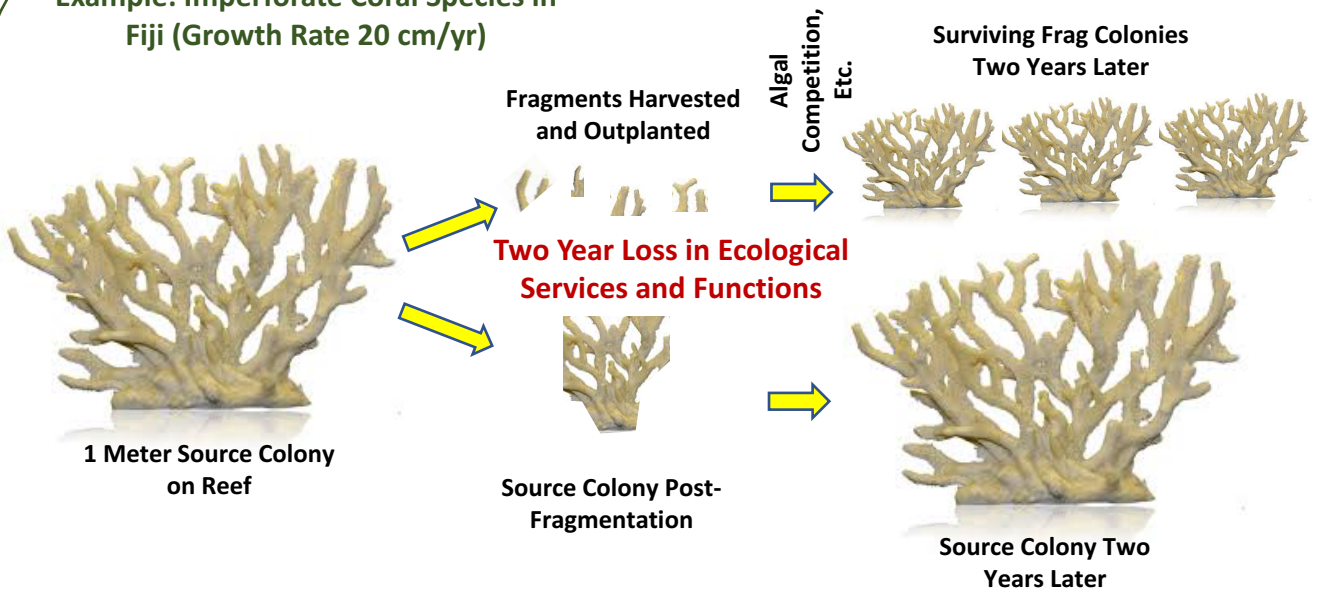


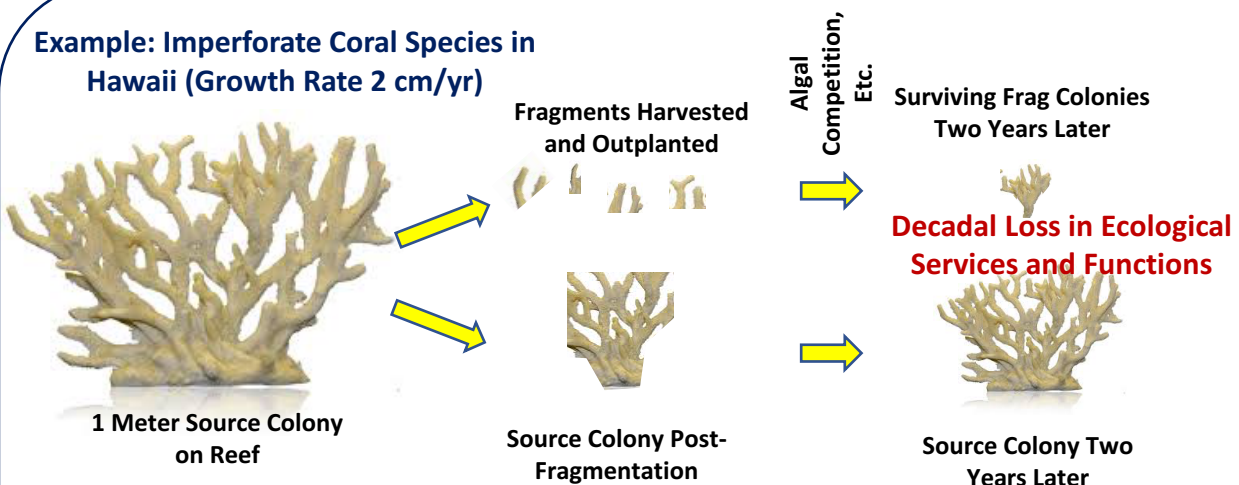
The Fragment Conundrum: Issues With In-Water Fragmentation in Hawaii

Example: Imperforate Coral Species in
Fiji (Growth Rate 20 cm/yr)



Result in Fiji: After two years, source colony has recovered, which along with surviving new frag colonies (which are now at large size), offsets temporary loss in ecological services and functions. End result: considerable gain in ecological services within two years.

Example: Imperforate Coral Species in
Hawaii (Growth Rate 2 cm/yr)



Result in Hawaii: After two years, source colony has grown only a little, which along with few surviving new frag colonies, does NOT offset the long-term loss in ecological services and functions. End result: considerable loss in ecological services over two years.

The in-water coral gardening technique most commonly used elsewhere, actually decreases the amount of ecological services and functions when used in Hawaii.



Hawaii Coral
Restoration
Nursery

Division of Aquatic Resources