

Marine Life Protection Act Initiative

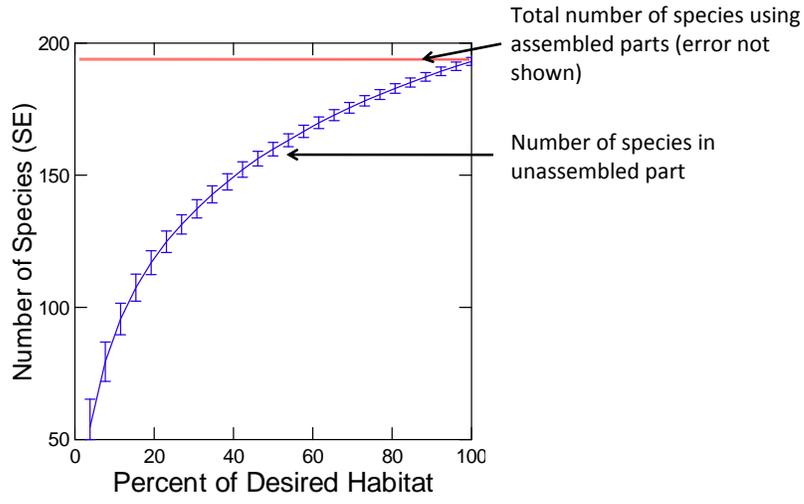


**Single Large Or Several Small
Habitat Areas**

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**SLOSS – single large or several small
using PISCO intertidal data as example**

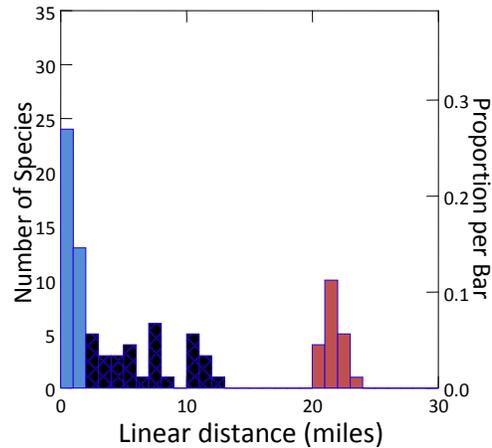


Species Based Approach (using CRANE rocky reef data for an example)

Frequency distribution of distance required to produce 90% likelihood of a species being present

Many species are common and distances are small

Some are very rare and distances are large



Single “Large” versus Several “Small” Habitat Areas

Implications:

- protecting species versus interactions (how many interactions protected within an MPA)
- proximity of pieces within an MPA versus separated between MPAs (movement and interactions)
- contribution of pieces to species population sustainability and yield assessed by models
- contributions to community-wide larval production and dispersal at regional scales (pieces versus “whole”)