EVOLUTIONARY RECOVERY 762 mie 442 mie 442 mie 762 mie FOSTER CITY Foster City, once San Mateo County's thriving shoreline tidal marsh, has formed its land by dredging the wetlands Operation Phasing Plan and pumping mud and sand onto the island raising it slightly above sea level. Land subsidence and projected sea level rise put all of Foster City, built on 4 square miles of former bay wetlands, at risk of inundation, threatening 30,000 residents and San Francisco Bay is one living organism. It breathes, circulates and transforms over time. During the past century, San Francisco businesses. Bay has suffered from tremendous loss of its body - more than 40% due to the heavy shoreline development. Phase I The global warming phenomenon calls for both challenges and opportunities for San Francisco Bay. If continuous climate change is anticipated, the sea level at the Bay is projected to be 4.5 feet higher in 2100. This will result massive inundation of the San Present Francisco Bay shoreline. Ironically, the sea level rise will bring Loss Low Density back the Bay to the size that it was a century ago. Expansion Expansion Residential Residential Recovery Evolutionary Recovery begins. Phase IV - 55 inch Sea Level Rise There is no one magical solution for this recovery process. Some wounds have stitches to heal while some need simple clean-ups. Others require major surgery. This design proposal defines Bay's Evolutionary Recovery process and identifies 3 recovery zones: Protection. Operation. Adaptation. High Density Mixed Use **PROTECTION** Protect Shoreline Infrastructure. Protect major shoreline infrastructure - Airports / Ports / Highways / Utilities · Physical Barrier + Wetland = Double shoreline protection San Pablo Bay **OPERATION** Operate Low-Grounds / Landfill Development. Foster City Protection Zone : Existing development susceptible to future inundation · Relocate : Creating New High-ground for Relocation Operation Zone Adaptation Zone · Revitalize : New High-density development Wastewater / Power Remain Wastewater / Power Relocate Oakland Army Base — 55" Sea Level Rise SAN FRANCISC SAN LEANDRO Hunters Point International Airport San Francisco Bay San Francisco **ADAPTATION** International Airport Adapt Existing Wetlands / Salt Ponds. South Bay · Tidal wetlands function as natural buffers against flood events. They adapt to sea level rise by gathering sediments and growing vegetation accelerated with carefully prescribed dredging and deposition accompanied with wetland planting. · Salt ponds will be released as dredge materials and sediment washes into newly opened salt ponds. Don Edwards National Wildlife Refuge Moffett Field Naval Air Station