

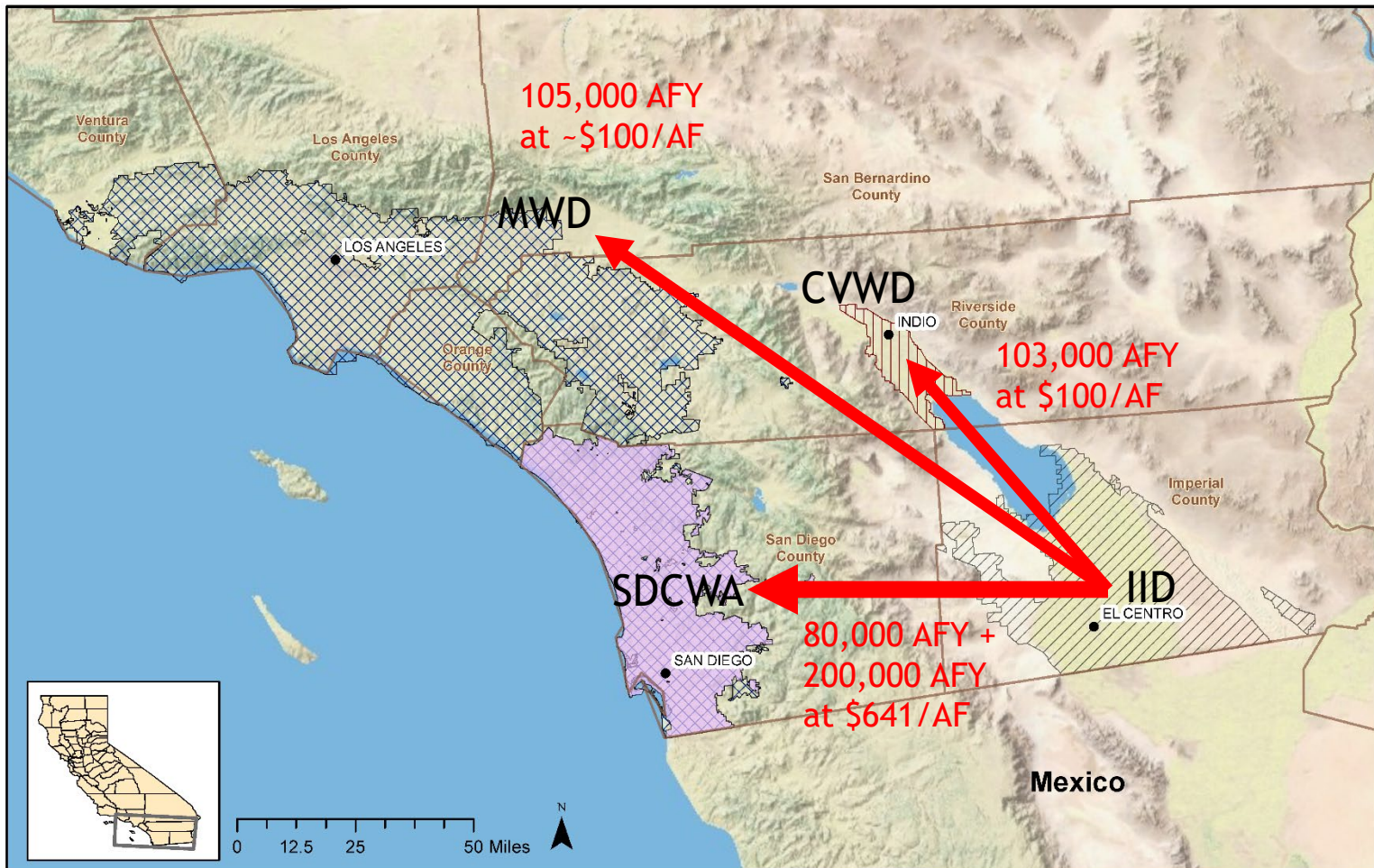
Salton Sea Restoration Water Import Options

Restauración del mar de Salton Opciones de importación de agua



QSA Transfers to Regional Water Agencies

Transferencias de QSA a las agencias regionales de agua



Data Sources: California Federal, State, and Private Water Districts. Basemap courtesy of ESRI

Legend

- San Diego County Water Authority
- Imperial Irrigation District
- Metropolitan Water District
- Coachella Valley Water District

Figure 1
Project Location Map
Notice of Preparation

Source: SDCWA website, IID website

Three Broad Categories of Salton Sea Solutions

Tres amplias categorías de soluciones a Mar de Salton

1. Whole Sea Restoration / Restauración de todo el Mar
2. Divide the Sea, Restore a Portion / Divide el Mar, restaura una porción
3. Shrink the Sea, Mitigate Damage / Reducir el Mar, mitigar los daños

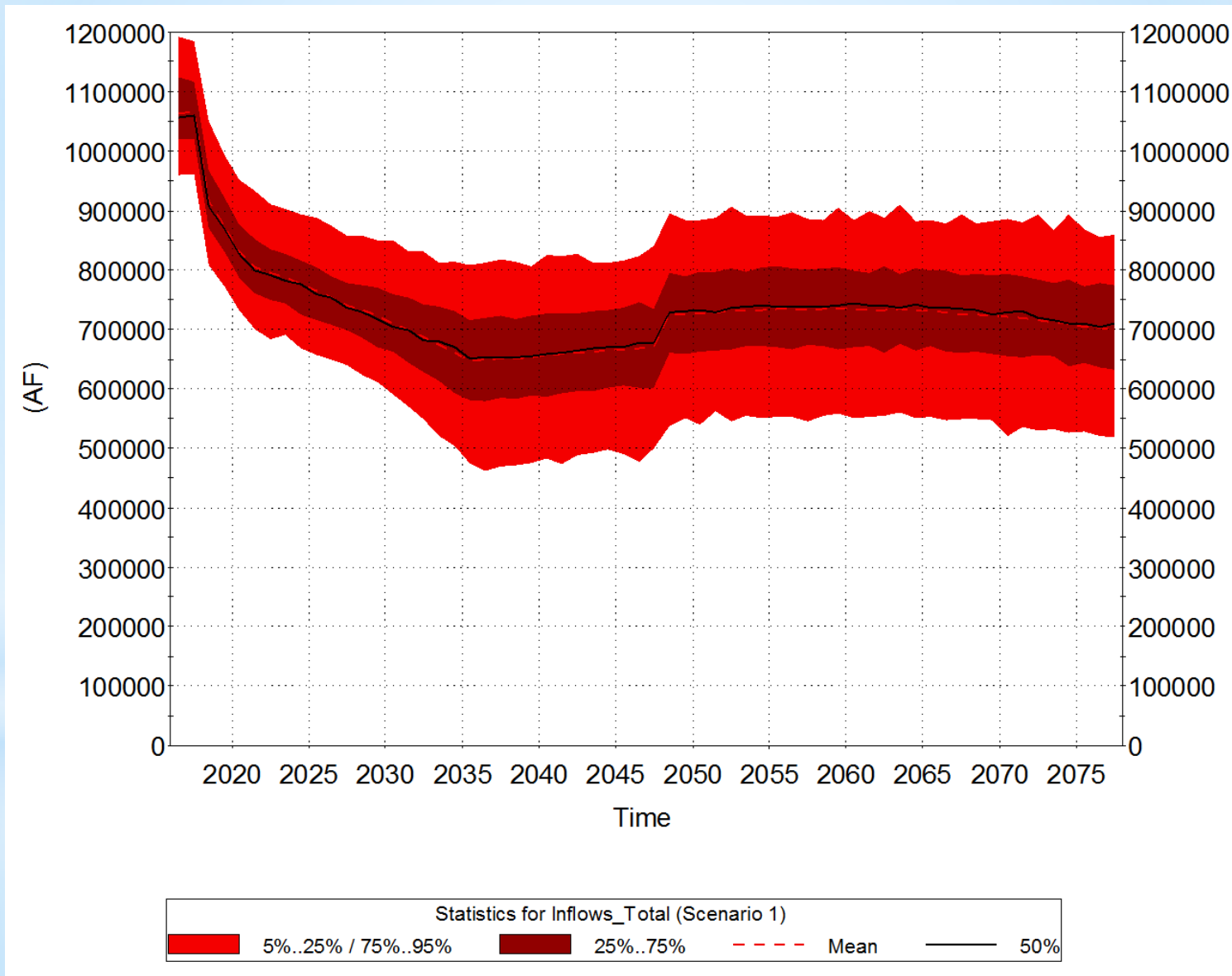
Whole Sea Restoration by Water Import

Restauración de todo el mar por importación de agua



Projected Total Inflow to Salton Sea (IID 2018)

Afluencia total proyectada a Mar de Salton (IID 2018)



Source: CH2M Hill, Salton Sea Hydrology Development, October 2018 for IID

Salton Sea Outflow

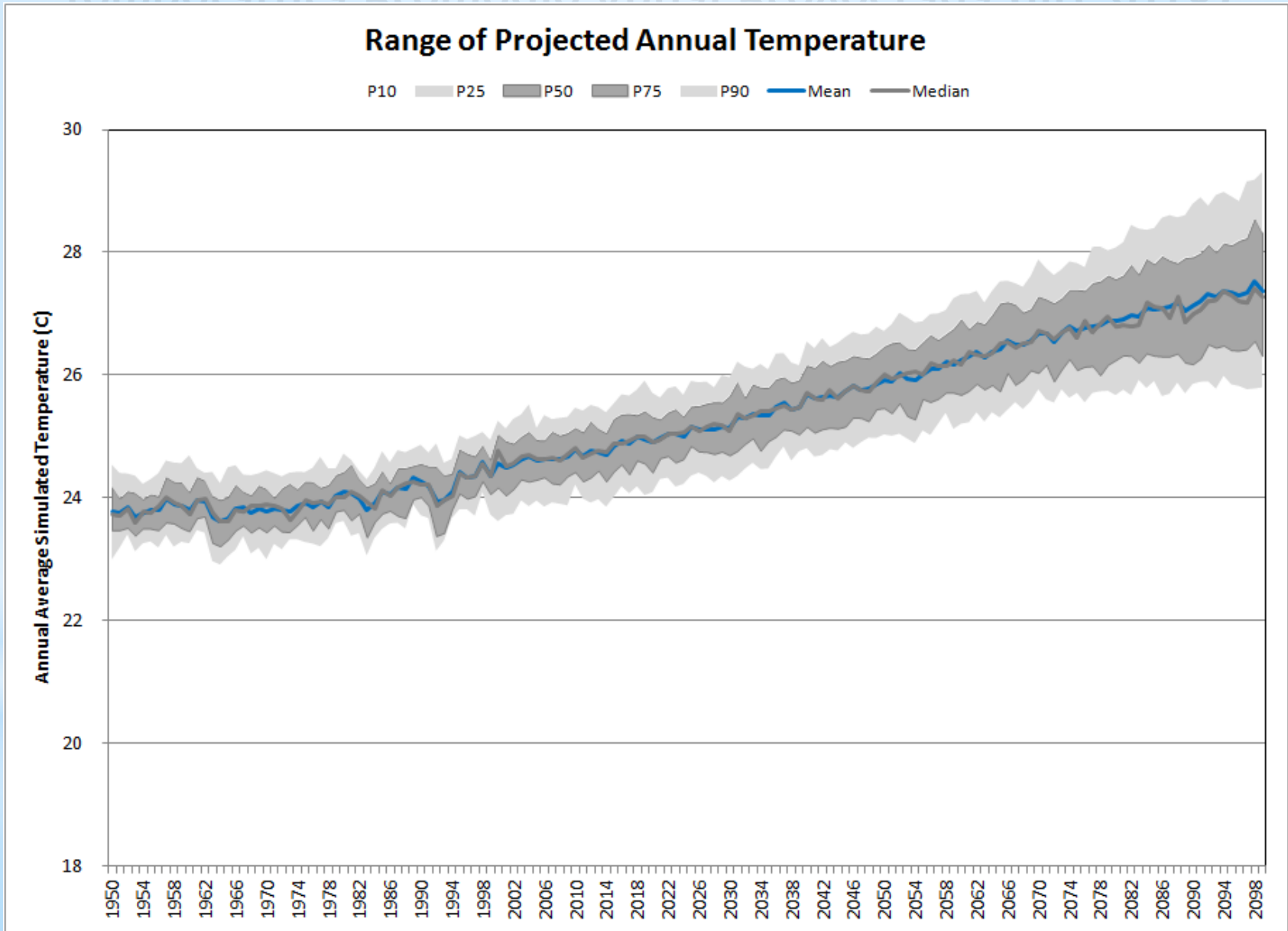
Salida del Mar de Salton



The predominant outflow from the Salton Sea is surface evaporation
La salida predominante del Mar de Salton es la evaporación superficial

Projected Average Annual Temperature (IID 2018)

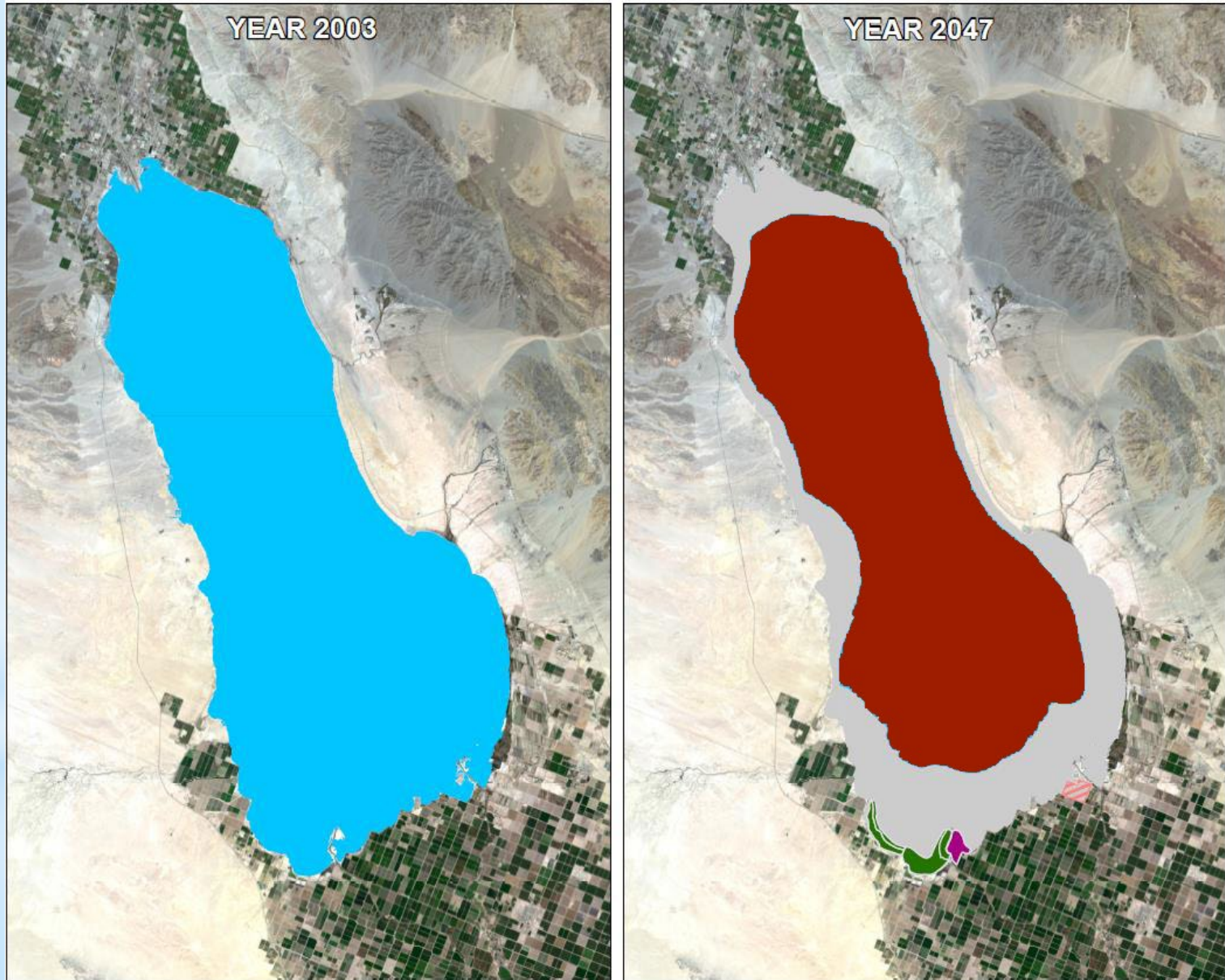
Temperatura Promedio Anual Proyectada (IID 2018)



Source: CH2M Hill, Salton Sea Hydrology Development, October 2018 for IID

Recede and Concentrate QSA 2003-2047 (IID 2018)

Retirar y concentrar QSA 2003-2047 (IID 2018)



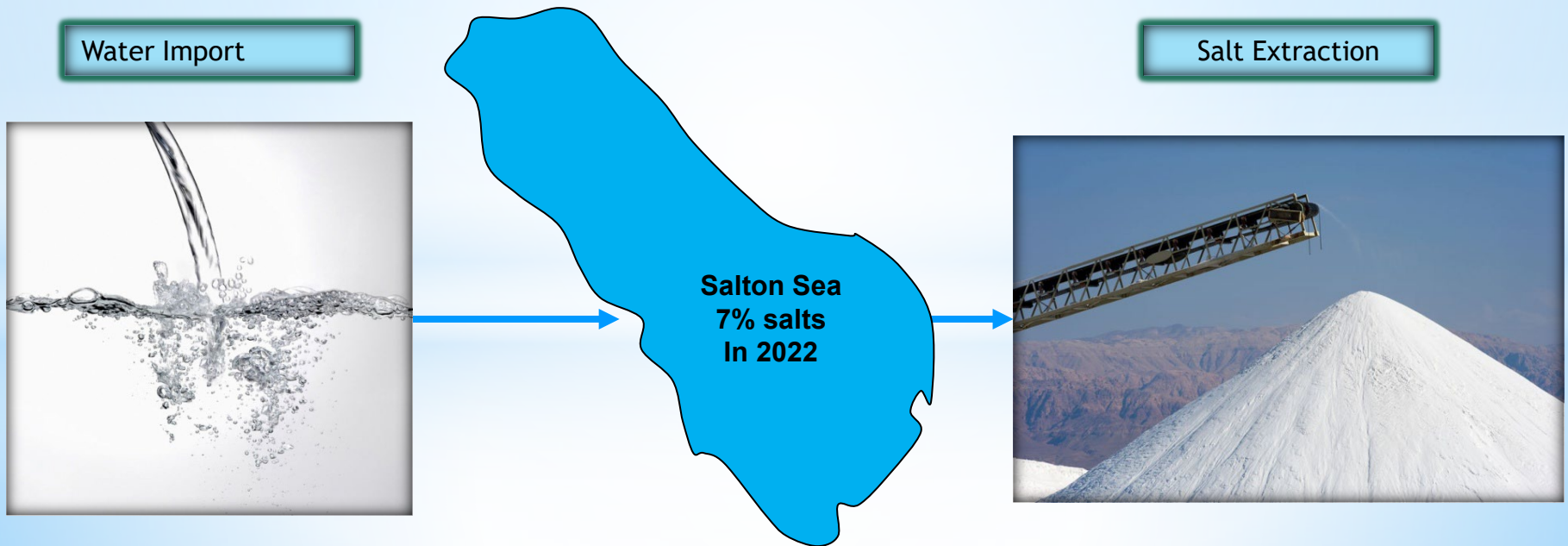
Source: CH2M Hill, Salton Sea Hydrology Development, October 2018 for IID

Import Concept: Water In / Salt Out

Concepto de importación: entrada de agua / salida de sal

Import enough new water to restore the pre-QSA, or other target, elevation of the Salton Sea and eliminate playa dust. Extract hypersaline water from the Salton Sea to remove salts.

Importar suficiente agua nueva para restaurar la elevación previa al QSA u otro objetivo del Salton Sea y eliminar el polvo de la playa. Extraiga agua hipersalina del mar de Salton para eliminar las sales.



Salton Sea Ocean Water Import Sources

Fuentes de importación de agua del océano a Mar de Salton



Image Source: Google Earth

Pump In Pump Out USBR Report

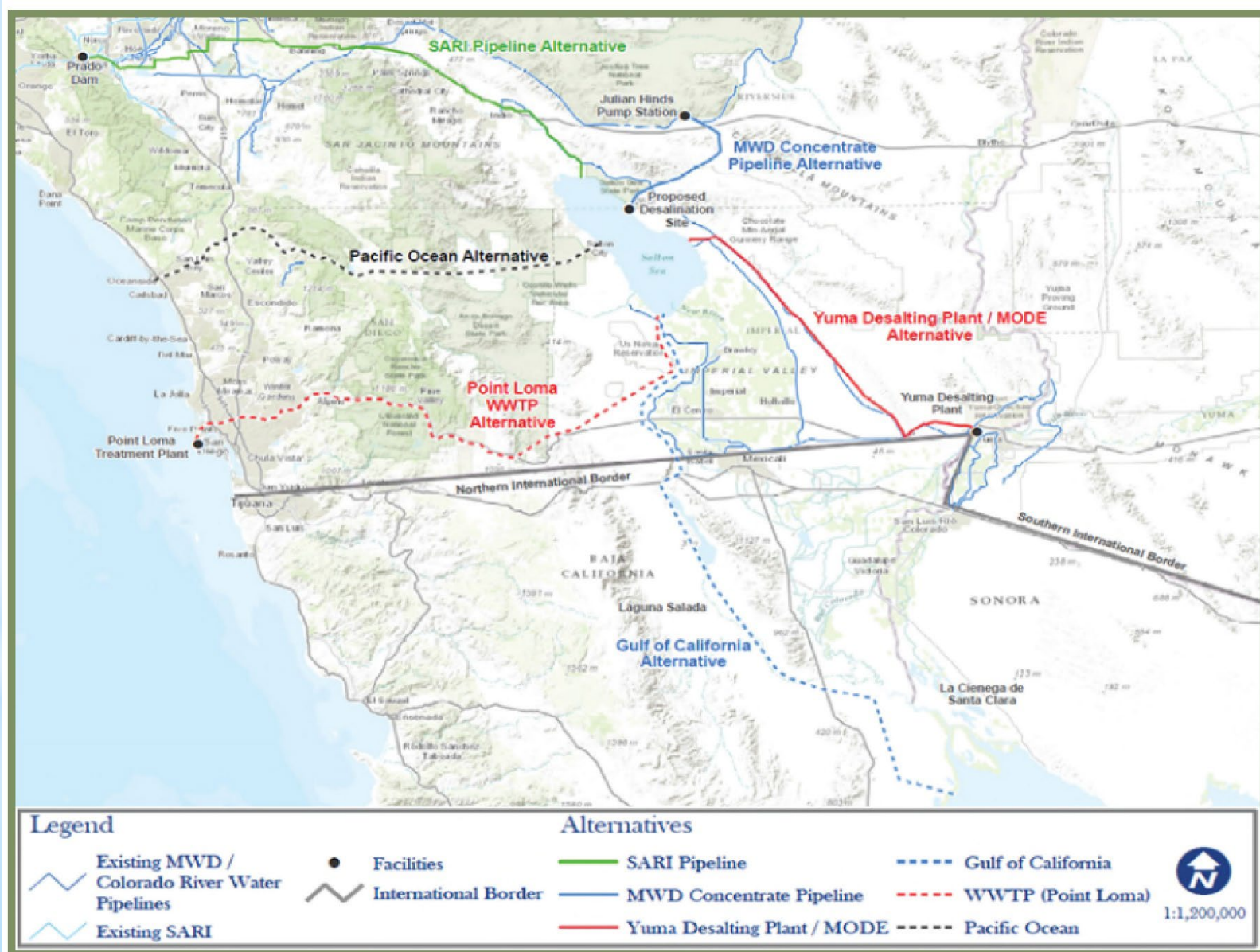
Bomba de entrada Bomba de salida Informe USBR



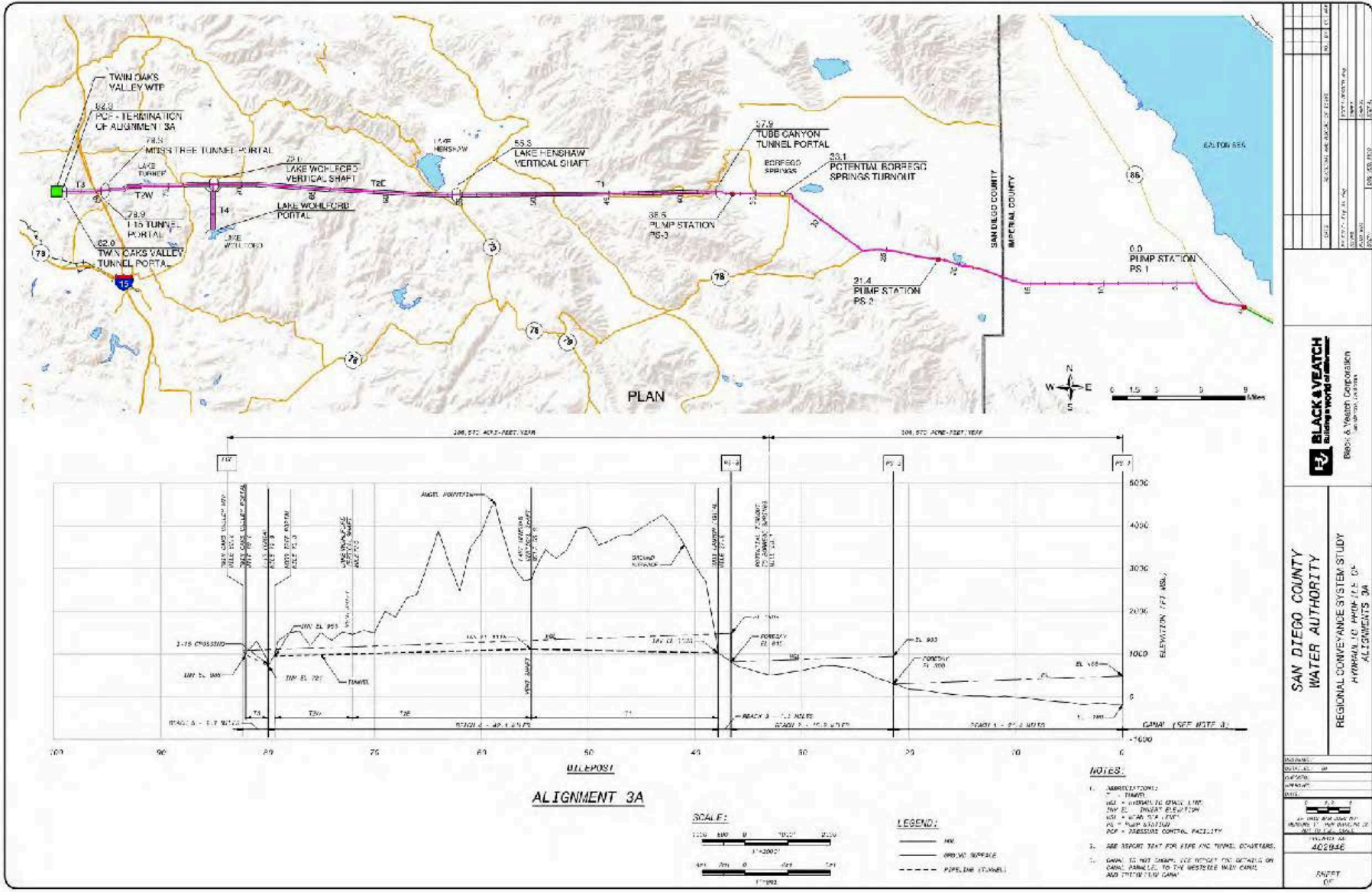
Figure 13.—Pipeline routes to and from Salton Sea.

Water Import Tetra Tech

Importación de agua Tetra Tech



SDCWA, Regional Conveyance System, 3A SDCWA, Sistema de transporte regional, 3A



DATE: 08/11/2020	BY: J. W. BROWN
SCALE: SECTION AND MAIN: 1" = 4000'	DATE: 08/11/2020
PROJECT: SDCWA REGIONAL CONVEYANCE SYSTEM STUDY	DATE: 08/11/2020
REVISION: 01	DATE: 08/11/2020
REVISION: 02	DATE: 08/11/2020
REVISION: 03	DATE: 08/11/2020

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SAN DIEGO COUNTY WATER AUTHORITY
 REGIONAL CONVEYANCE SYSTEM STUDY
 HYDRAULIC MODEL FILE 04
 ALIGNMENTS 3A

DATE: 08/11/2020

Pacific Ocean Tunnel Route Option

Opción de ruta del túnel del océano Pacífico

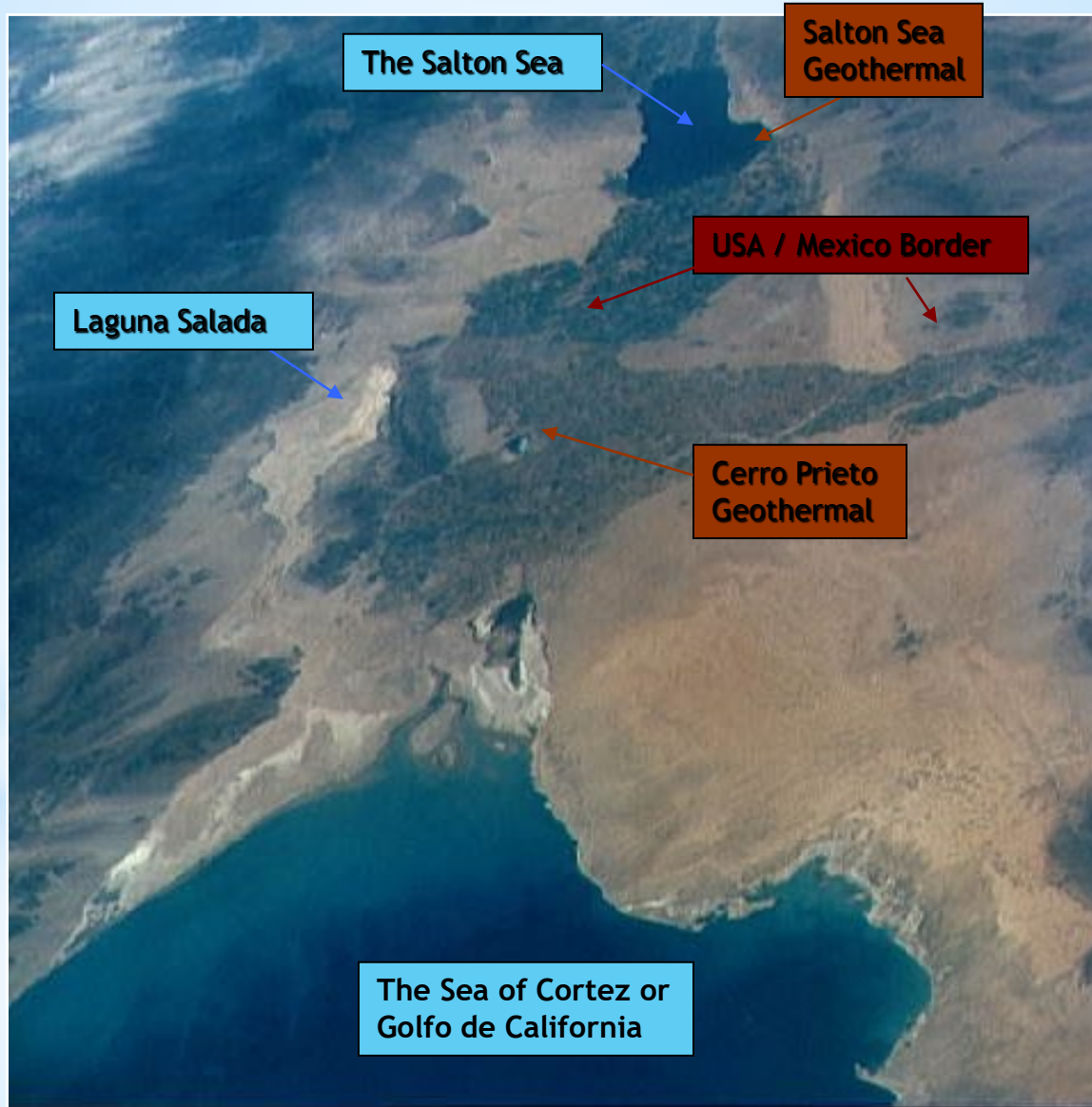
Cost Estimates Range from
\$5 Billion to \$10 Billion

Las estimaciones de costos
oscilan entre \$ 5 mil millones
y \$ 10 mil millones



Sea of Cortez Water Source

Fuente de agua del Mar de Cortés



Through Laguna Salada to Salton Sea Por Laguna Salada a mar de Salton

**Cost
Estimates
Range from
\$1 Billion to
\$4 Billion**

**Las estimaciones de costos
oscilan entre \$ 1 mil millones y \$
4 mil millones**



Laguna Salada Feeder Canal Canal Alimentador Laguna Salada



Image Source: Corbin Schweitzer

Mexicali Valley Route to Salton Sea

Ruta del Valle de Mexicali al Mar de Salton

**Cost
Estimates
Range from
\$1.2 Billion to
\$1.7 Billion**

**Las estimaciones de costos
oscilan entre \$ 1.3 mil millones y
\$ 1.7 mil millones**

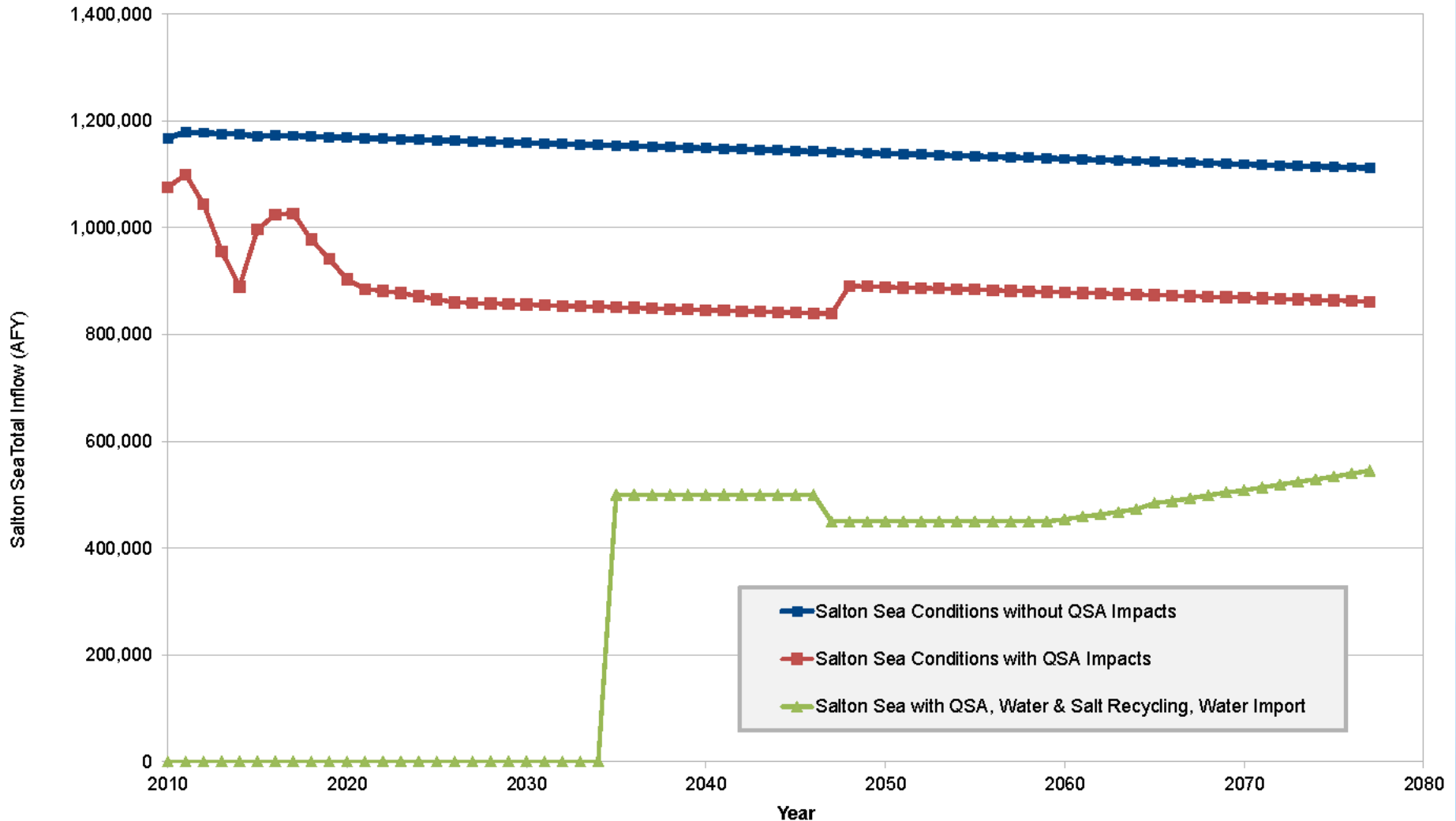


Google Earth

Image Landsat / Copernicus
Data: LDEO-Columbia, NSF, NOAA
Data: SIO, NOAA, U.S. Navy, NGA, GEBCO

Salton Sea Inflow with Water Import (~500 KAFY) Afluencia del Mar de Salton con importación de agua

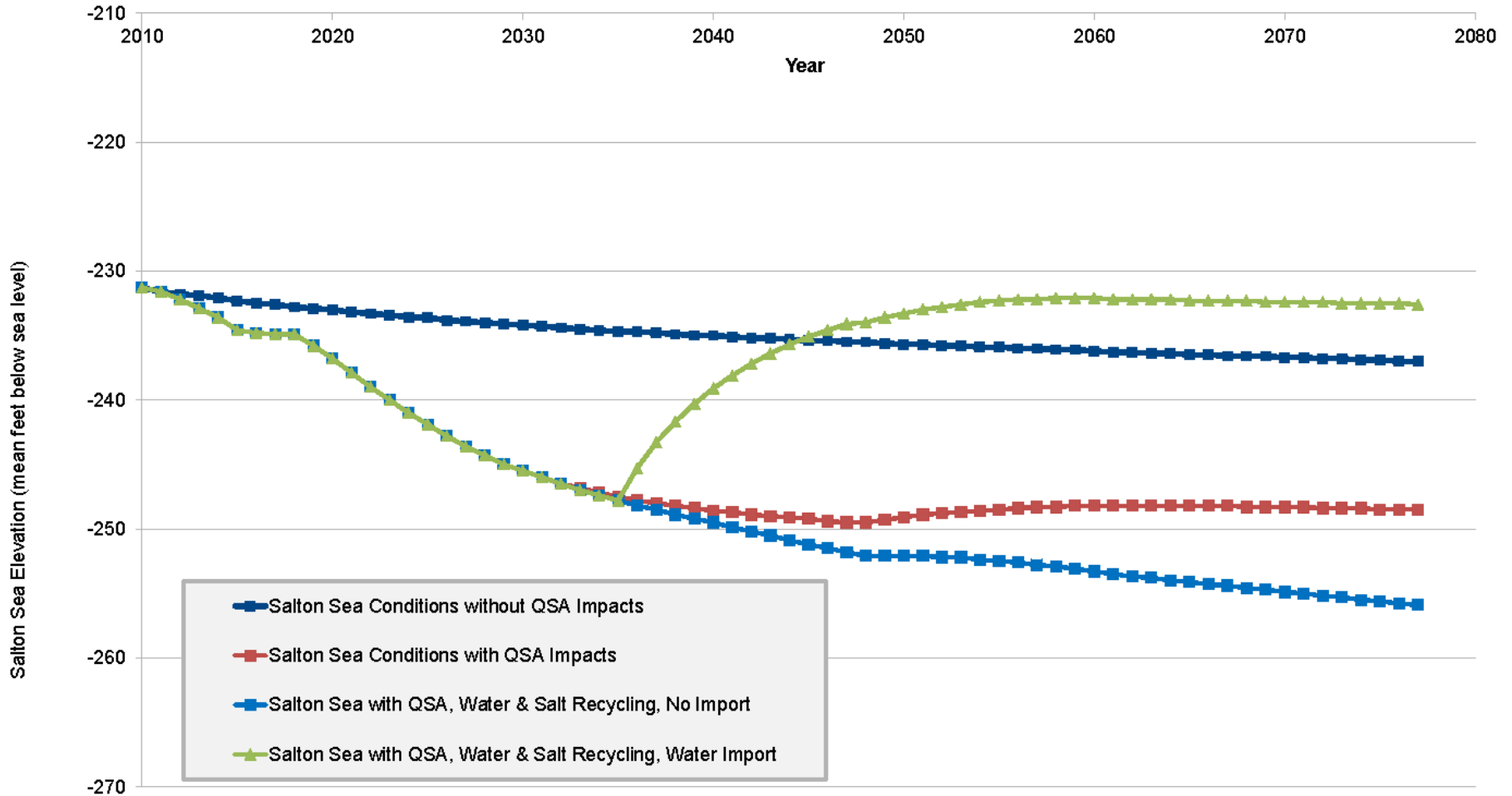
Salton Sea Predicted Inflow, With and Without QSA and Showing Ocean Water Import



Source: Sephton Water Technology water and salt mass balance calculation from public data

Salton Sea Elevation with Water Import Elevación del Mar de Salton con importación de agua

Salton Sea Elevation, with and without QSA and with Water & Salt Recycling and with Ocean Water Import

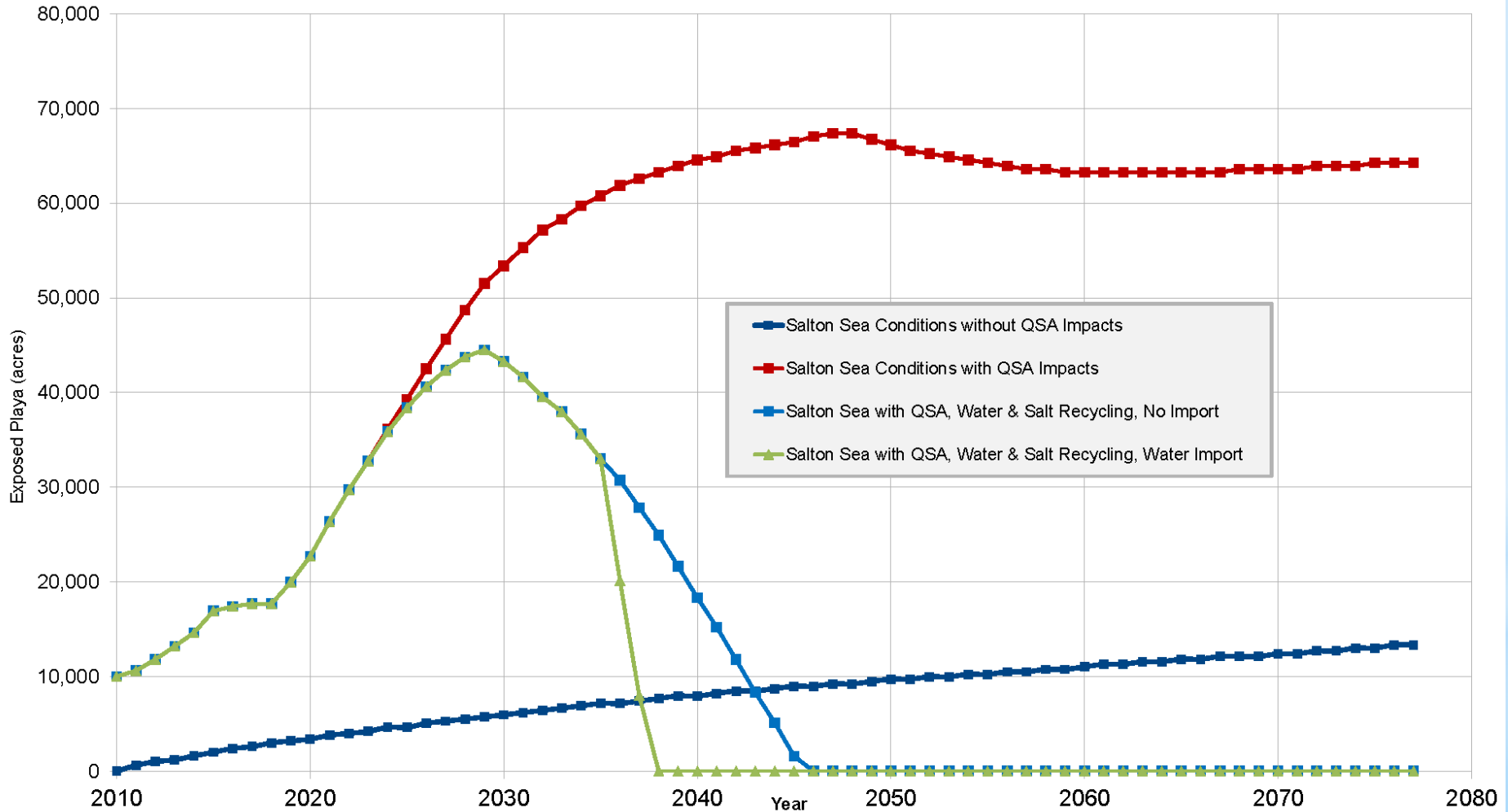


Source: Sephton Water Technology water and salt mass balance calculation from public data

Playa Exposure with Water Import

Playa Exposición con Importación de Agua

Salton Sea Playa Exposure, With and Without QSA, Water & Salt Recycling with Ocean Water Import

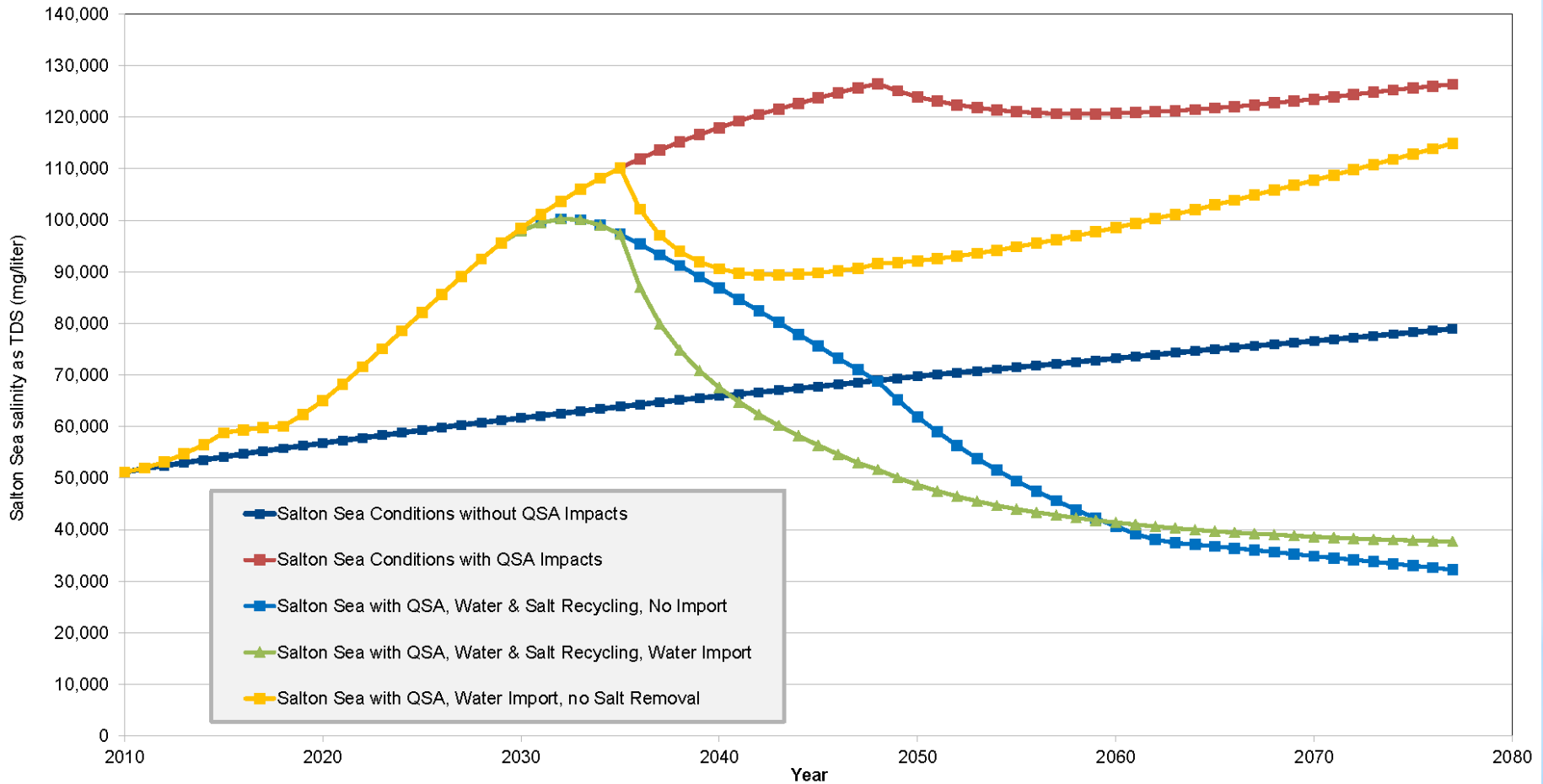


Source: Sephton Water Technology water and salt mass balance calculation from public data

Salton Sea Salinity with Water Import

Salinidad del Mar de Salton con importación de agua

Salton Sea Salinity Prediction, with and without QSA and with Water & Salt Recycling and with Ocean Water Import



Source: Sephton Water Technology water and salt mass balance calculation from public data

Questions at the End? / ¿preguntas al final?

