D printing
- » Gaming

### ACCESS

- » Universal access
- » Community database
- » Experiential learning





