

Effectiveness of Aquatic Invasive Plant Control In Emerald Bay, Lake Tahoe

Dan Shaw – CA State Parks

Zach Hymanson – CA Tahoe Conservancy

Kim Boyd – Tahoe RCD

Tamara Sasaki – CA State Parks



1995

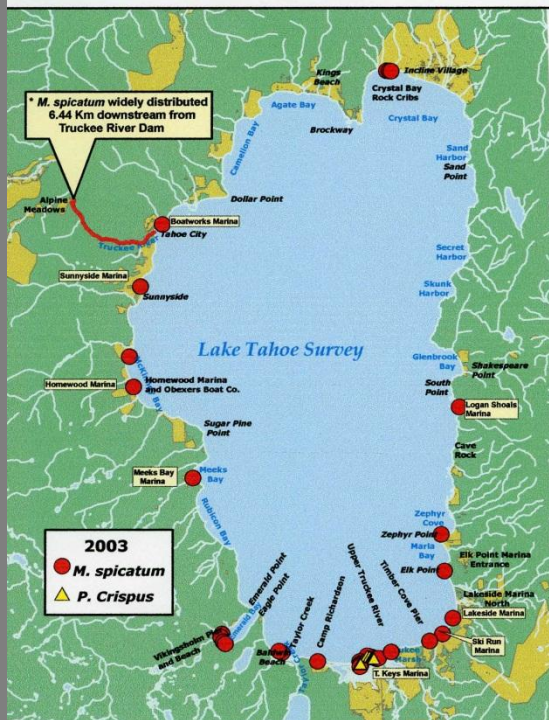
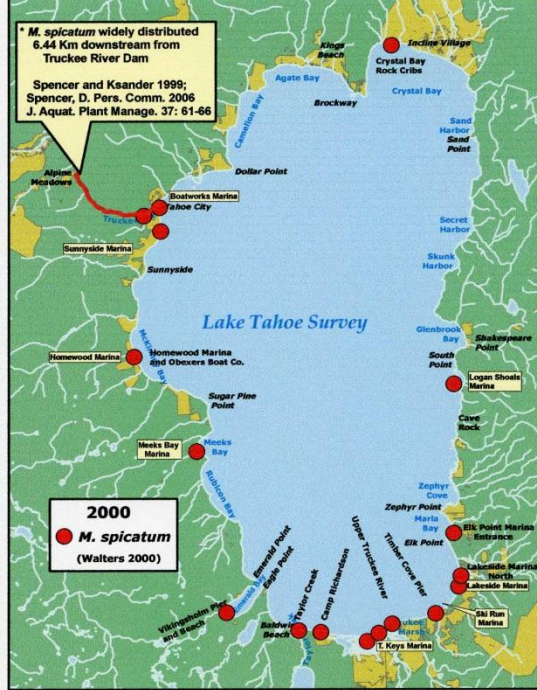
13 milfoil sites
many of which
were small and
sparse



Slide Credit:
Lars
Anderson

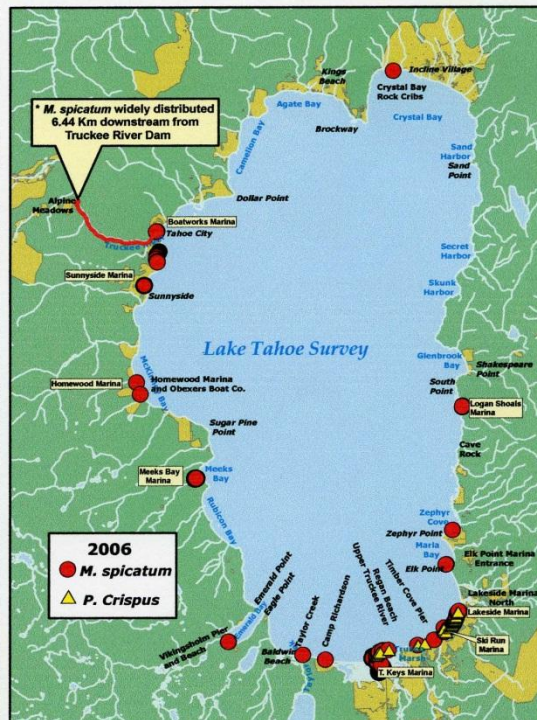
2000

Milfoil filled in
south shore and
spread along
west shore and
for 4 miles
down Truckee
River



2003

P. crispus
Curly-leaf
Pondweed
Detected-
Roughly 1 sparse
acre



2006

14 curly-leaf
sites
milfoil spreading
rapidly
in Emerald Bay

Eurasian watermilfoil (*Myriophyllum spicatum*)

1995 – First Discovered in Emerald Bay

2000 – Few Plants

2003 – Approximately 1 Acre

2010 – Well over 3 Acres of Milfoil

Emerald Bay milfoil infestation



2011/07/19

Photo :Doug Freeland A.C.E



Floating fragments
colonize
unvegetated
substrate

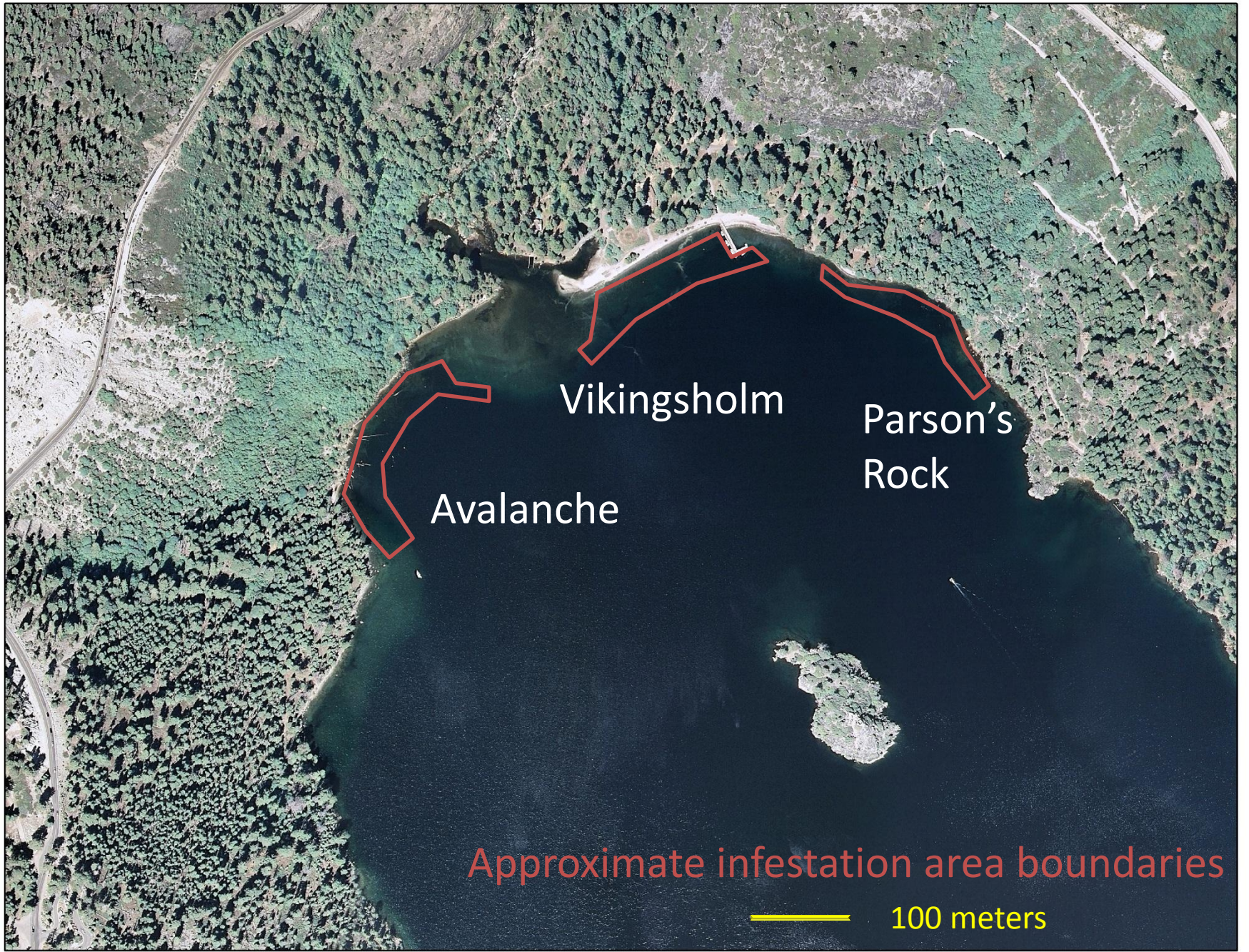
Challenges to working in Emerald Bay



Recreation



Project Area



Vikingsholm

Parson's
Rock

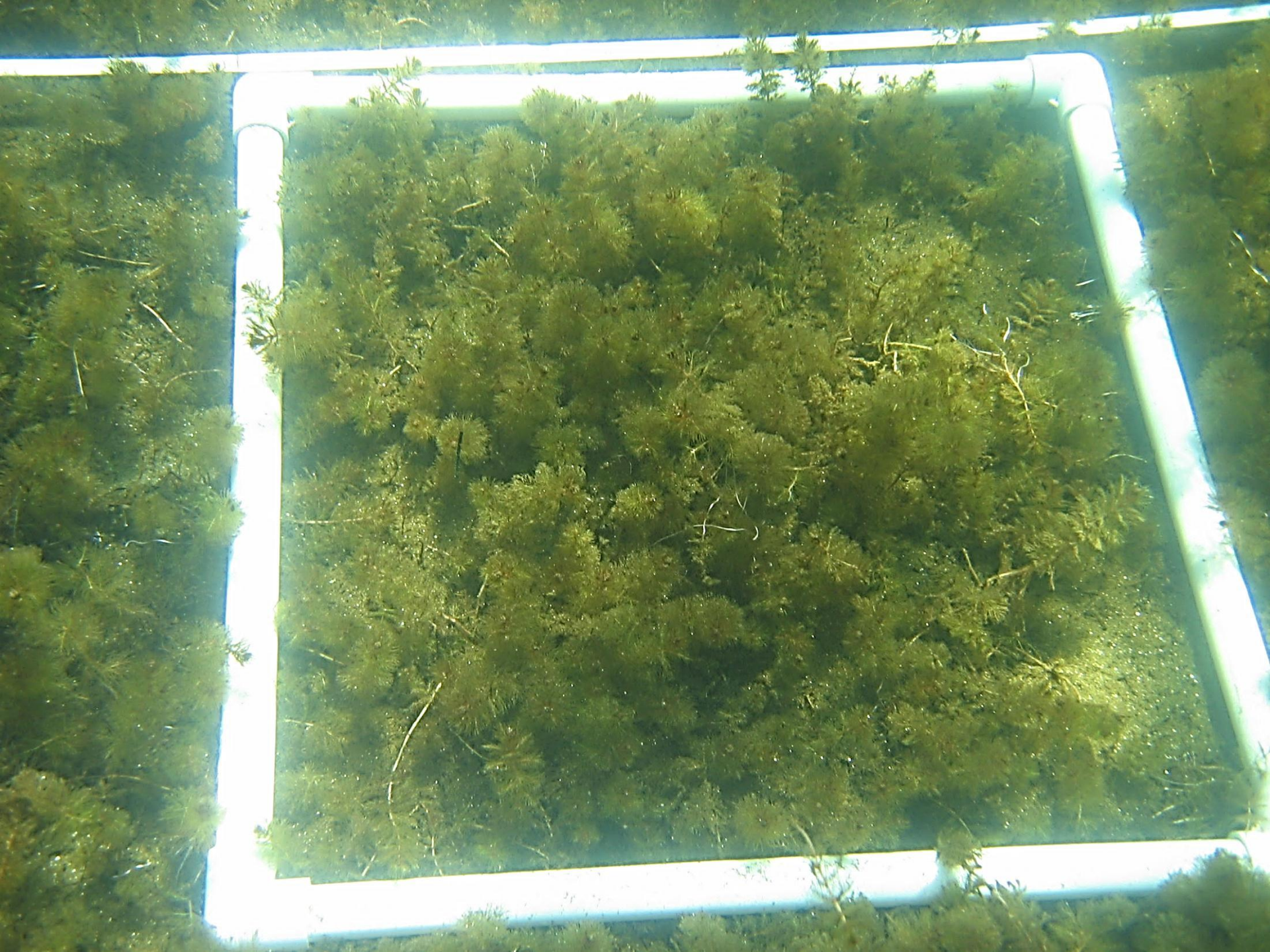
Avalanche

Approximate infestation area boundaries

100 meters



Underwater transects to measure
treatment effectiveness



Benthic Barriers





Swimming
Barriers
into place

Photo: Jim Brockett

Barriers don't work in hard to reach places, but suction removal does



Photo: Jim Brockett





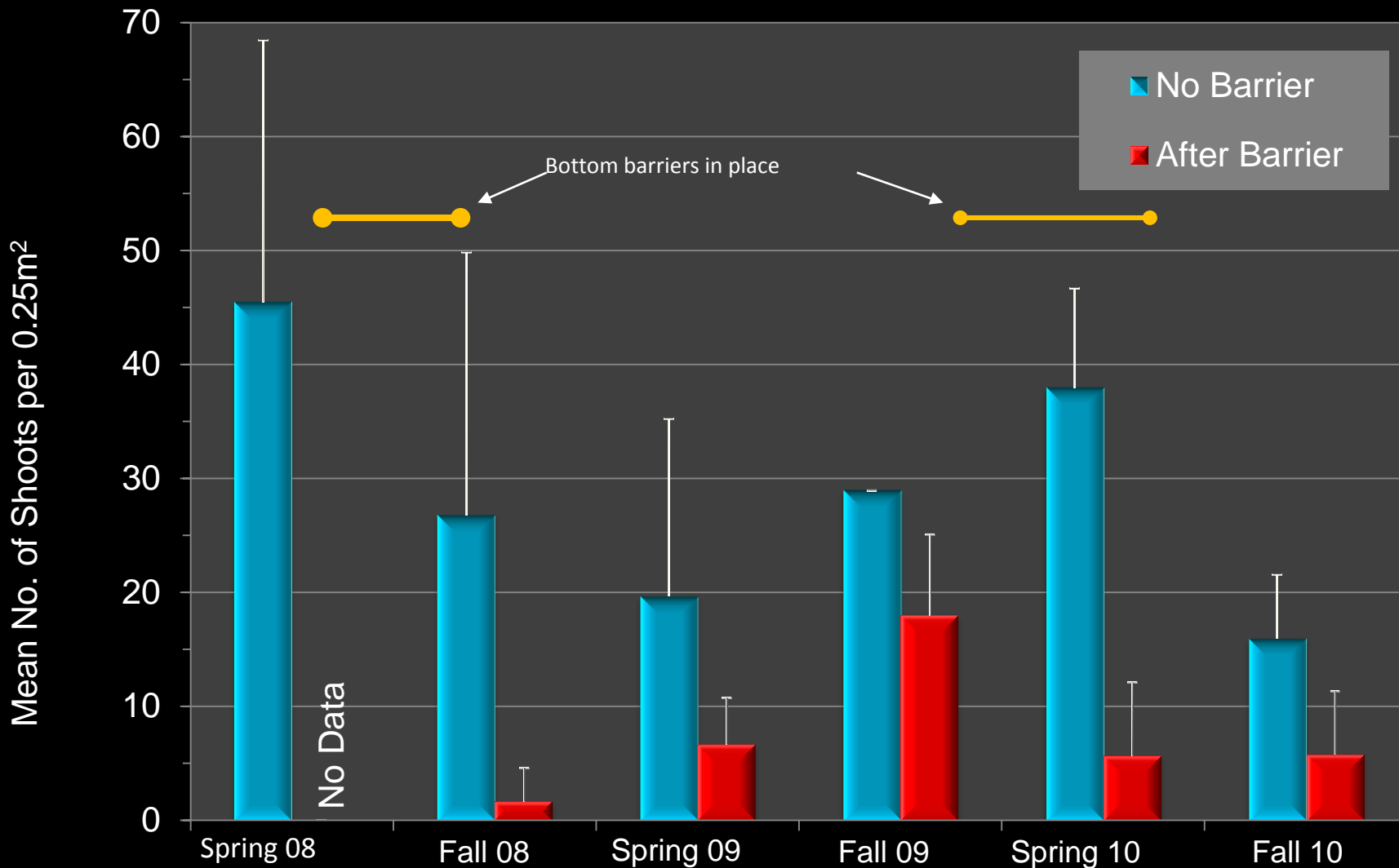




Milfoil

Sandy Bottom
After Barrier Removal

EWM Densities at Parsons Rock Site

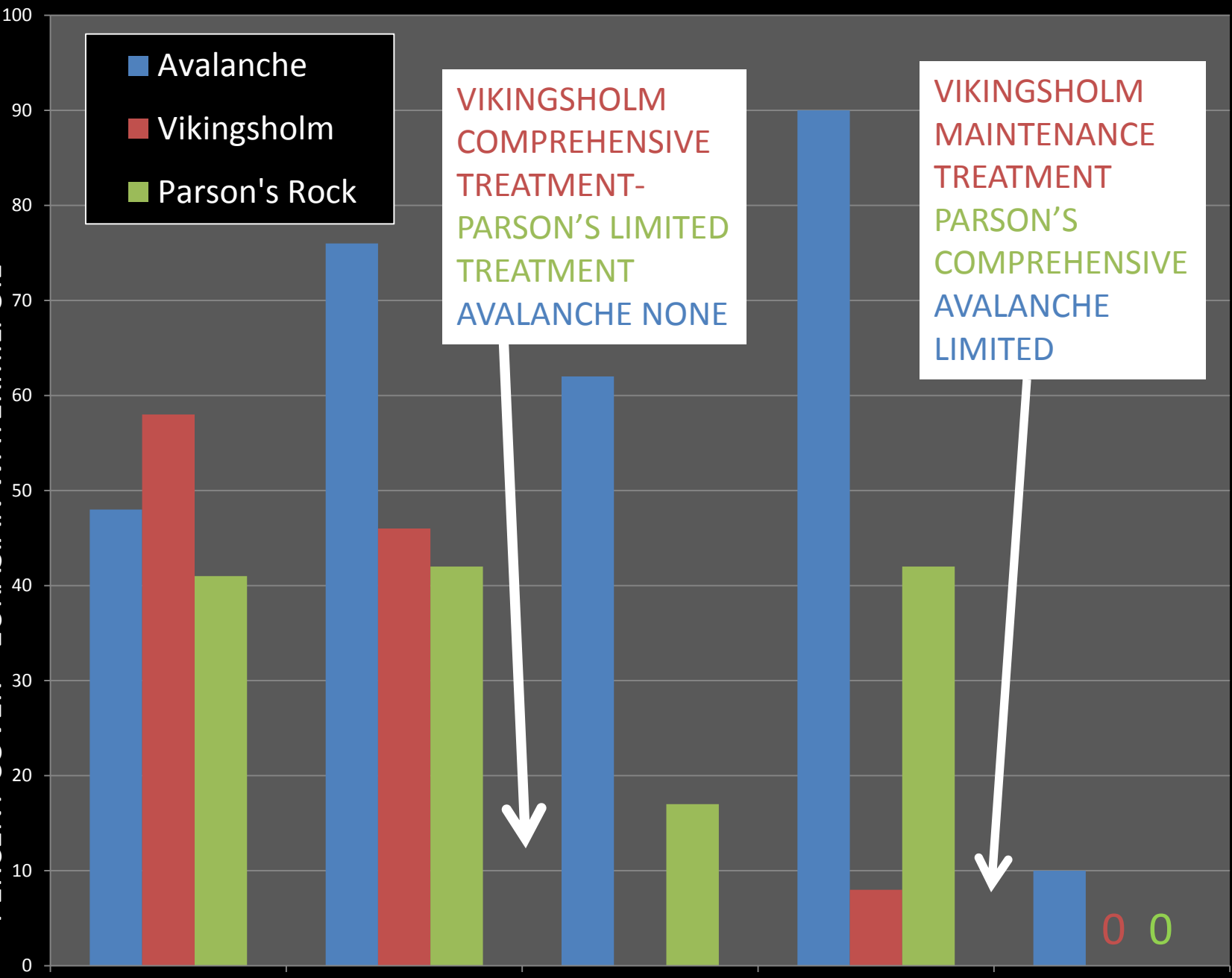


PERCENT COVER – EURASIAN WATERMILFOIL



VIKINGSHOLM
COMPREHENSIVE
TREATMENT-
PARSON'S LIMITED
TREATMENT
AVALANCHE NONE

VIKINGSHOLM
MAINTENANCE
TREATMENT
PARSON'S
COMPREHENSIVE
AVALANCHE
LIMITED



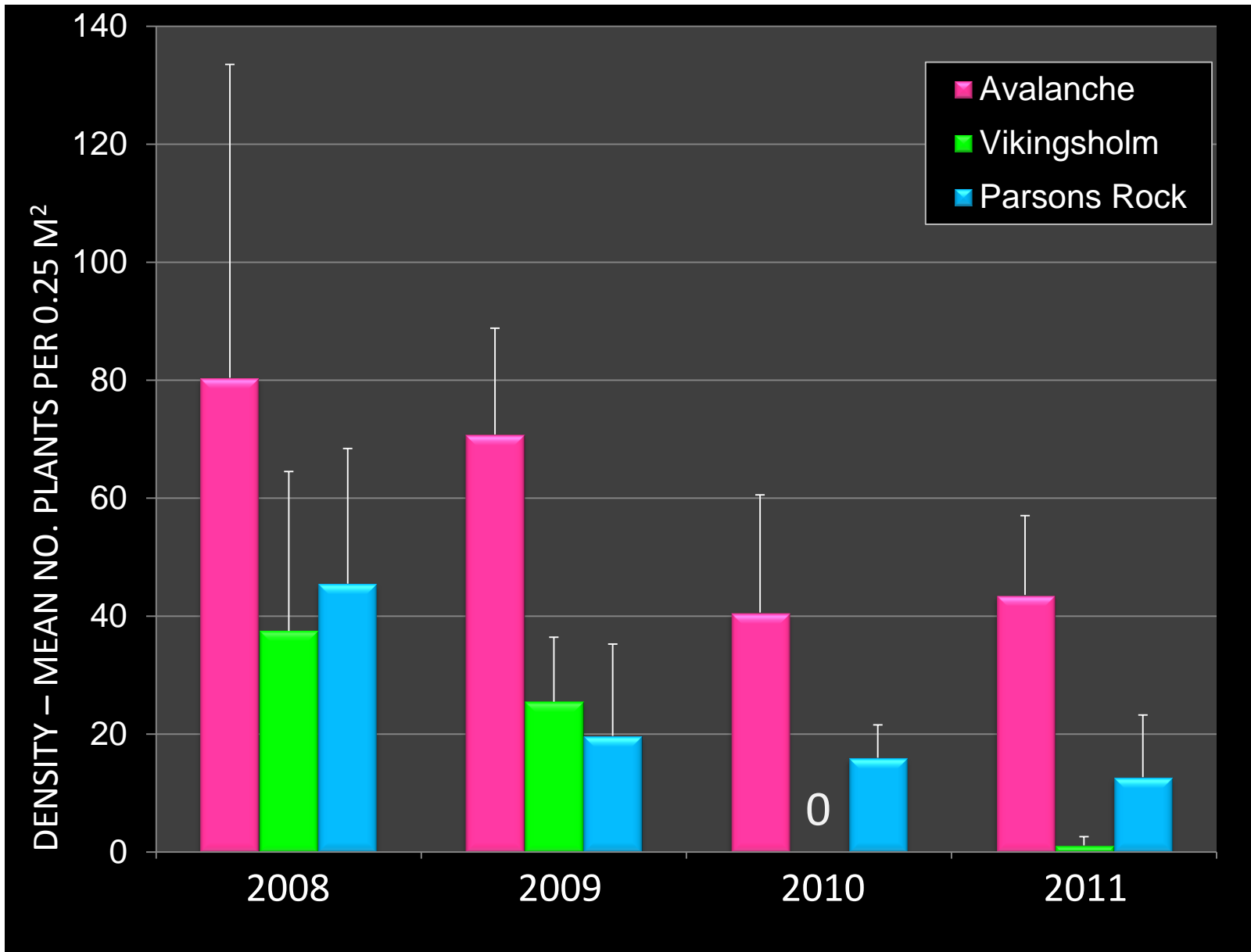
2008

2009

2010

2011 spr

2011 fall



Comprehensive treatment of all Invasive Aquatic Weeds in Emerald Bay
is within our reach in 2012



Questions?

