Policy Summit

"One California, One Coast"

Highwave Ocean Energy

Y REEF

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Smart Coast California

Invertebrates with algae assist make Coral Reefs that we now know can capture up to 97% of a wave's energy.

Guided by Nature to mimic
Coral Reef for their shore protection, a new habitat,
energy capture with a good surfing wave.

We are still in “The Stone Age” with our shore protection methods.

It is now urgent to use or to mimic nature’s proven solutions.

It’s not easy to mimic nature !!!

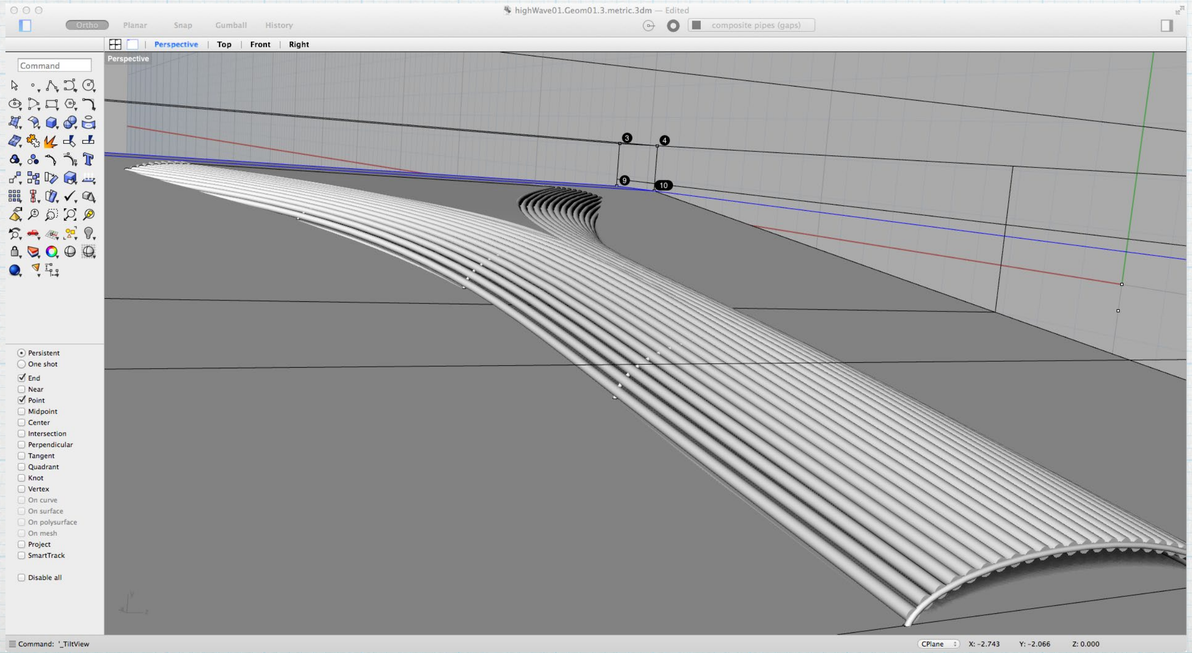
Any inshore artificial reef solution should include the following:

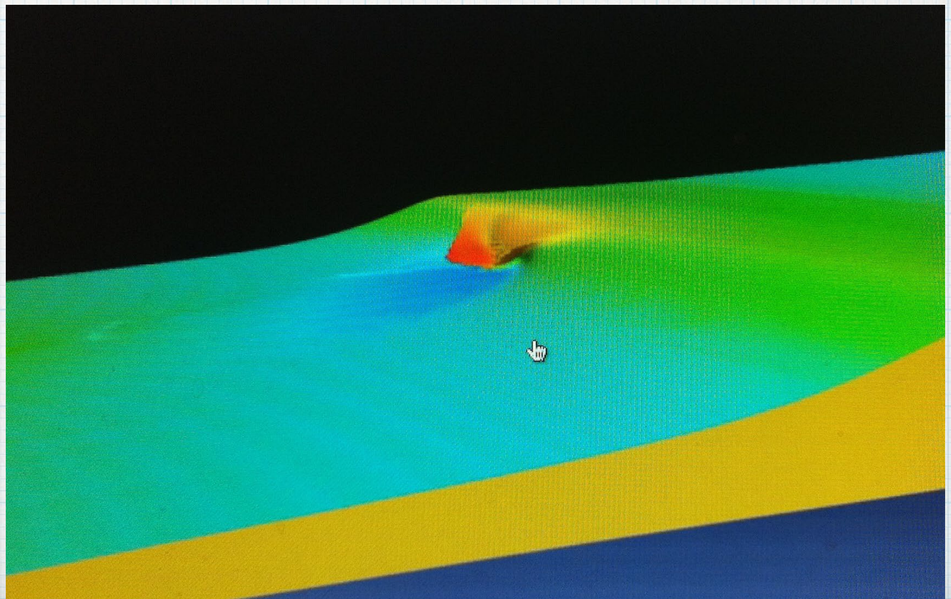
* economical * long life * inert * scalable * removable

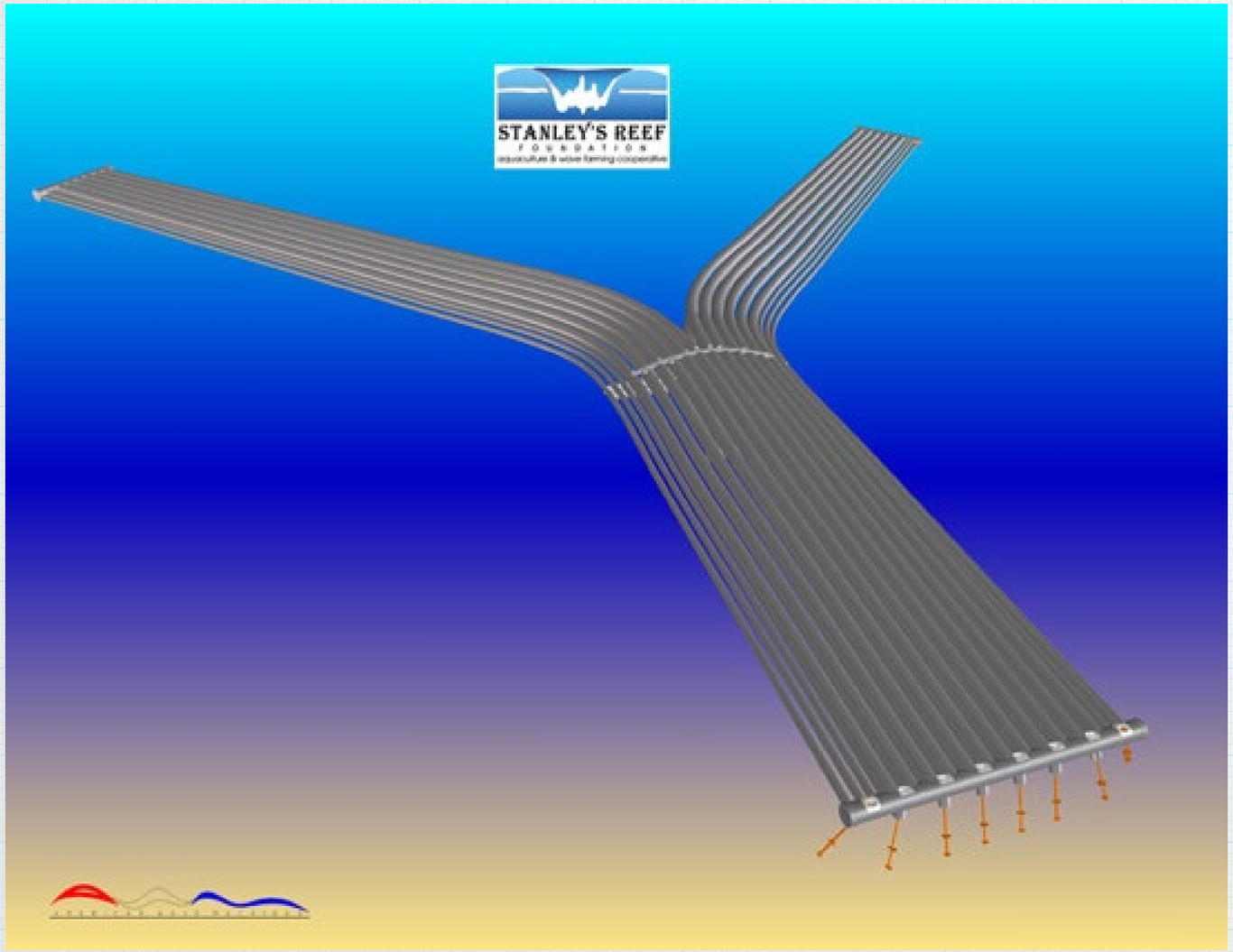
* become a marine habitat * holds sand * quickly installed

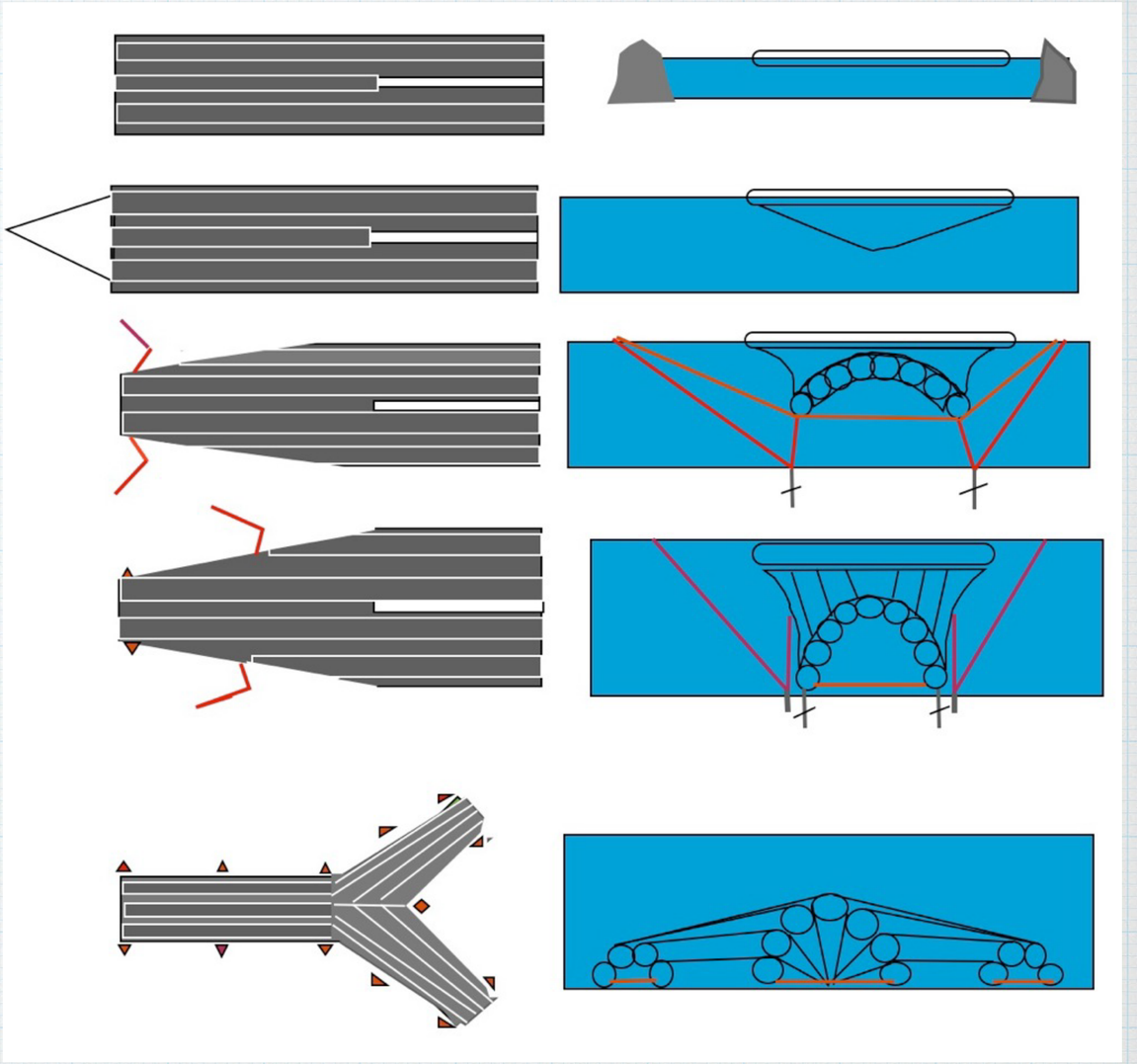
* allows local sand transport * considers all stakeholders

* dissipates energy offshore * nothing on the horizon









The first formal reef design on the left. Assembled in a harbor, towed offshore to the site, formalized and installed with anchors in a fortnight.

The Y reef design evolved from a full bathymetry study with Fugro of “Rights and Lefts” as a good surfing wave at Hollister Ranch in California.


HWRL
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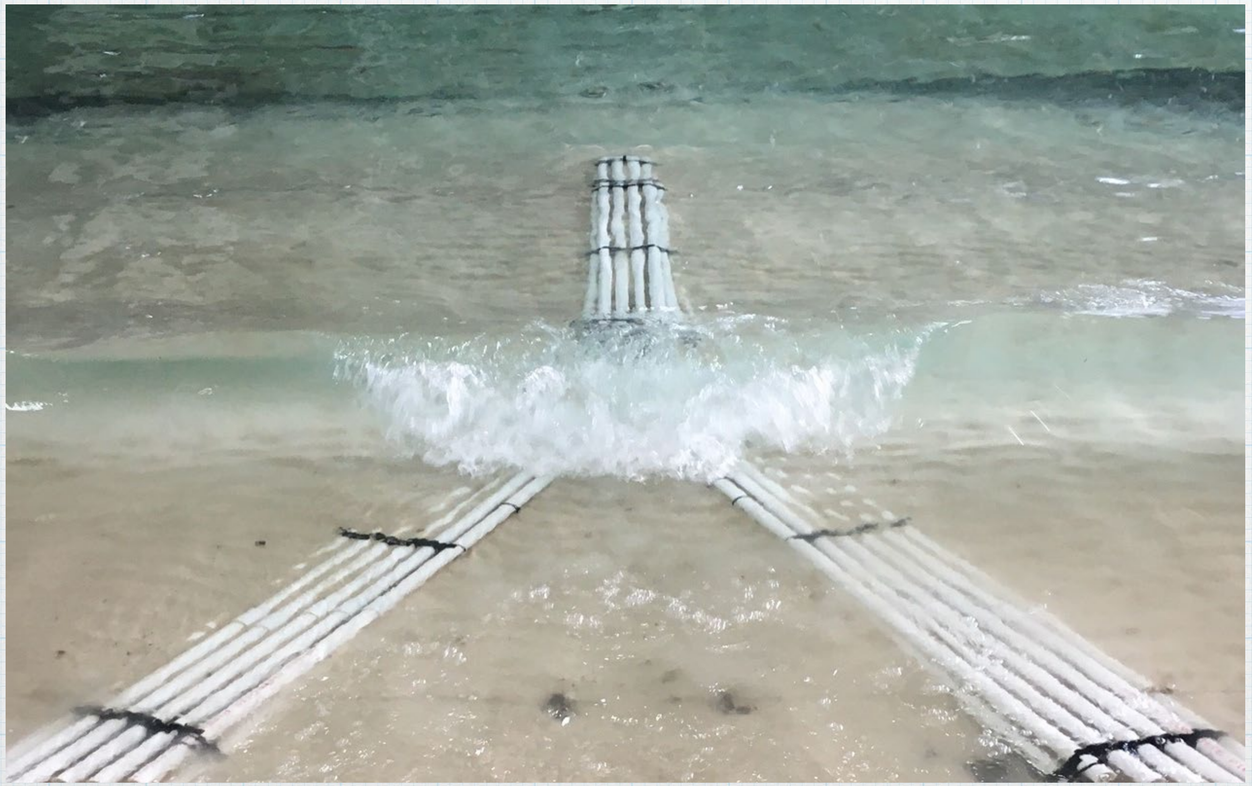

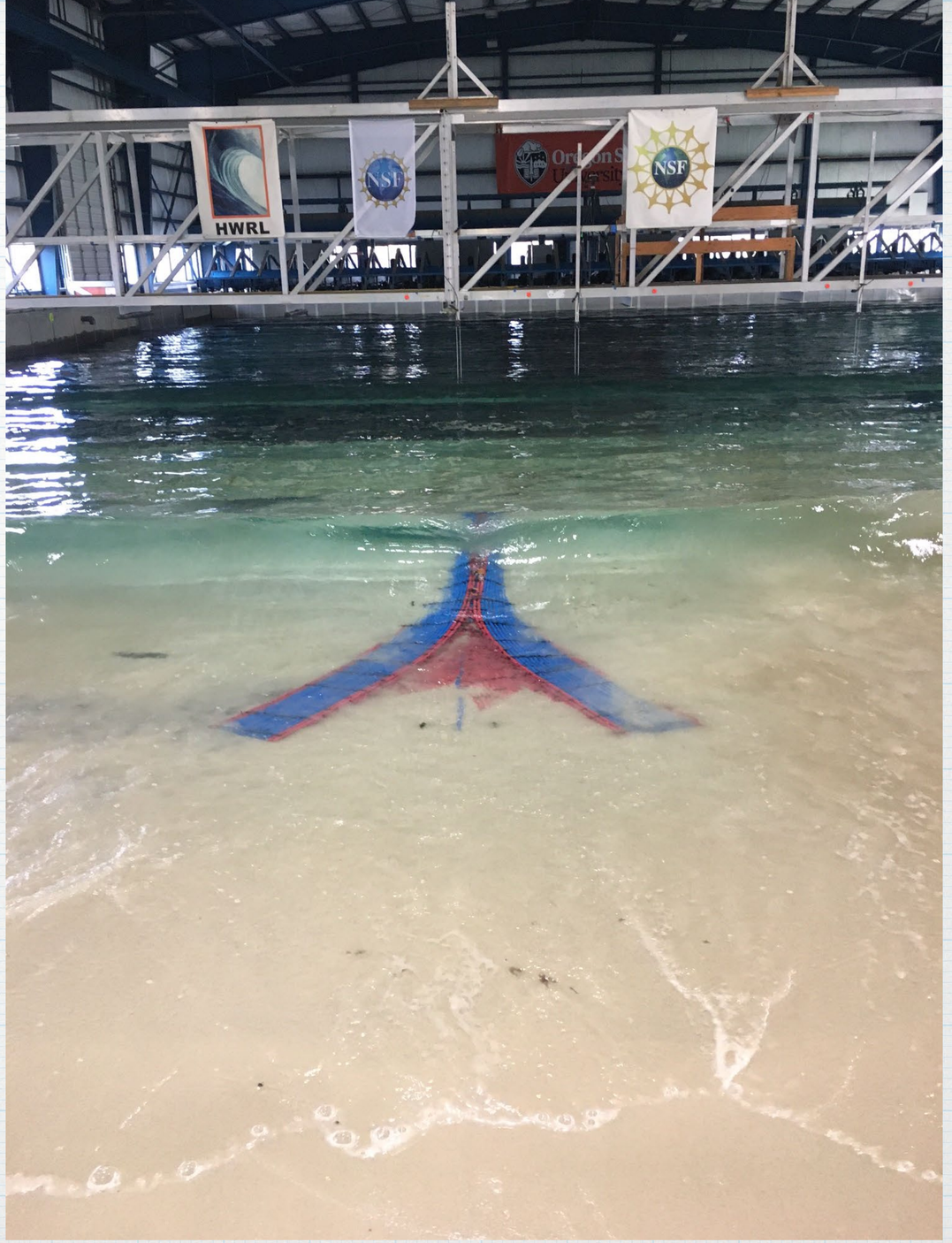
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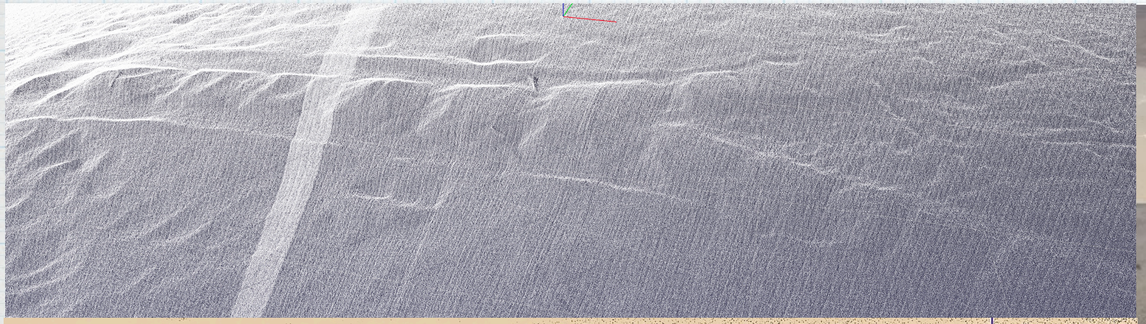
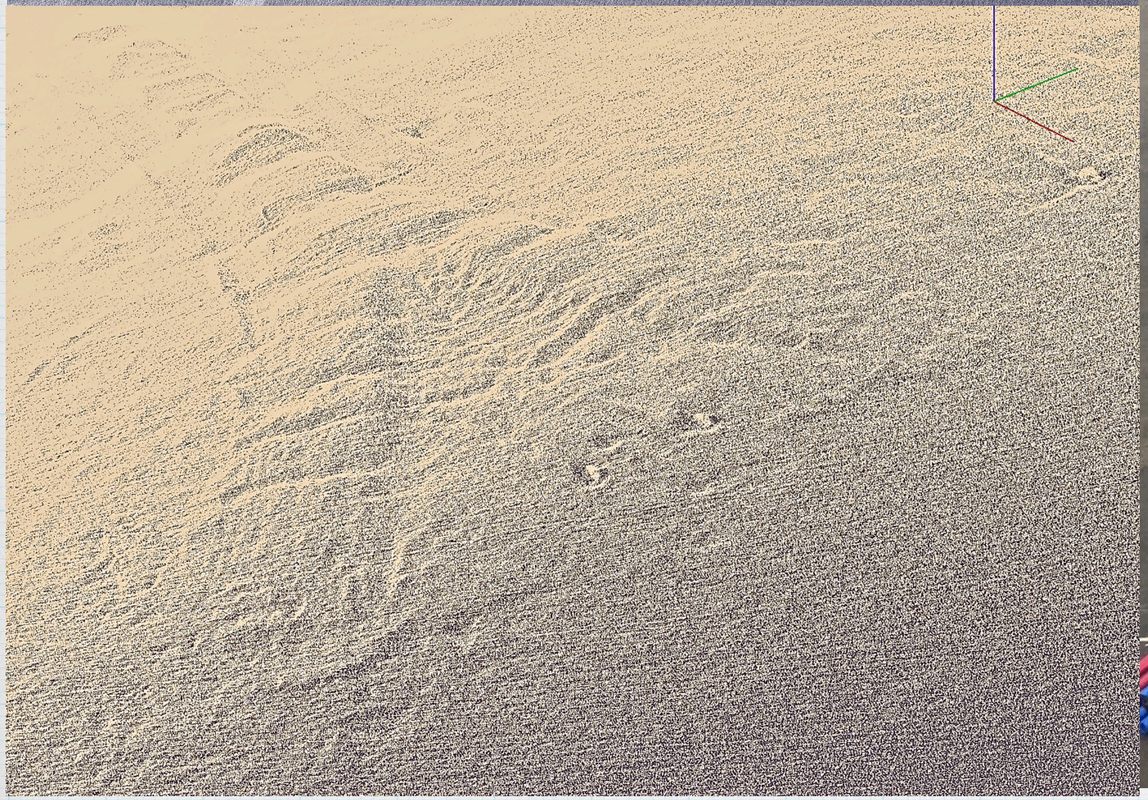
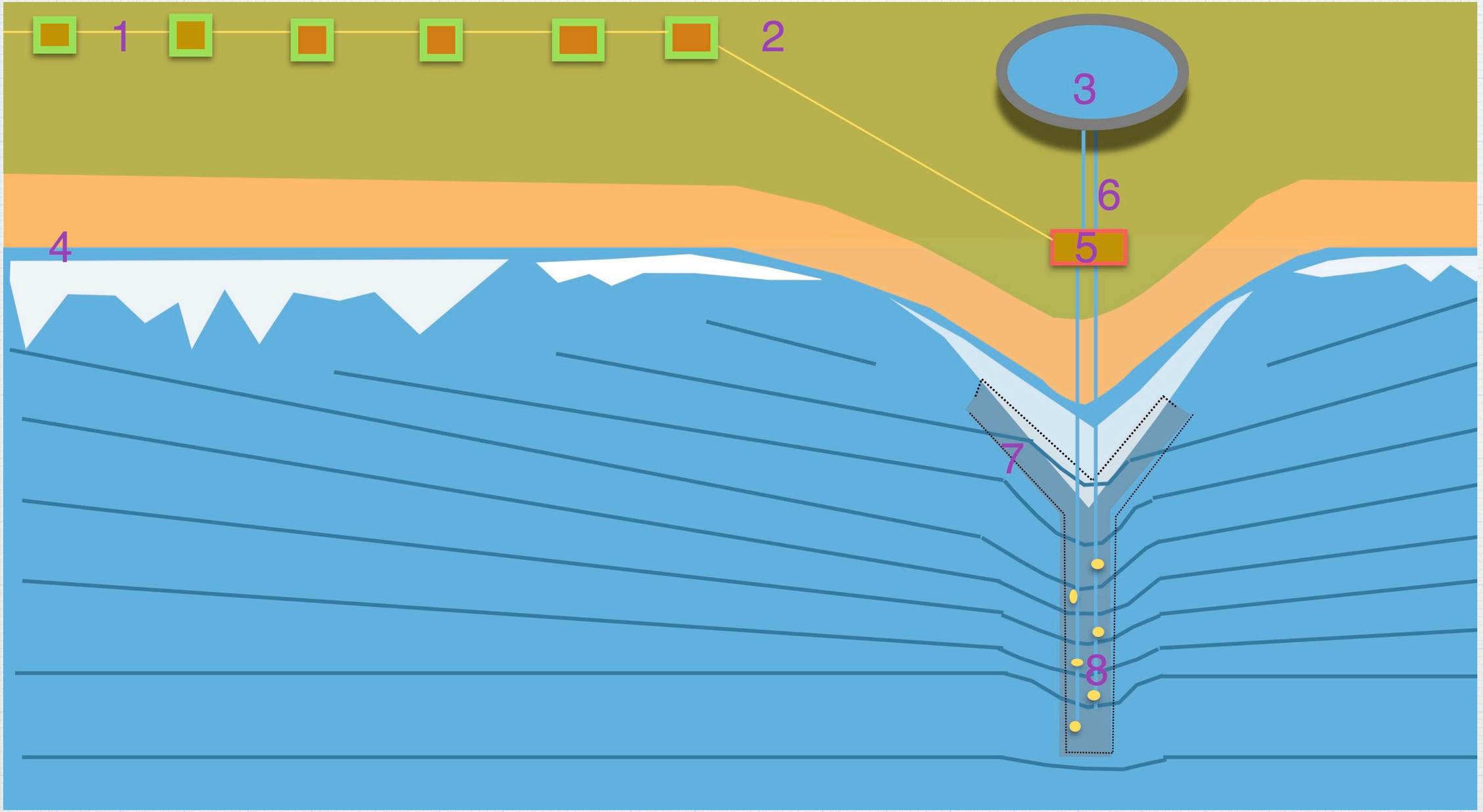


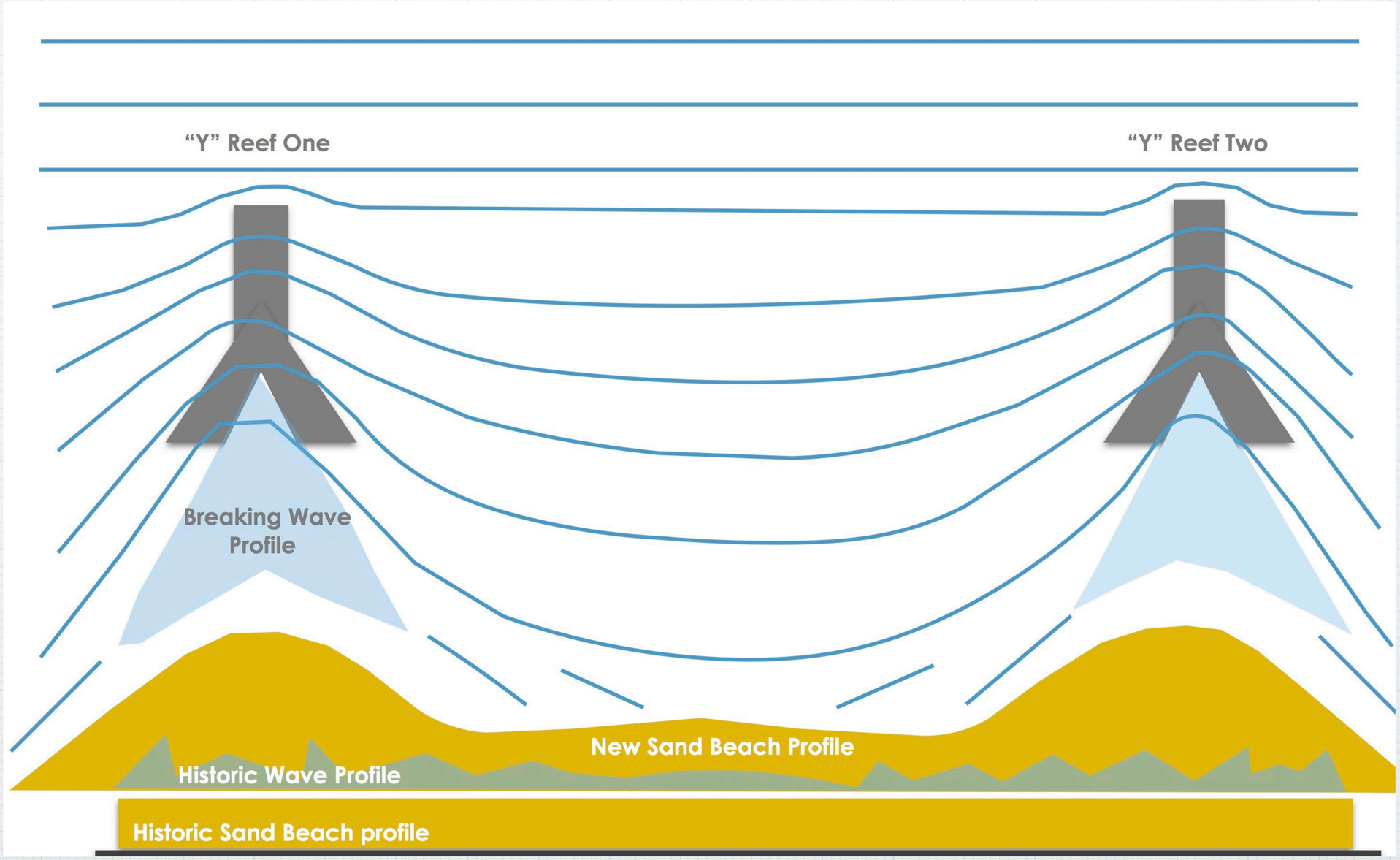


Scans show the sand holding ability with the “footprint” after removal of the Y reef.



Y reef acts to transform and to manage the inshore energy.

Two reefs are better than one when the goal is to protect a stretch of beach.



Y REEF

Porosity is key for critical aspects
and benefits including sand holding and as a
future living marine habitat. Designed to host
seagrass, high temperature corals, mussels and
oysters. The Y reef will be made with any area's tide,
wave history, slope and bathymetry. Made to manage
the local spectrum of energy
like natural coral reefs for small or large waves breaking
more offshore. This to reduce energy on the inshore to
protect or grow a beach like coral reef. The process is to
mimic nature's coral
reefs to emulate natures perfect solution.

Highwave Ocean Energy

Y Reef… Y not ?

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