

Salton Sea Species Conservation Habitat Project

Revitalizing over 4,000 acres of aquatic and terrestrial habitats

THE CHALLENGE

A shrinking saltwater lake in California, the Salton Sea's increasingly hypersaline water conditions have become inhospitable to aquatic species, disrupting the food chain for local and migratory birds. The shrinkage has exposed large areas of lakebed releasing airborne particulates, contributing to high asthma rates in the Imperial Valley.

OUR APPROACH

Knight Piésold served as lead designer for Kiewit under an EPC contract, and the team designed and constructed shallow habitat ponds with an innovative gravity flow system, which mixes fresh water with hypersaline Salton Sea water to achieve ocean-like salinity while significantly reducing operational costs and energy usage.

THE RESULTS

The project revitalized over 4,000 acres of aquatic and terrestrial habitats—an area more than two and a half times larger than Denver's Central Business District. Restored shoreline habitats support biodiversity for fish and bird populations and native vegetation, with endangered species now flourishing. Air quality has improved supporting better health and quality of life for surrounding communities.

LOCATION: Westmorland, California

CLIENT: Kiewit Infrastructure West Co.

OWNER: California Department of Water Resources

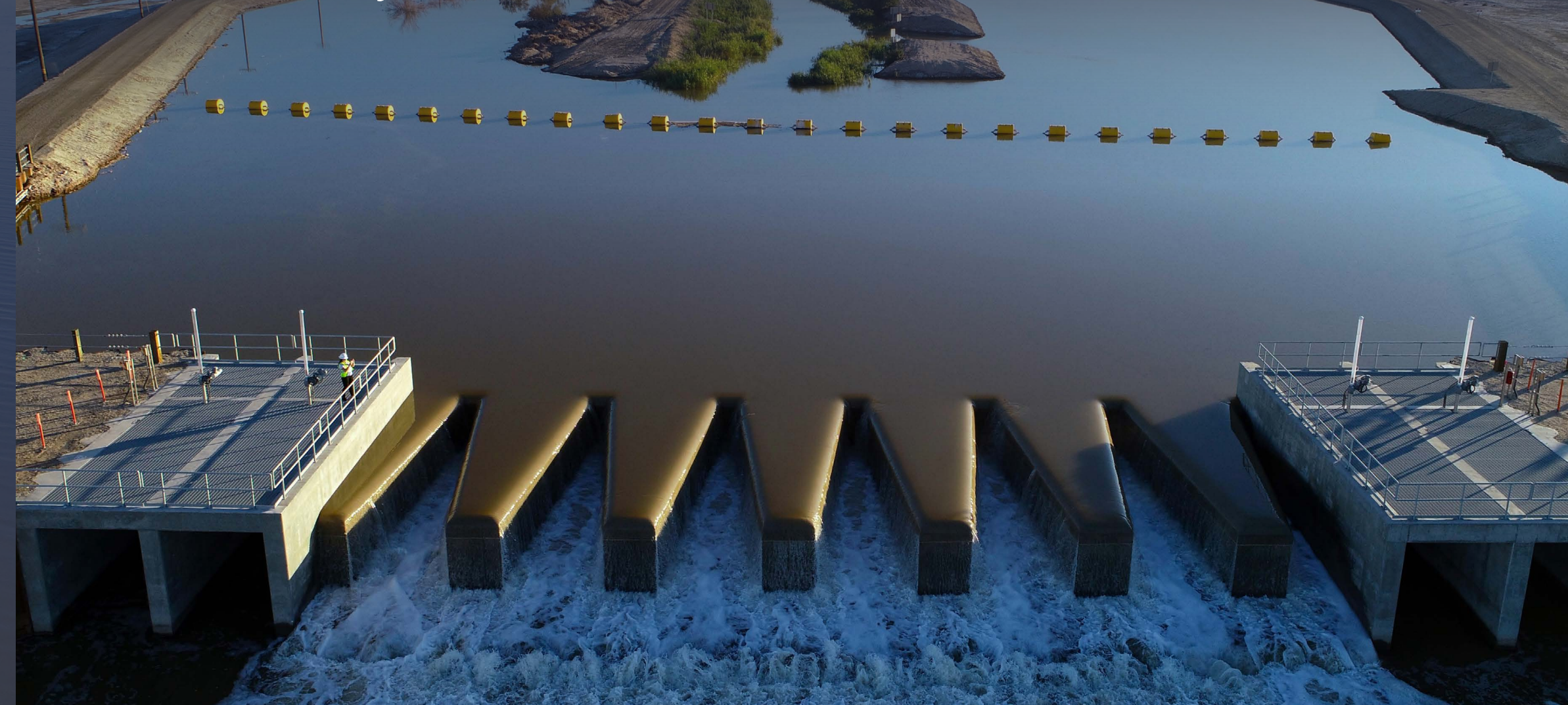
ENTRANT: Knight Piésold and Co. (Denver, Colorado)



New River weir with east and west sedimentation basins



New River labyrinth weir and diversion structures



East habitat pond in operation

