

An Analysis of Bioeconomic Tradeoffs in Vaquita Conservation Policies



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Project Objective

To explore a range of policy options that:

- Recover vaquita population
- Minimize economic impact to fisheries



Project Background

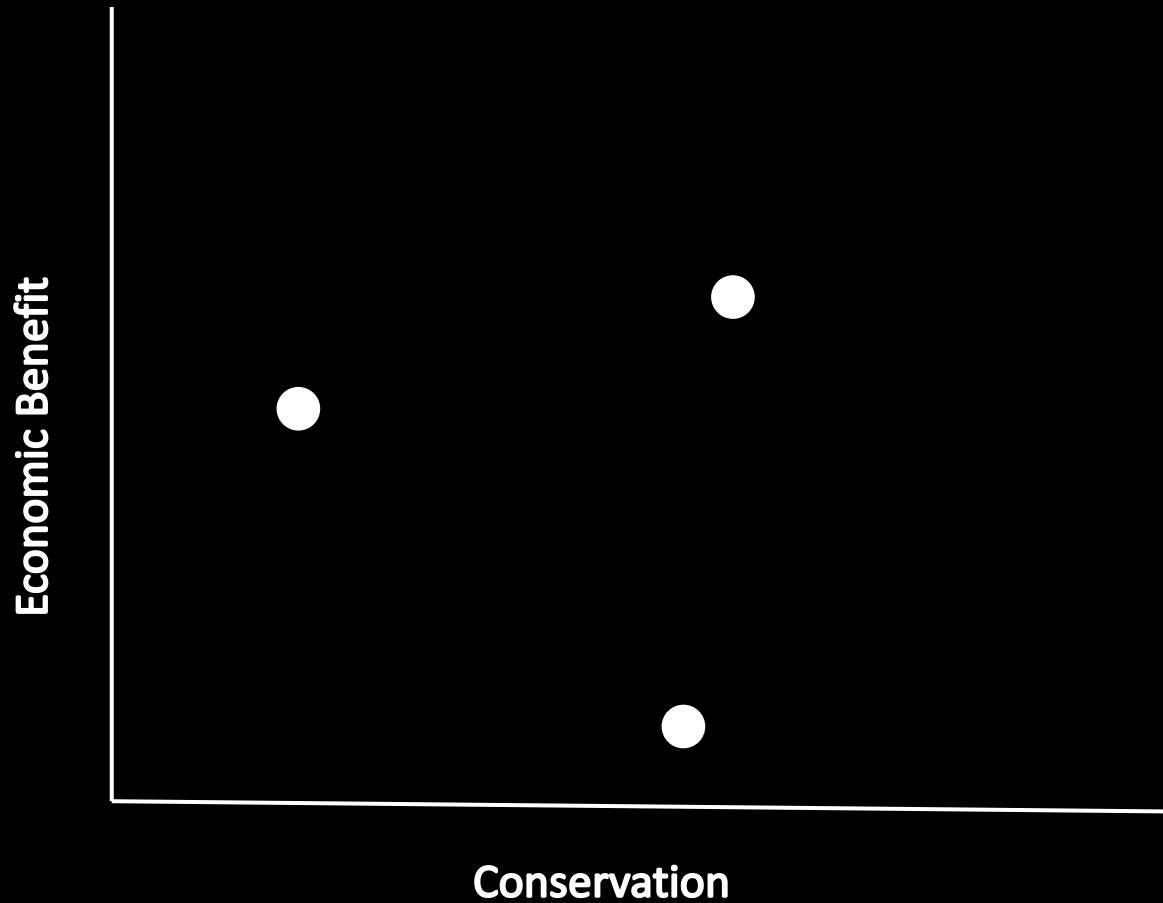
Approach

Results

Recommendations

Conclusions

Tradeoff Analysis



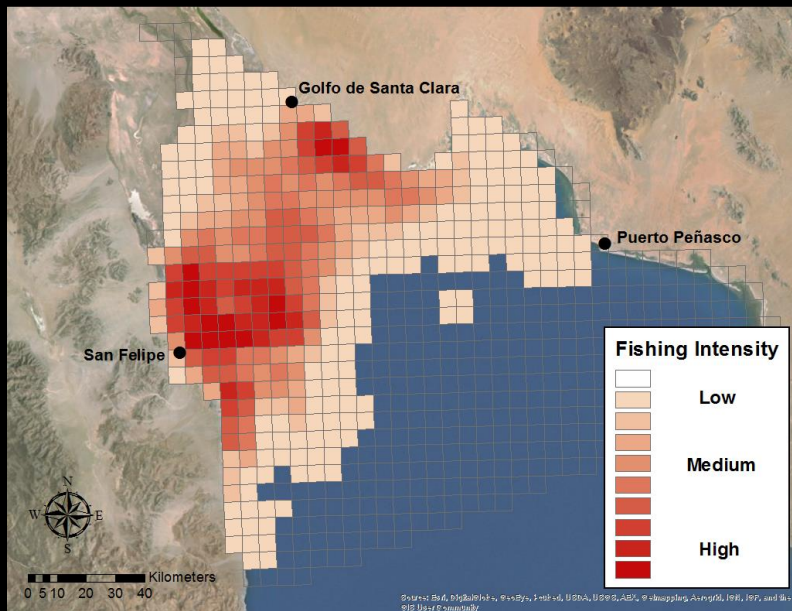
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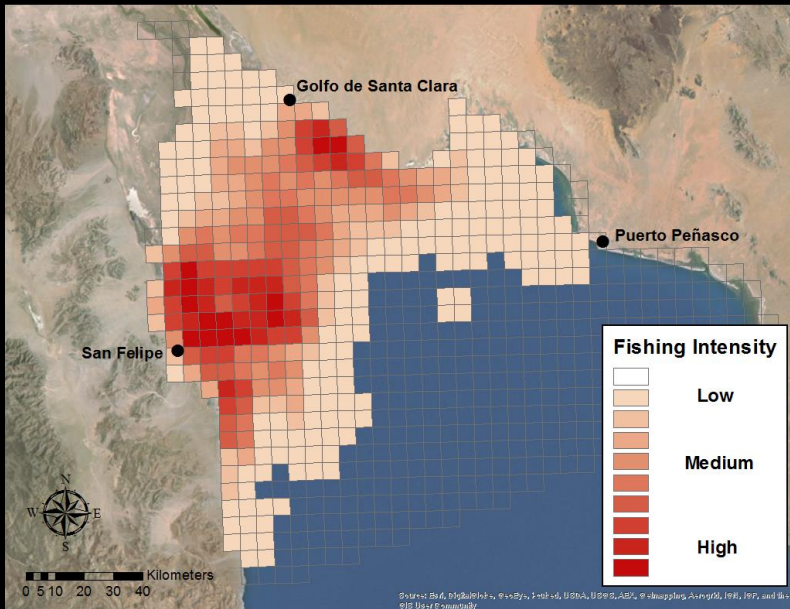
Recommendations

Conclusions

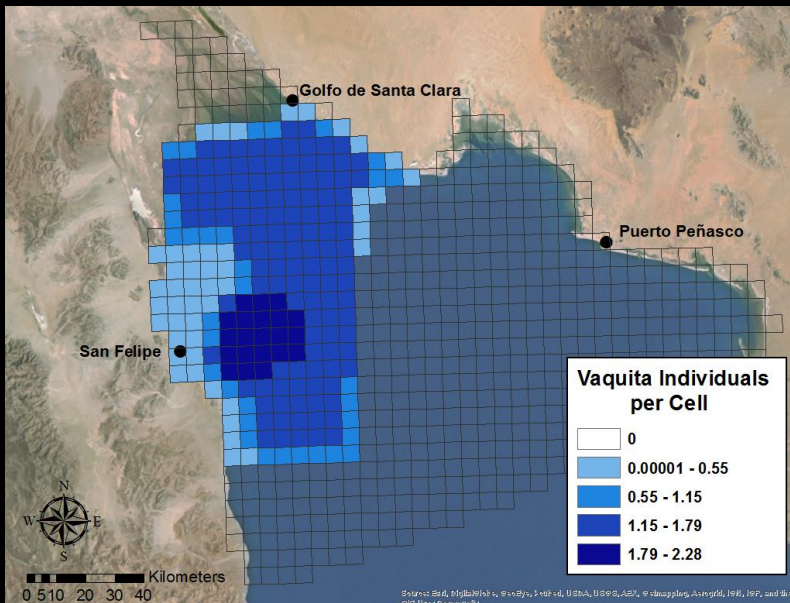


PANGAS Project

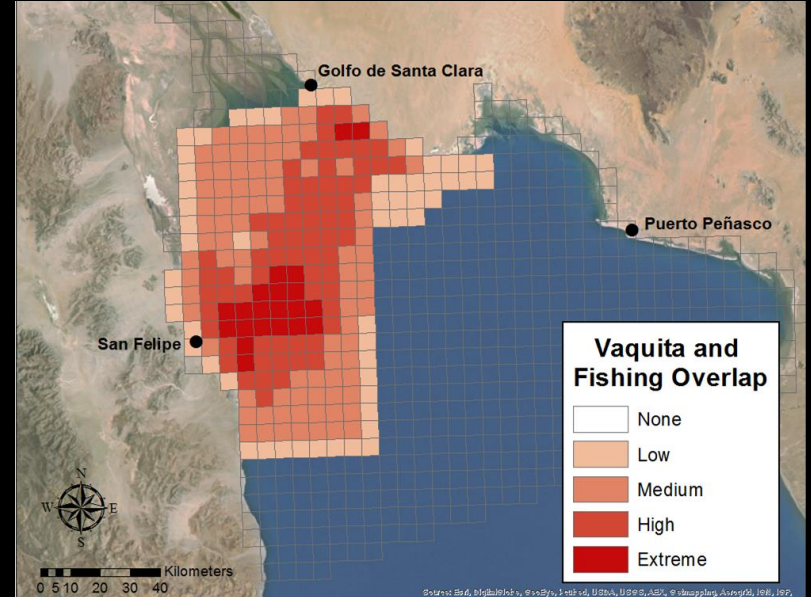
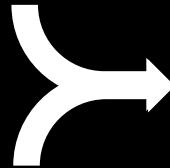
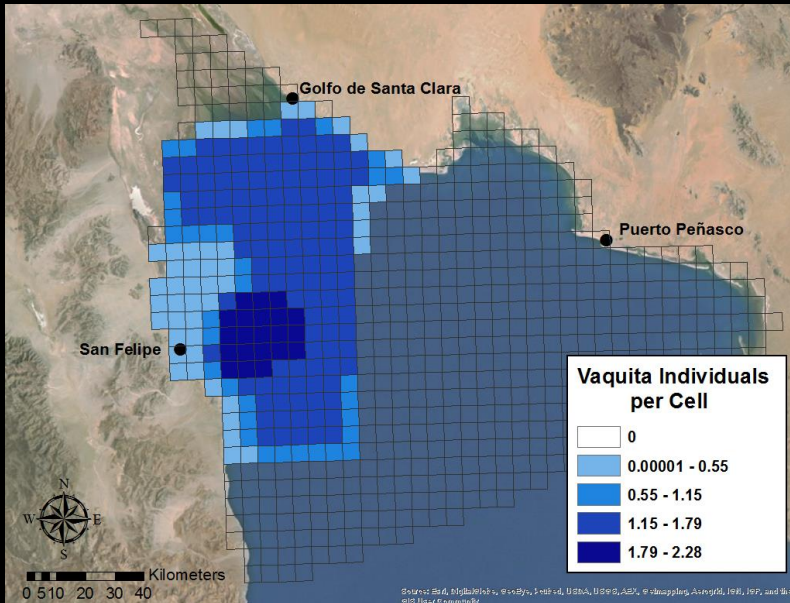
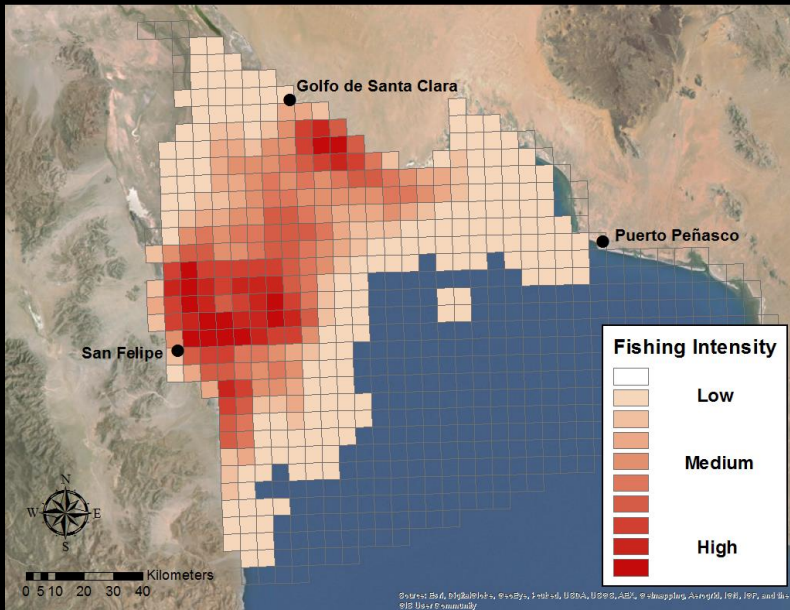
Fishermen Interviews: Where they fish, What they fish (Moreno-Baez, et al. 2012)



PANGAS Project
 Fishermen Interviews:
 Where they fish, What they fish
 (Moreno-Baez, et al. 2012)



Visual and acoustic Vaquita surveys
 (Gerrodette, et al. 2011)



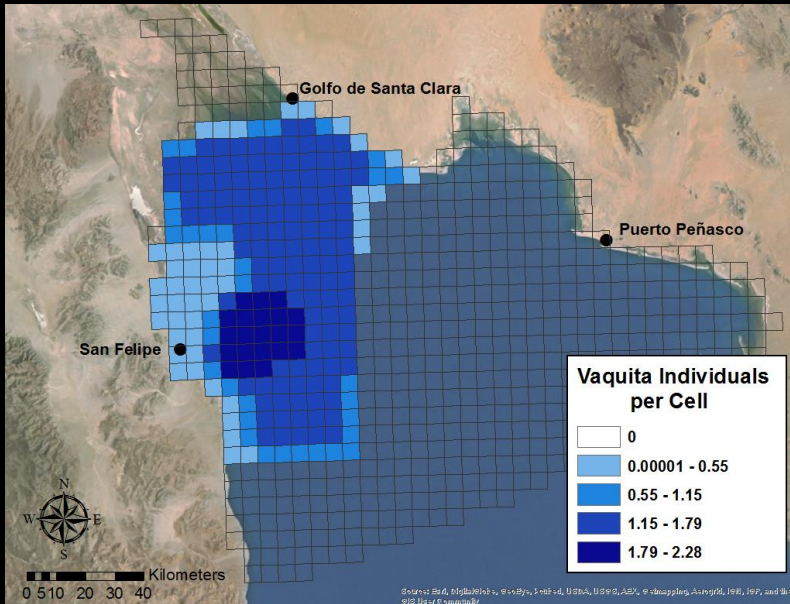
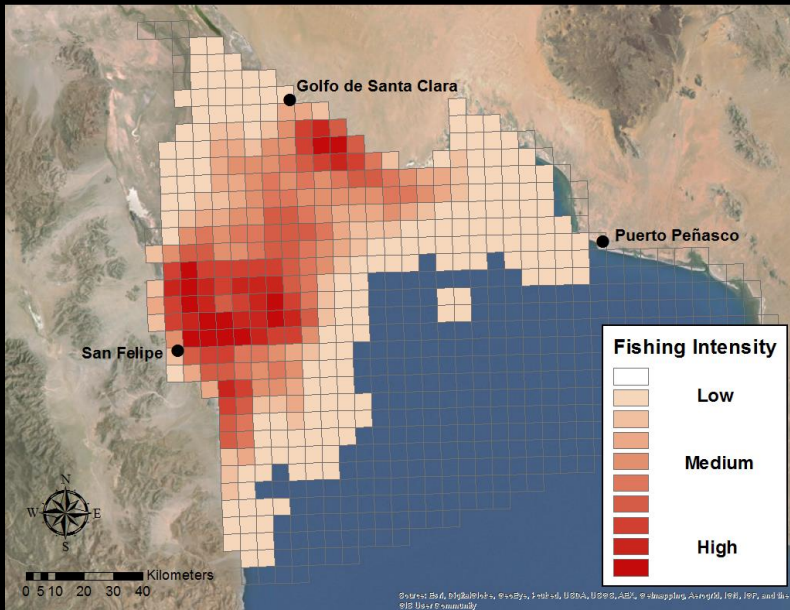
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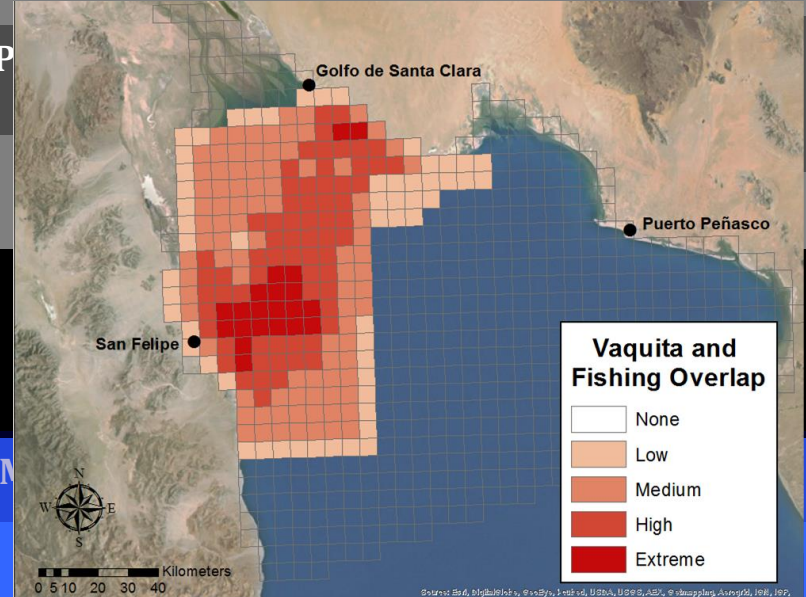
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Economic Model

Landings Per Cell



Biological Model

Bycatch Per Cell

Bycatch Rate

Population Growth Rate

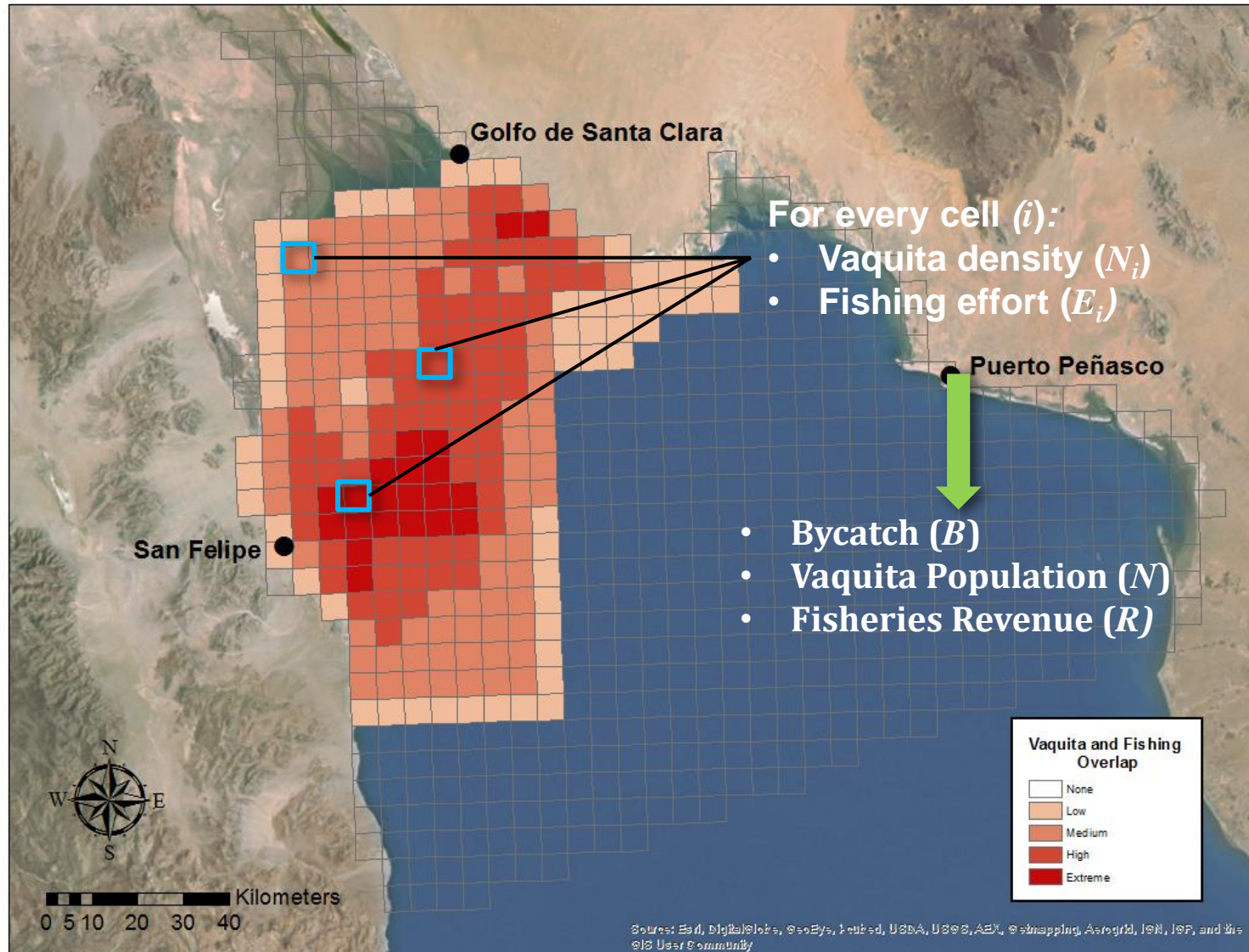
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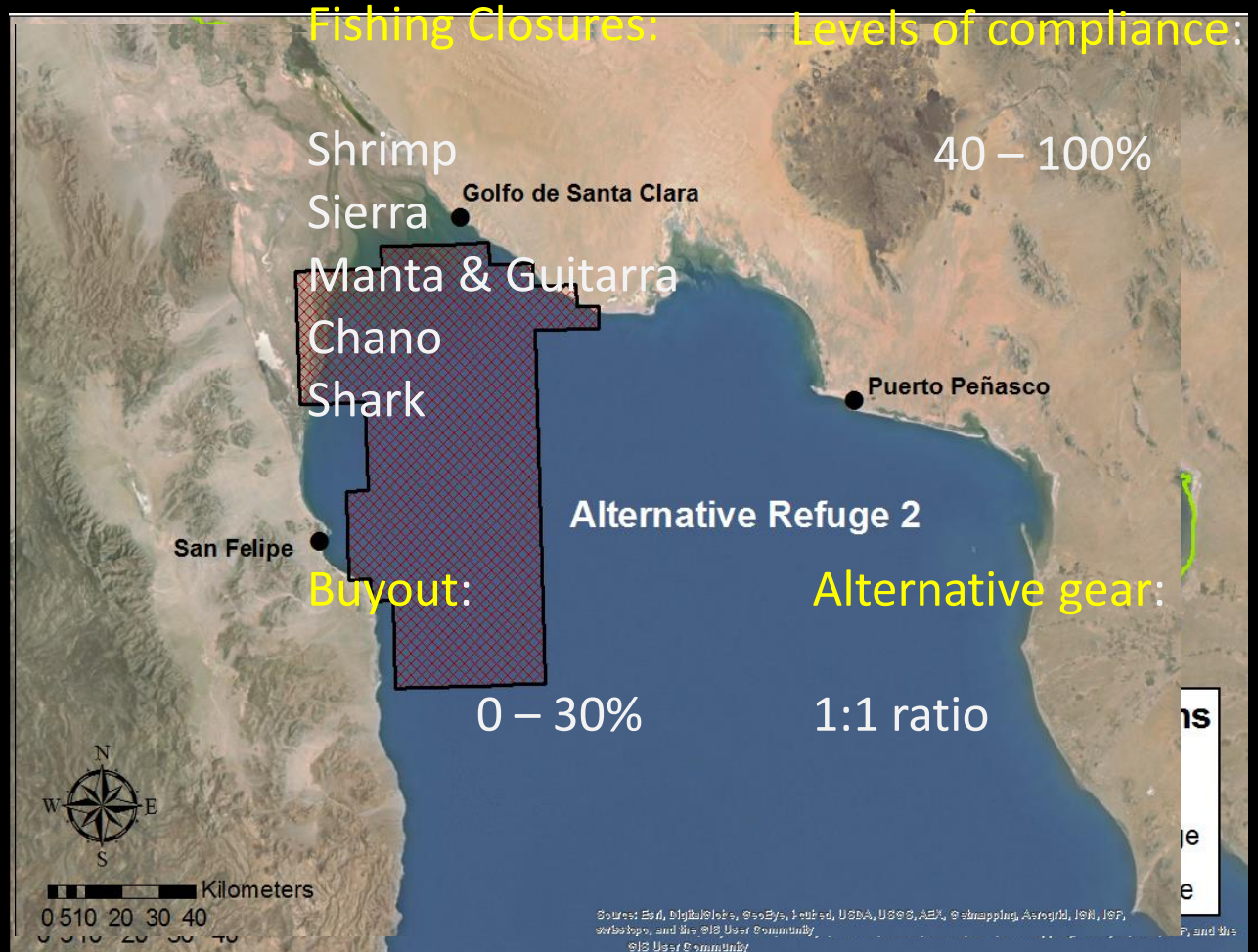
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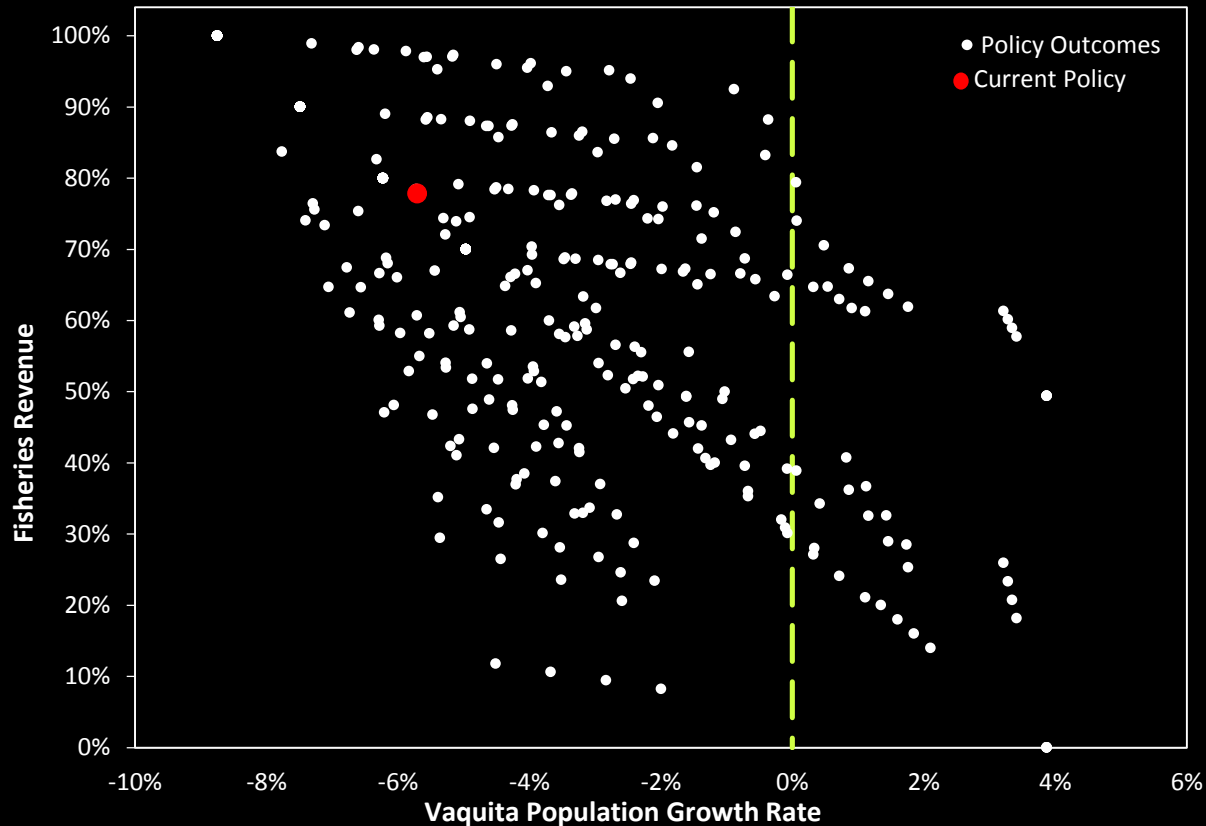
Conclusions



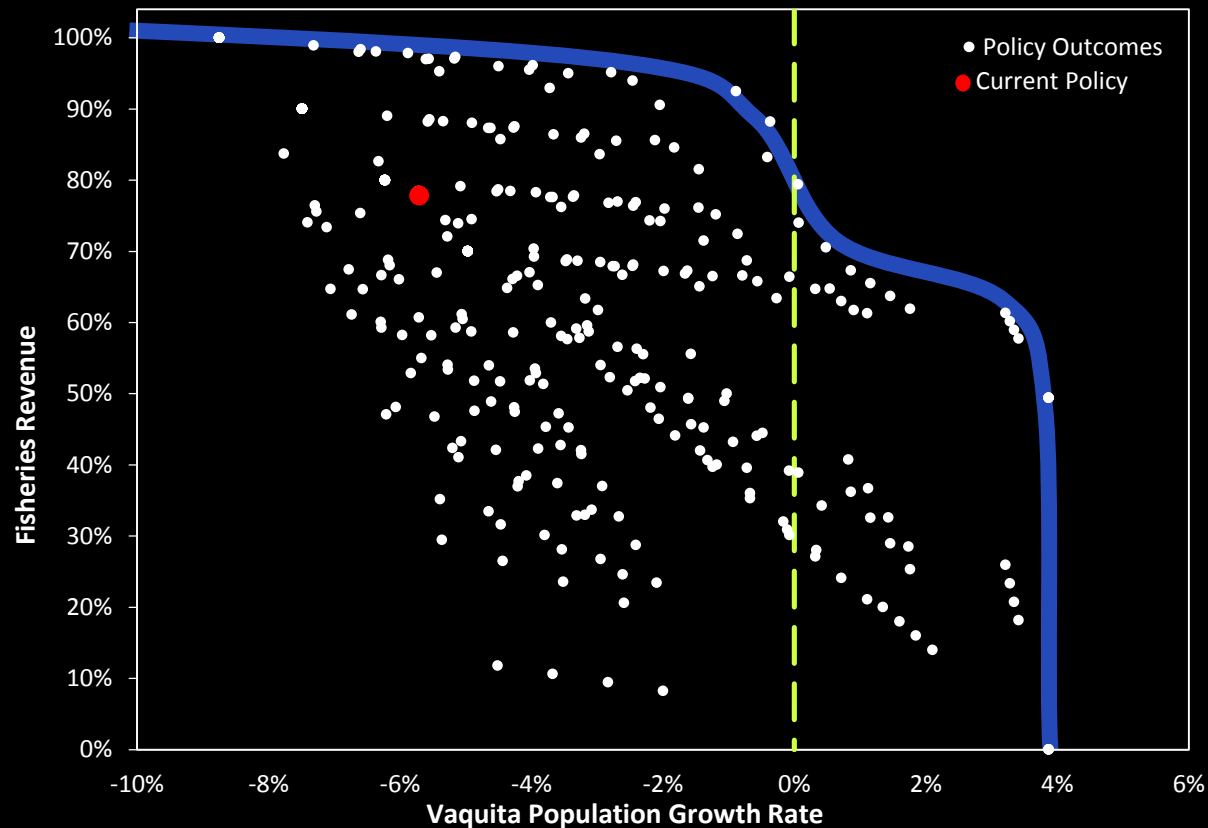
Policy Combinations



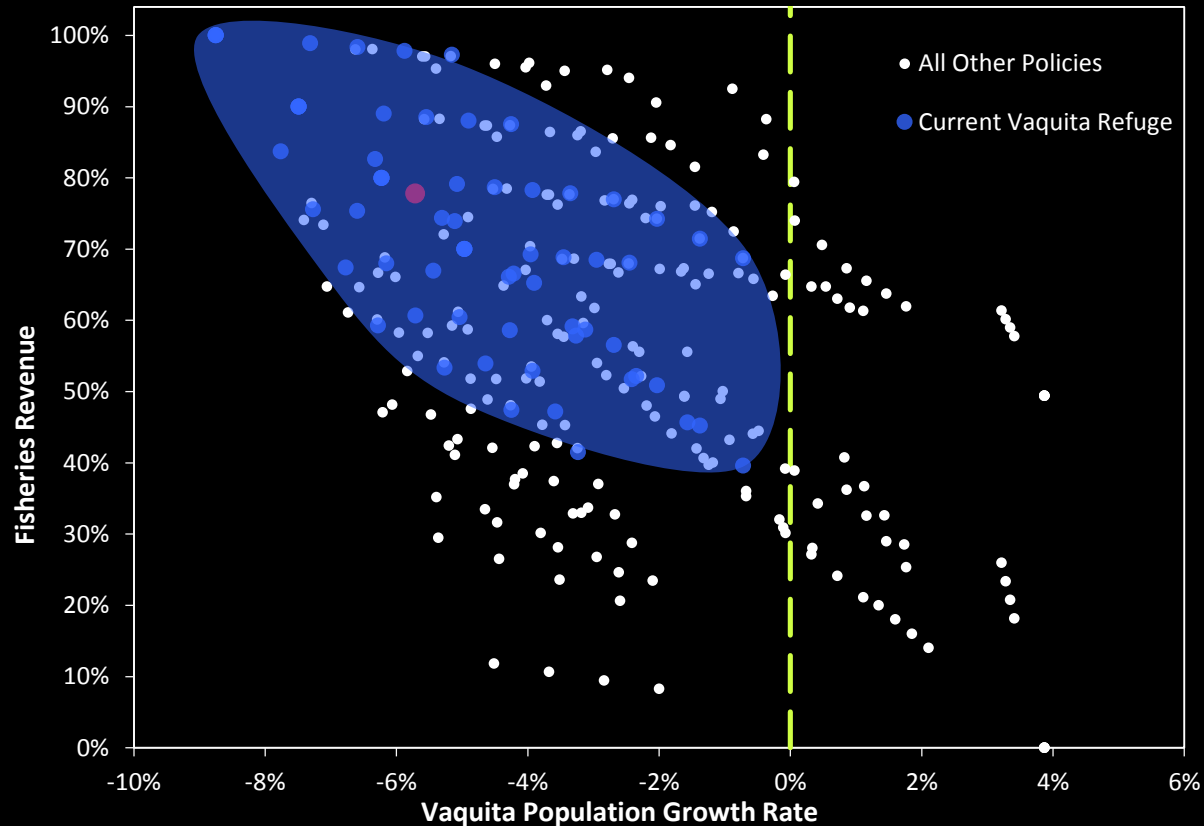
Analysis of Vaquita Conservation Policies



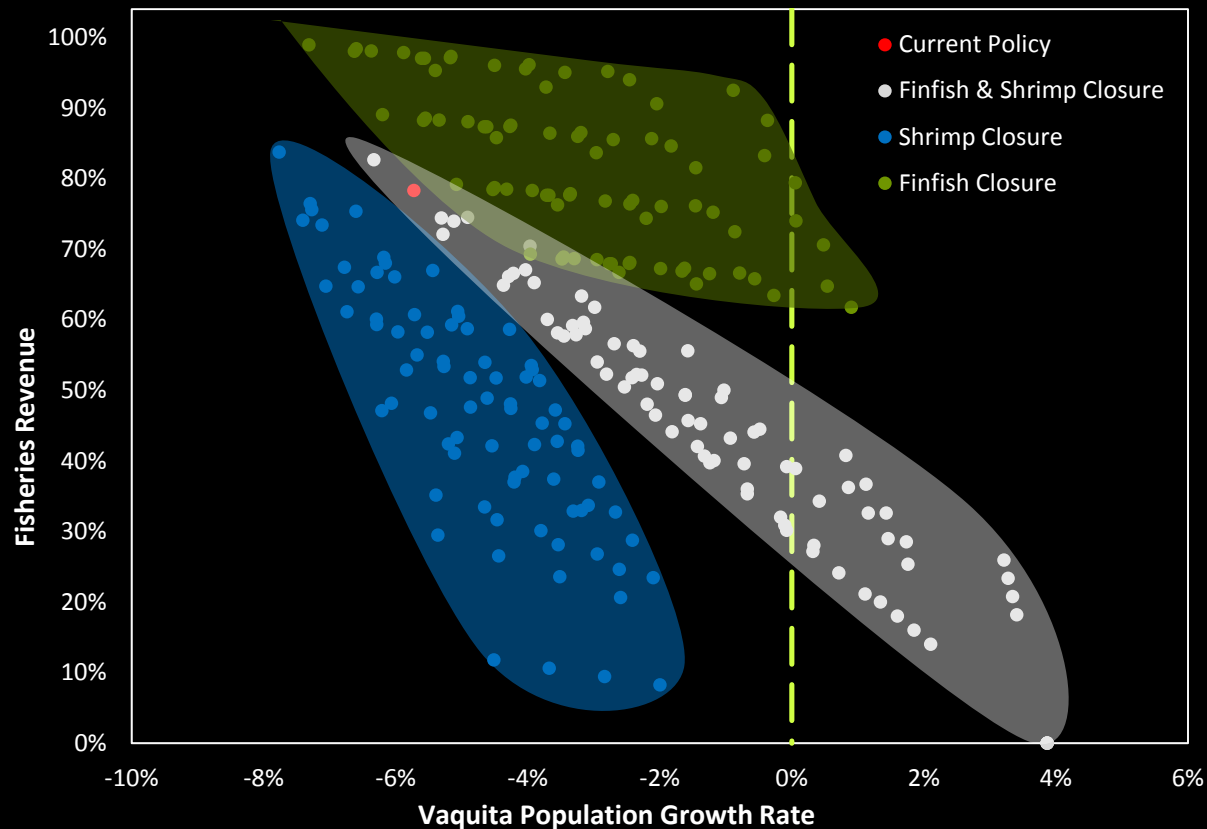
Analysis of Vaquita Conservation Policies



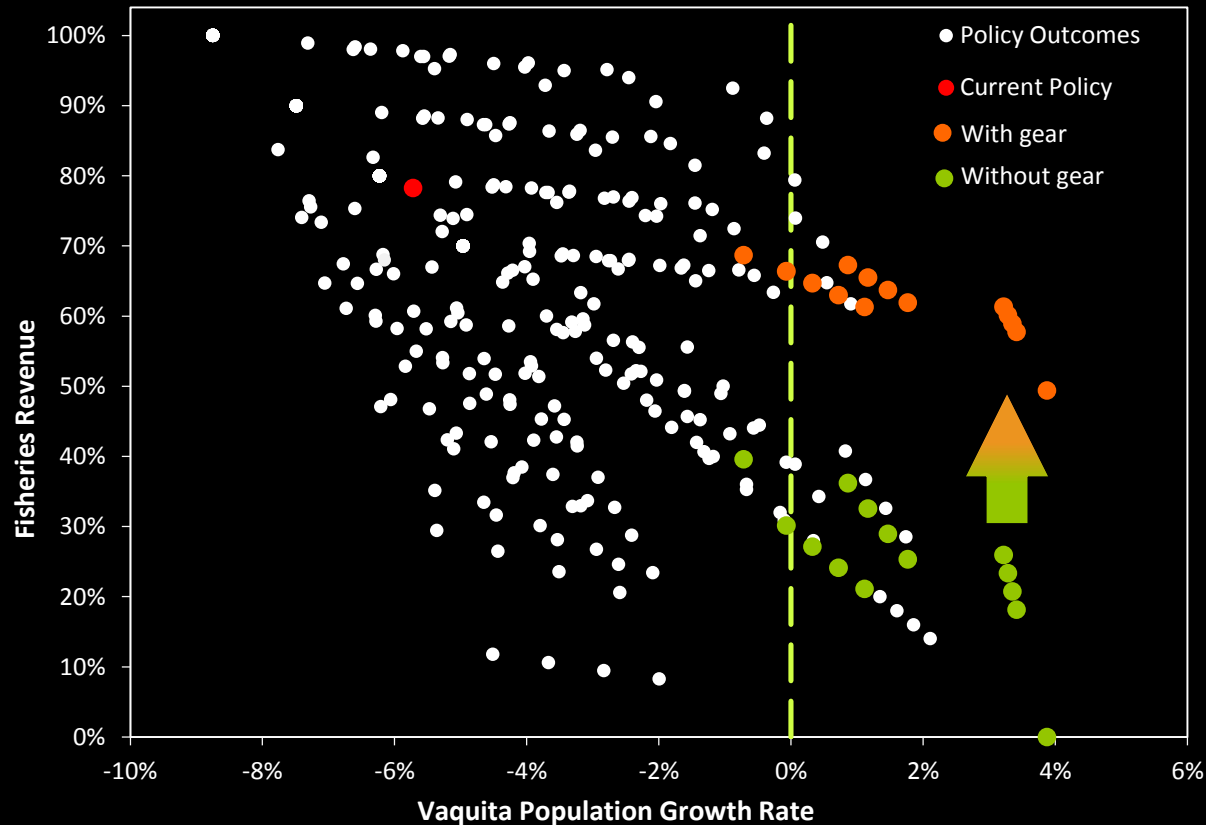
Policies with Current Refuge



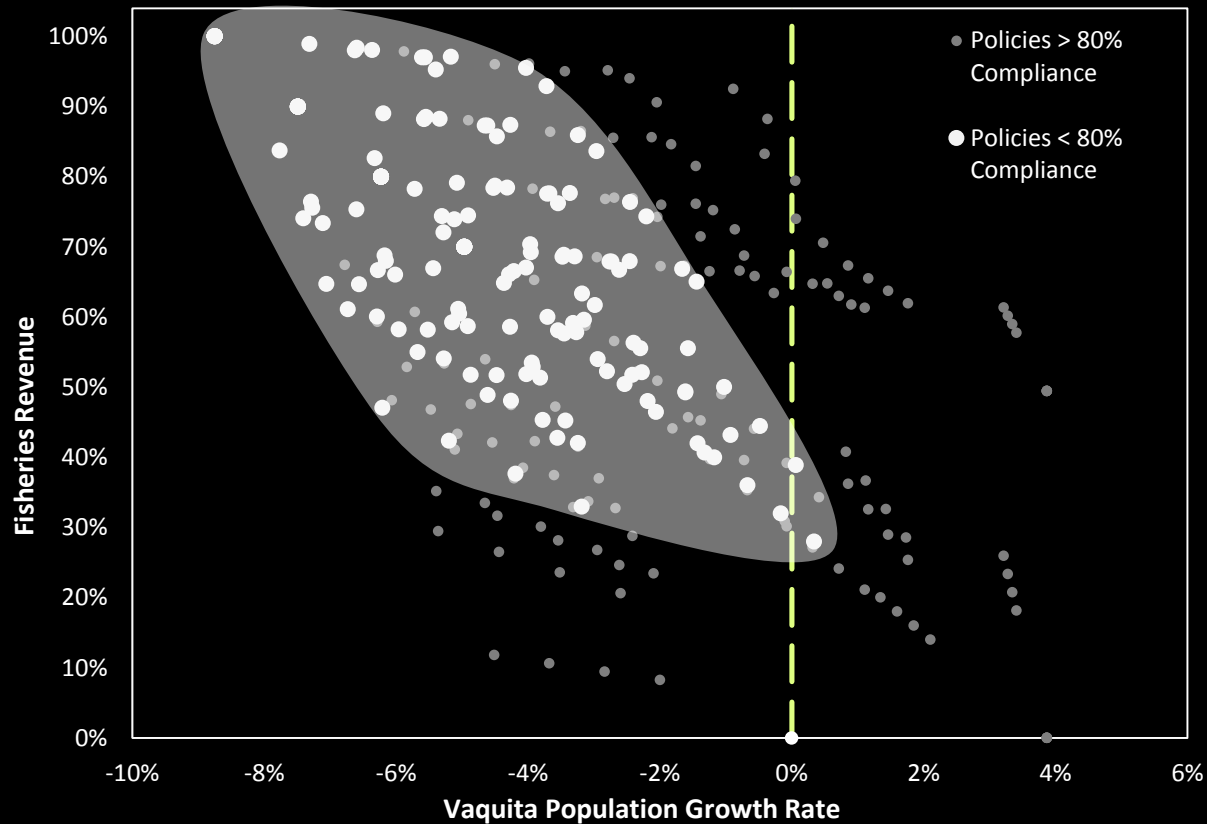
Gillnet Closures by Species



Effect of an Alternative Fishing Gear



Effect of Compliance



Conclusions

Increased refuge sizes, all fisheries closed
Technology change
Ensure compliance > 80%



