

# Between the Devil and the Deep Blue Sea: How In-Lieu Fee Programs Compensate for Impacts to Coastal Ecosystems

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# Charted Course

- Overview of In-Lieu Fees (ILFs)
- ILFs and Coastal Ecosystems
- Program and Project Examples
- Challenges and Lessons Learned
- Conclusion



Photo: Pixabay

# Overview of In-Lieu Fees (ILFs)

- 2008 Compensatory Mitigation Rule
- What is an ILF?
- Basic statistics

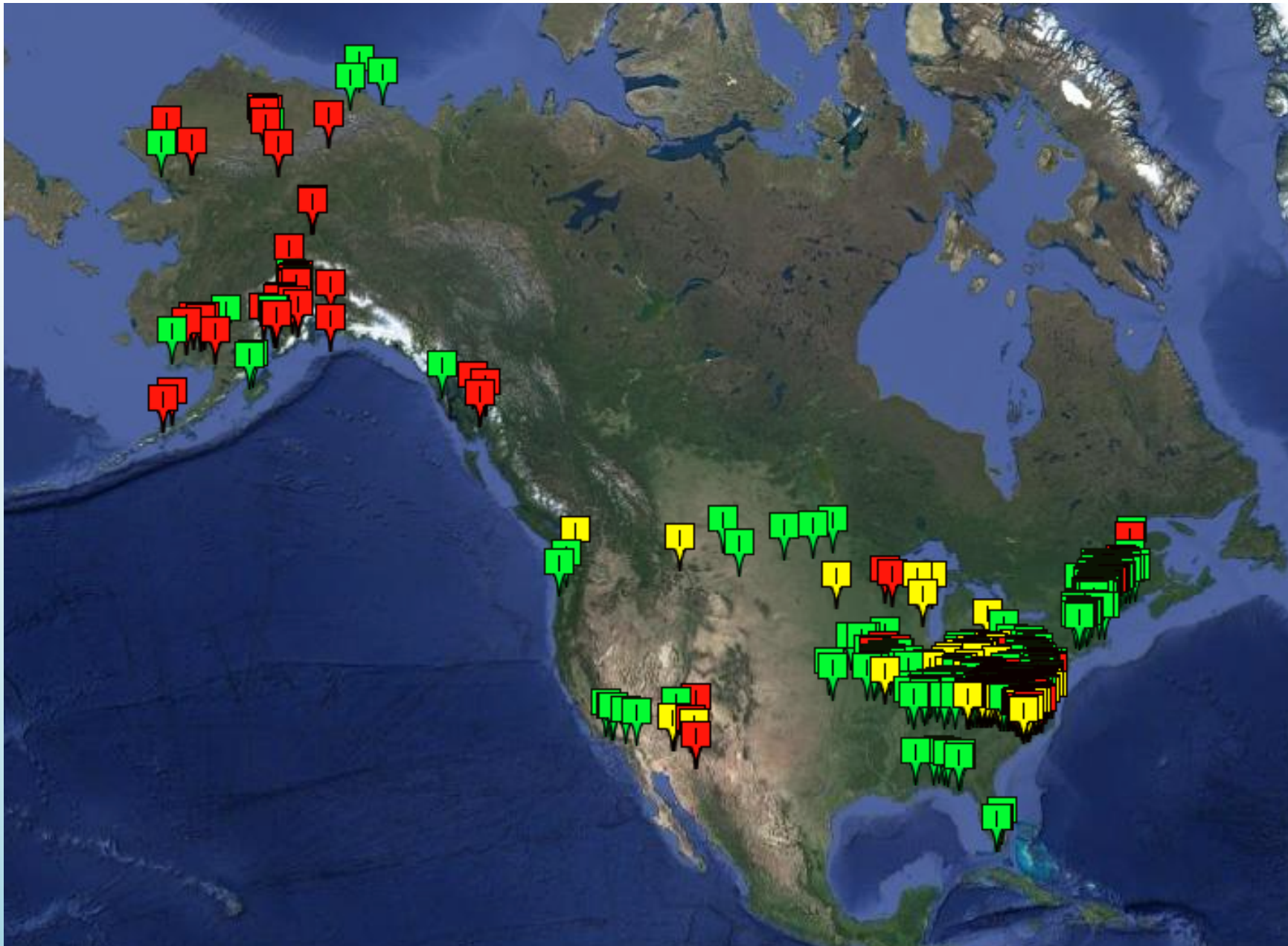


Image: Google map from RIBITS



# ILFs and Coastal Ecosystems

- Projects in ILF programs
- Less common
- Types of impacts

# Program and Project Examples\*

- Virginia Aquatic Resources Trust Fund
- Connecticut ILF Program
- Massachusetts ILF Program
- Keys Restoration Fund
- California State Coastal Conservancy ILF

\*Not an exhaustive list

# Virginia Aquatic Resources Trust Fund (VARTF)

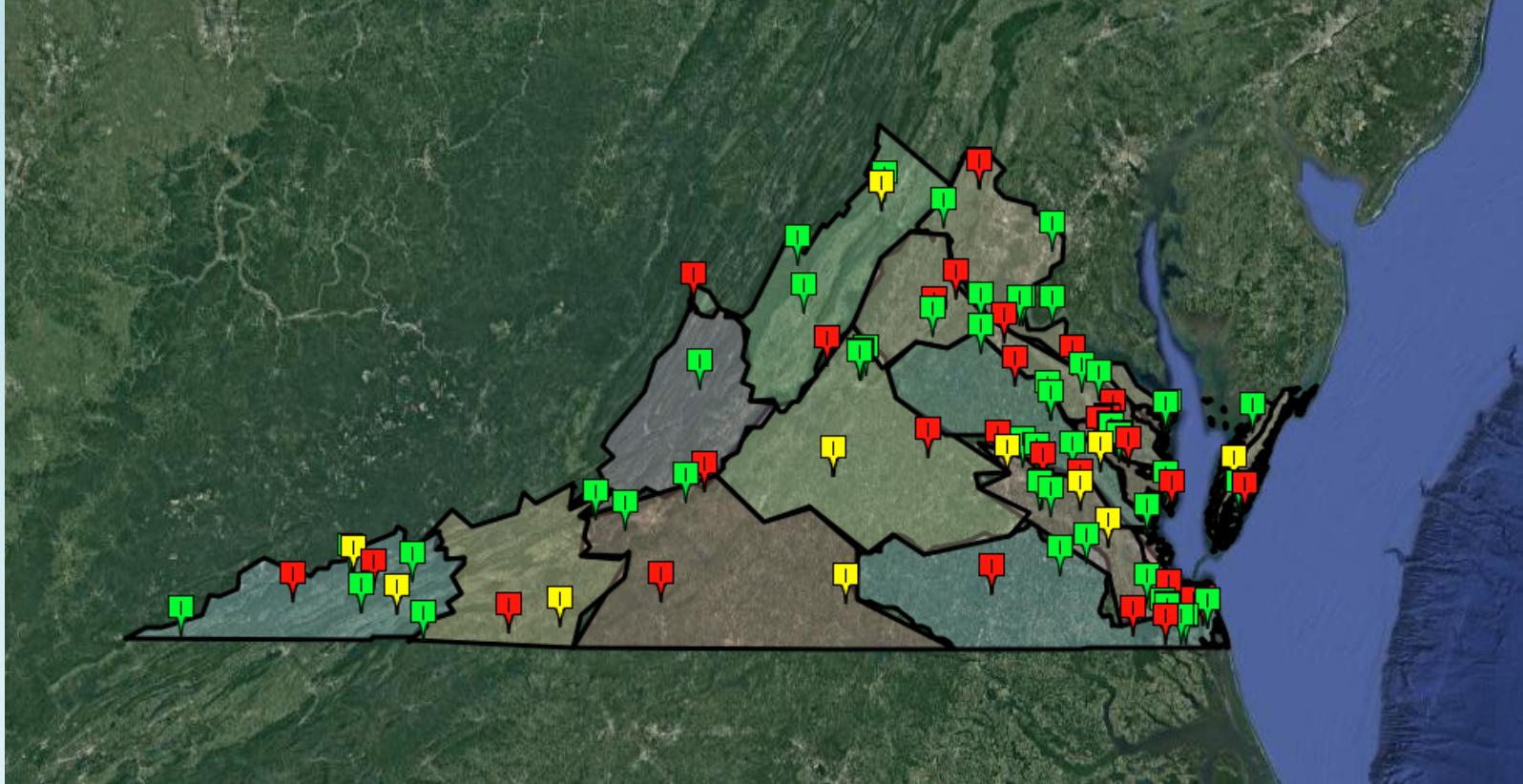


Image: Google map from RIBITS

- Program sponsor
- Service areas
- Coastal projects
  - Seagrass
  - Oyster reef
  - Marsh
  - Other

# What is eelgrass?



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# What is eelgrass?



Photo: U.S. Fish and Wildlife Service National Digital Library

# VARTF (continued)

**Fig. 3. South Bay eelgrass changes from 2004 to 2010  
(inside red polygon) (aerial photographs from 12,000 ft)**

2004

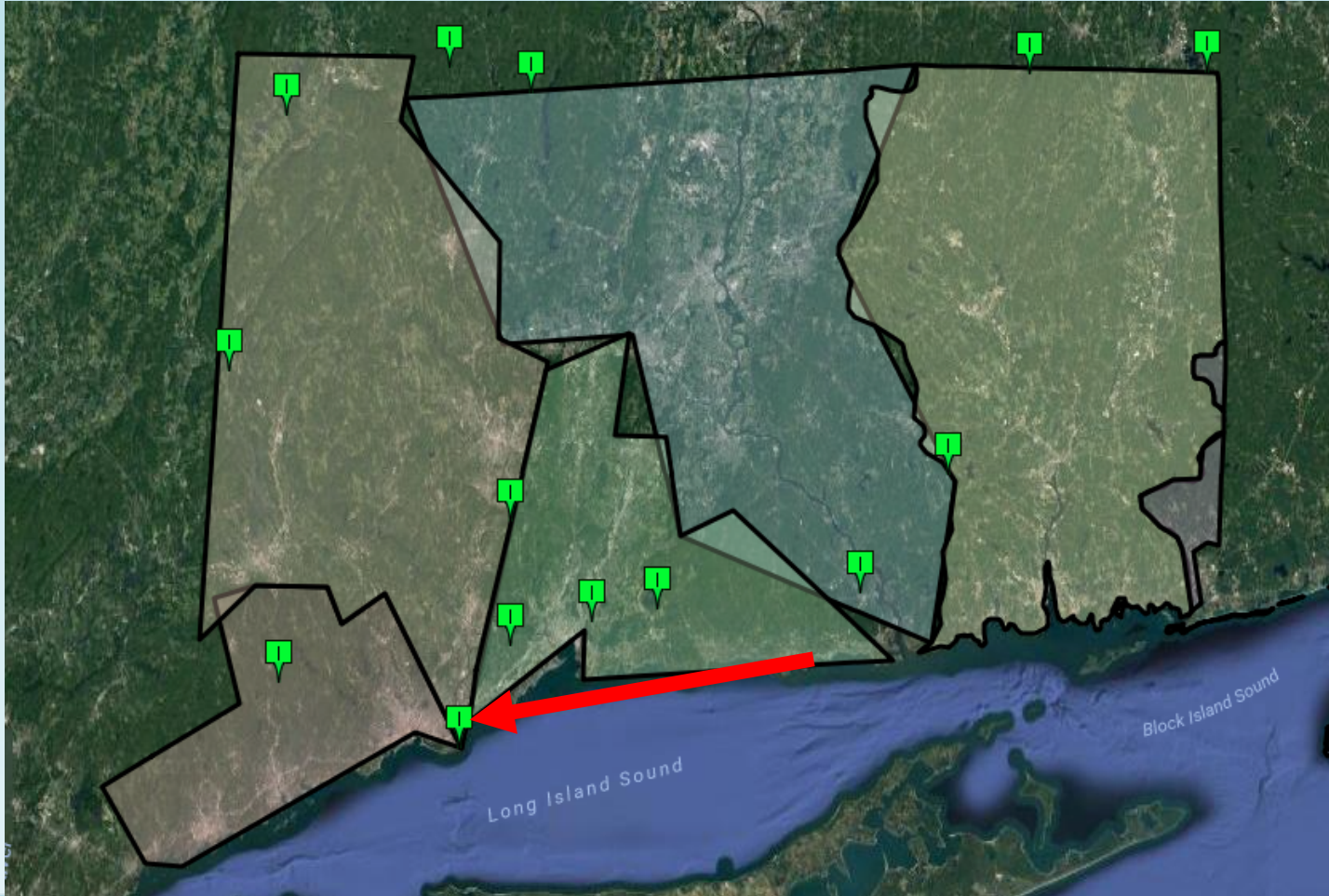


2010





# Connecticut ILF Program



- Program sponsor
- Service areas
- Stratford Point Living Shoreline Project
  - Marsh restoration
  - Reef balls
  - Wildlife

Image: Google map from RIBITS

# Connecticut ILF Program (continued)



Photos: U.S. Fish and Wildlife Service National Digital Library



# Connecticut ILF Program (continued)



Photos: Ruth M. Ladd, *Site inspection report on the Stratford Point Living Shoreline, Stratford, Connecticut, August 22, 2017* (available on RIBITS)



# Connecticut ILF Program (continued)



Photos: Ruth M. Ladd, *Site inspection report on the Stratford Point Living Shoreline, Stratford, Connecticut, August 22, 2017* (available on RIBITS)



# Connecticut ILF Program (continued)



Photos: Ruth M. Ladd, *Site inspection report on the Stratford Point Living Shoreline, Stratford, Connecticut, August 22, 2017* (available on RIBITS)

# Massachusetts ILF Program

- Program sponsor
- Service areas
- Coastal projects
  - Eelgrass
  - Marsh

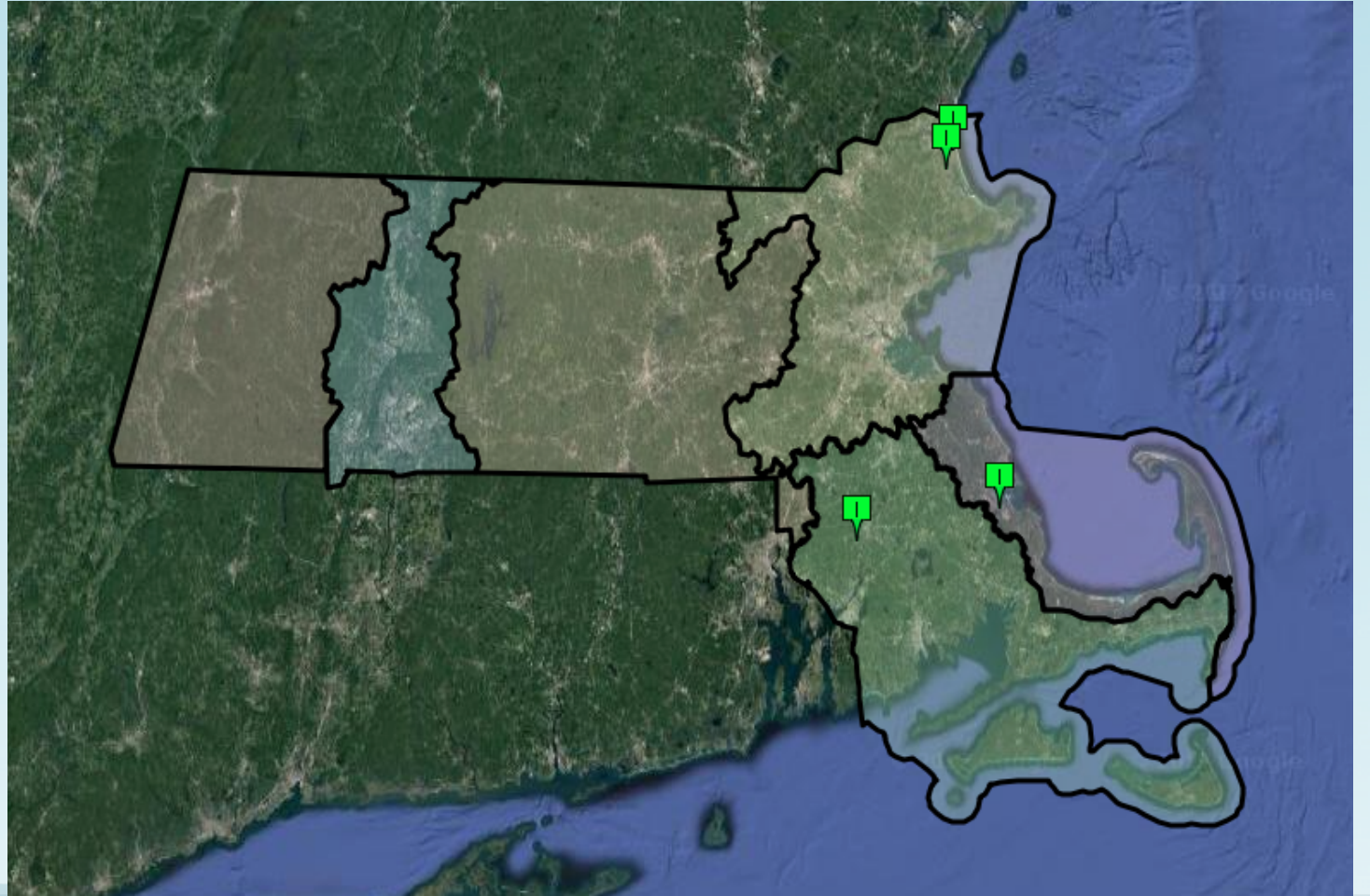


Image: Google map from RIBITS



# Massachusetts ILF Program (continued)



Photo: Ruth M. Ladd, *Site inspection report on the Upper Great Marsh project, Newbury and Rowley, Massachusetts, August 27, 2015* (available on RIBITS)

# Keys Restoration Fund

- Program sponsor
- Service areas
- Coastal projects
  - Mangrove
  - Marsh
  - Seagrass

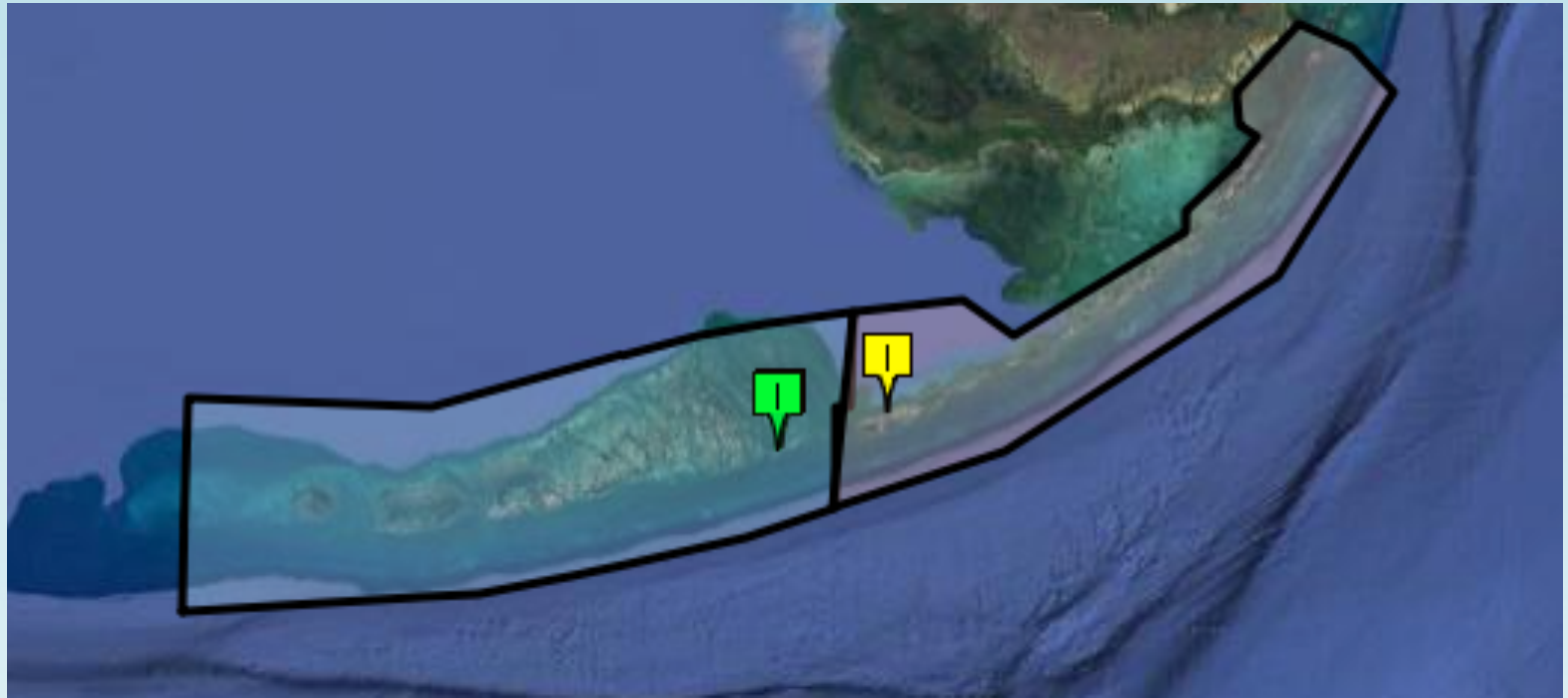


Image: Google map from RIBITS



# Keys Restoration Fund (continued)



Photo: Coastal Resources Group, Inc., *Bahia Honda State Park*,  
<http://coastalresourcesgroup.org/bahia-honda-state-park/#!>



# Keys Restoration Fund (continued)



Photos: Coastal Resources Group, Inc., *Bahia Honda State Park*,  
<http://coastalresourcesgroup.org/bahia-honda-state-park/#!>

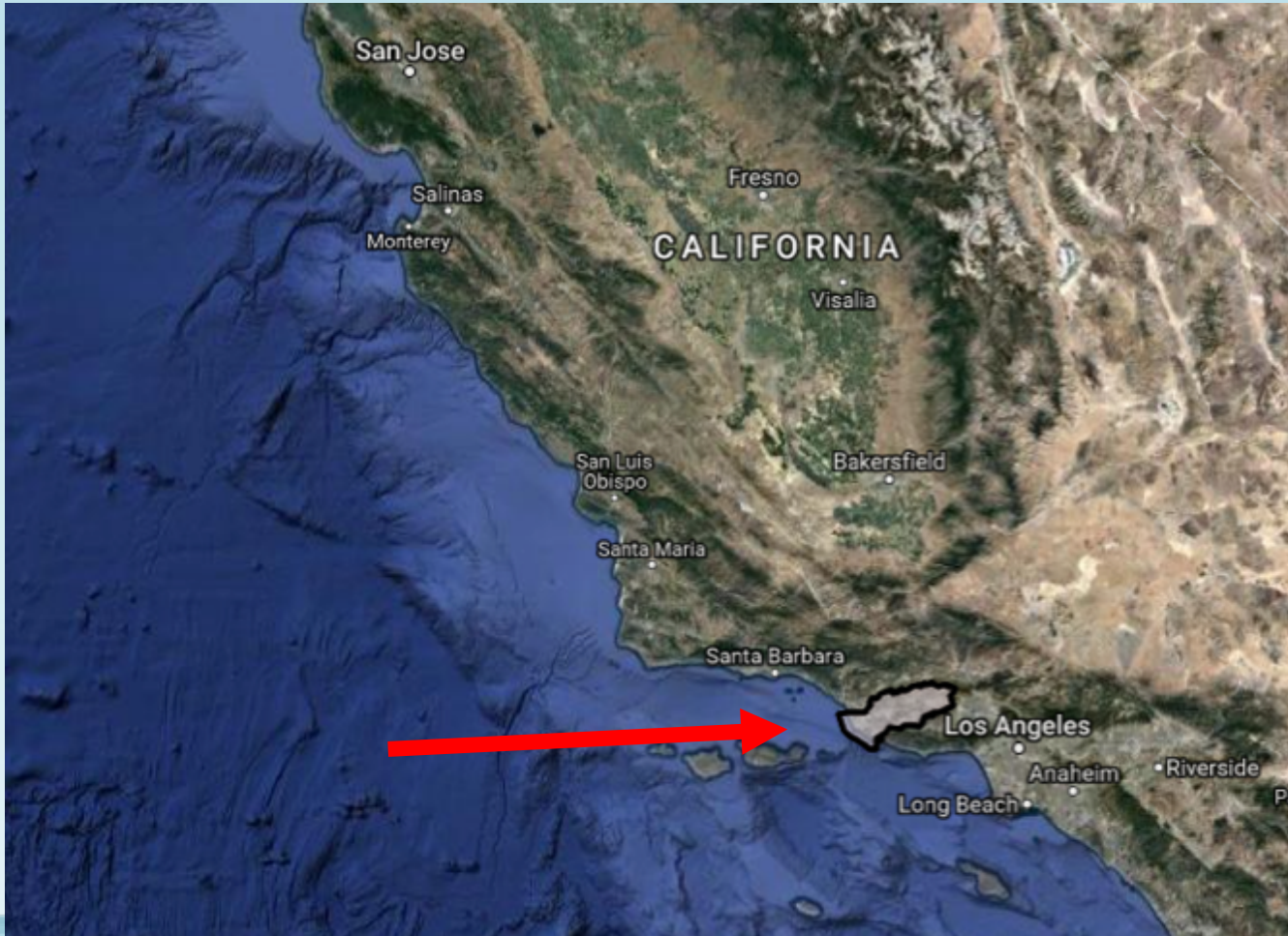


# Keys Restoration Fund (continued)



Photos: U.S. Fish and Wildlife Service National Digital Library

# California State Coastal Conservancy ILF



- Program sponsor
- Transition
- Service areas
- Coastal projects

Image: Google map from RIBITS



# Challenges and Lessons Learned

- Cost
- Risk
- Credits
- Timing
- Other



Photo: Pixabay

# Conclusion



# Questions?



Photo: U.S. Fish and Wildlife Service National Digital Library

# Thank you!

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