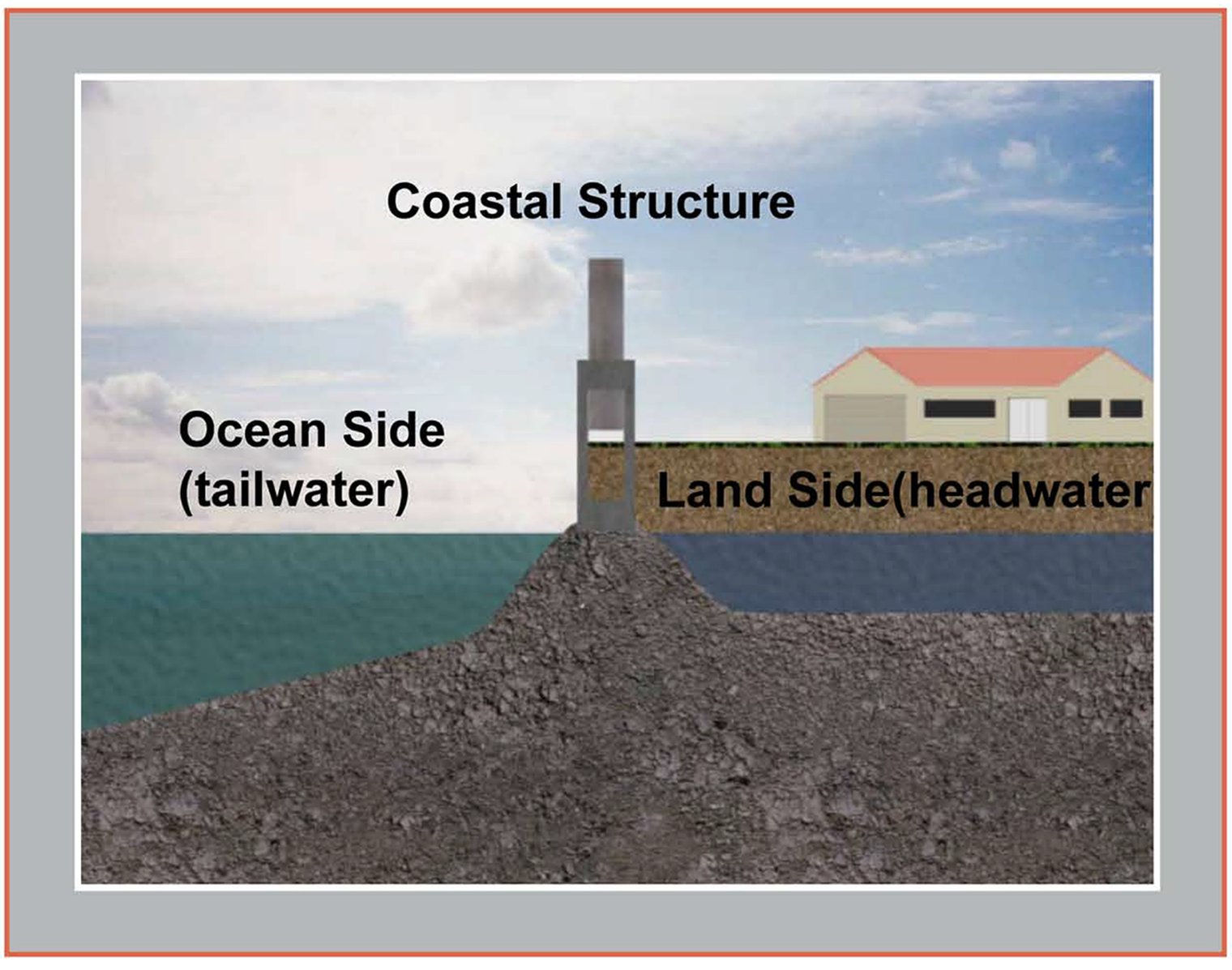
Water management CONCERNS of rising seas

Water Supply

Most coastal communities in South Florida depend on wellfields that tap underground freshwater aquifers for their water supply. Coastal water supplies could be contaminated by saltwater intrusion. The highly populated area from Miami to Palm Beach is considered especially vulnerable.

Flood Control

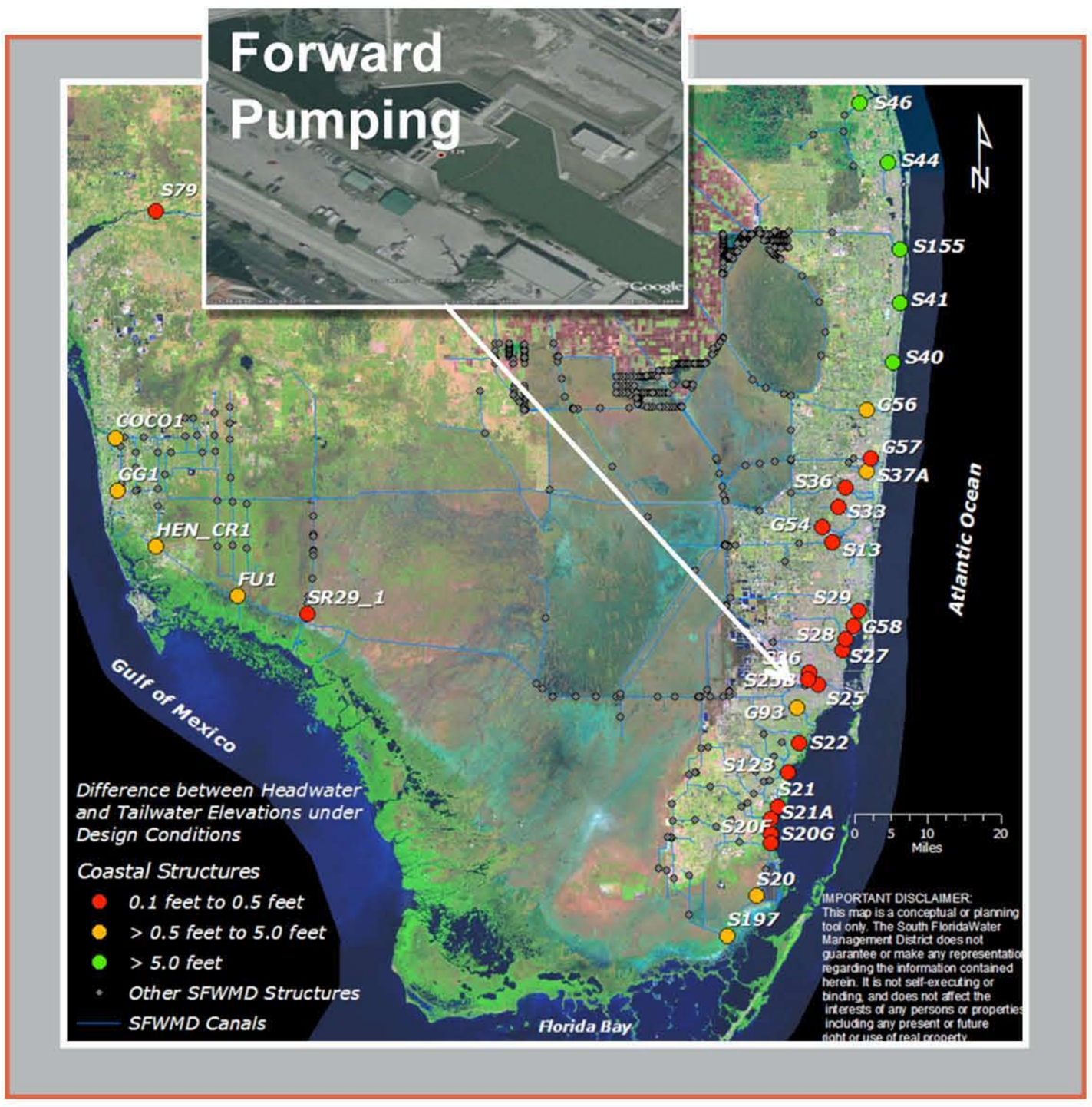
Water in coastal canals is typically higher on the land side allowing water managers to open flood gates when needed to move excess water for flood control. Higher levels on the ocean side could limit flood protection and may also cause significant flooding of coastal property.



Natural Systems/Water Quality

Much of South Florida, including many of the region's most environmentally sensitive areas, is at low elevation. Already prone to flooding, sea level rise may cause them to become permanently inundated and destroy vital coastal habitats.

Water management
ADAPTATION to rising seas



Flood Control Actions

Retrofit coastal water control structures affected by sea level rise. Twenty-eight structures on the east coast and six on the west coast are most vulnerable. Three coastal spillways in north Miami-Dade County are targeted for forward pumps.

Water Supply Actions

Evaluate saltwater intrusion monitoring. If needed, add additional groundwater monitoring wells and identify utility coastal wellfields as “at risk” or “of concern.” Coordinate with these utilities to evaluate technologies to reduce or limit saltwater intrusion, implement water conservation measures and develop alternative water supplies.

Natural Systems/Water Quality Actions

Research is under way to assess possible impacts of sea level rise and climate change on planning used for ecosystem restoration projects. Restoration plans must address potential impacts such as changing salinity zones, spread of invasive species and altered drought/flood cycles.