Salton Sea
Air Quality Mitigation Program

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Imperial Irrigation District

“The Imperial Irrigation District is a fiscally responsible public agency whose mission it is to provide reliable, efficient and affordably priced water and energy service to the communities it serves.”

- Energy provided to Imperial Valley and parts of southern Coachella Valley
- Water delivered to 148 miles of main canals and 1,442 miles of laterals, with 1,457 miles of surface drains
IID’s Water Supply & Service Area

- 3,100,000 acre-feet annual Colorado River consumptive use entitlement
- 1,061,637 gross acres within boundaries
- 520,307 total acreage receiving water
- 472,818 total farmable acreage
- 451,015 total acreage in crops
Salton Sea

- Congressionally designated agricultural sump for IID and CVWD
- Almost 50% saltier than the Pacific Ocean
- 6 foot elevation decline since 2003 despite delivery of mitigation water
- Without transfers, Sea is estimated at turning hypersaline between 2010 and 2025
- With transfers, Sea is estimated to turn hypersaline 1-9 years earlier
QSA Salton Sea Mitigation

- The SWRCB imposed a 15-year (2003-2017) mitigation delivery requirement that was intended to maintain salinity levels for a long enough period of time to study feasibility, determine a restoration alternative and then begin implementation. Mitigation deliveries total up to 800,000 AF over the 15-year mitigation period.

- Mitigation volumes are proportional to the reduced Salton Sea inflows resulting from the conserved water transferred to SDCWA. Mitigation volumes increase as the conversion from fallowing to efficiency-based conservation measures ramps up.

1 AF of efficiency-based conservation = 1 AF of reduced Salton Sea inflow
A Call to Action

- On November 18, 2014 IID, in coordination with Imperial County, submitted a petition to the California State Water Resources Control Board to exercise its continuing authority over the nation's largest agricultural-to-urban water transfer.

- On March 15, 2017, more than two years later and less than 10 months of mitigation flows remaining, IID filed a request for a SWRCB evidentiary hearing to ensure the long-term viability of the QSA water transfers and provide for implementation of a smaller but sustainable restoration plan.
Salton Sea Issues

- Increased salinity
- Water quality
- Air quality impacts
- Receding shoreline
- Potential health and declining habitat value
IID’s Salton Sea Air Quality Mitigation Program

- Developed in coordination with Imperial County; a comprehensive, science-based adaptive approach to characterize emissions potential of exposed playa as the Sea recedes and pro-actively implement projects to prevent significant dust emissions
- Pilot testing a range of dust control measures tailored to climate and soil conditions around the Salton Sea
- Identifying measures that can be quickly implemented and scaled to create a stable surface and/or prevent the spread of dust emissions on exposed playa
Air Quality Monitoring

Salton Sea State Recreation Area
Air Monitoring Station
Salton Sea Playa Monitoring

Vegetation Mapping

Portable In Situ Wind Erosion Lab
Off Lake Monitoring
Surface Roughening
Vegetation Enhancement
2017-2018 Field Scale Projects

- Identify area for future project
  - Air Station Data
  - PISWERL
  - Surface Characteristics

- Soil Cores

- EM Soil Data

- Established Vegetation Mapping

- Project Design
  - Surface Roughening, Veg Enhancement or Both/Other

- Implementation
www.iid.com/airquality

www.SaltonSeaNow.com

www.facebook.com/SaltonSeaRestorationandRenewablesInitiative