



STATE OF CALIFORNIA
SALTON SEA
MANAGEMENT PROGRAM

SALTON SEA MANAGEMENT PROGRAM

Dust Suppression Action Plan

Presentation to the Salton Sea Authority
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Dust Suppression Action Plan (DSAP) Goals



GUIDE TO EXPEDITE THE IMPLEMENTATION OF DUST SUPPRESSION PROJECTS AROUND THE PERIMETER OF THE SALTON SEA BETWEEN 2020 AND END-2022. THE PLANNING AREA CONSISTS OF 9,800 ACRES.



THESE PROJECTS MEET THE STATE'S COMMITMENTS TO MANAGING AIR QUALITY FOR NEIGHBORING COMMUNITIES AND REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD ORDER WR 2017-0134



THIS IS NOT A REGULATORY DOCUMENT, BUT GUIDANCE ON THE TYPES OF ACTIONS THAT NEED TO BE TAKEN TO ACCOMPLISH THE AREA GOALS



DSAP Projects & Phases

Dust Suppression Action Plan released in July 2020

Total planning area: 9,800 Acres

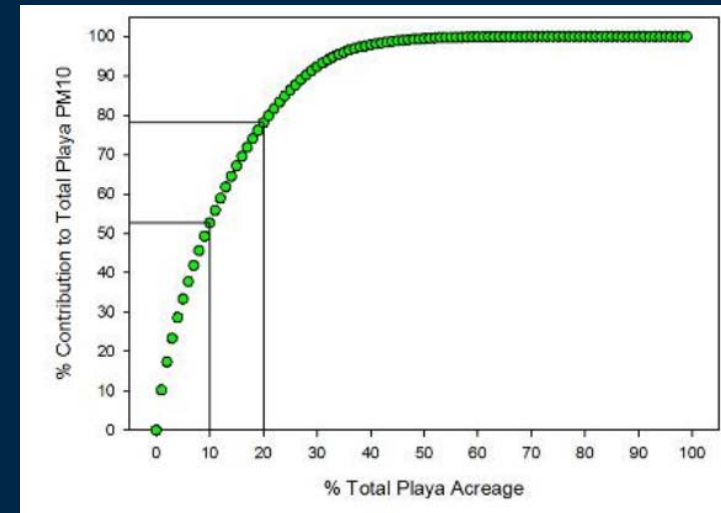
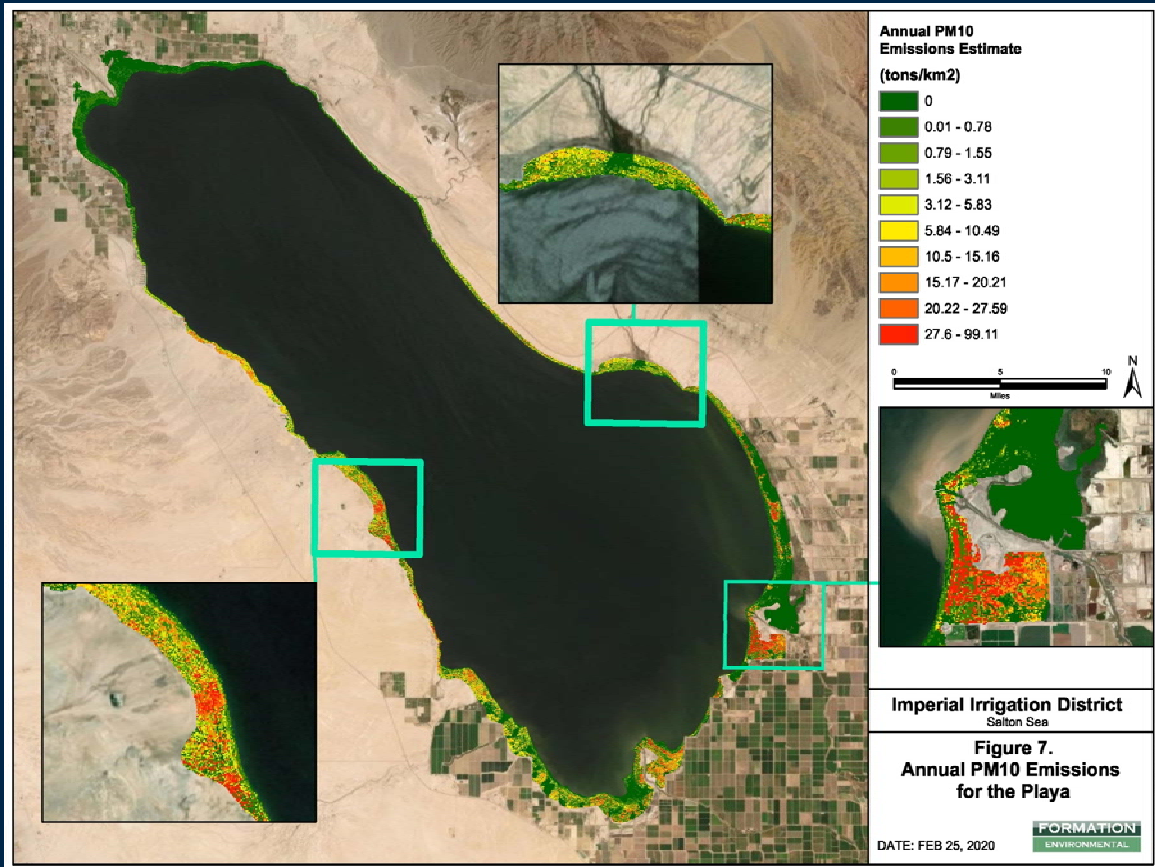
- Actual areas of project implementation may be limited by exclusions, based on further ground-level evaluation
- Several project areas include parcels that are to be implemented in both Phase A and Phase B

Project delivery through end of 2021

- January 2020: Bruchard Road Project 112 acres completed
- December 2020: 1,500 – 2,000 additional acres completed
- March 2021: 2,000 – 2,500 additional acres completed
- December 2021: 2,500 – 3,000 additional acres completed



Existing Regional Source Area Data



www.iid.com/airquality

Process Based Dust Control

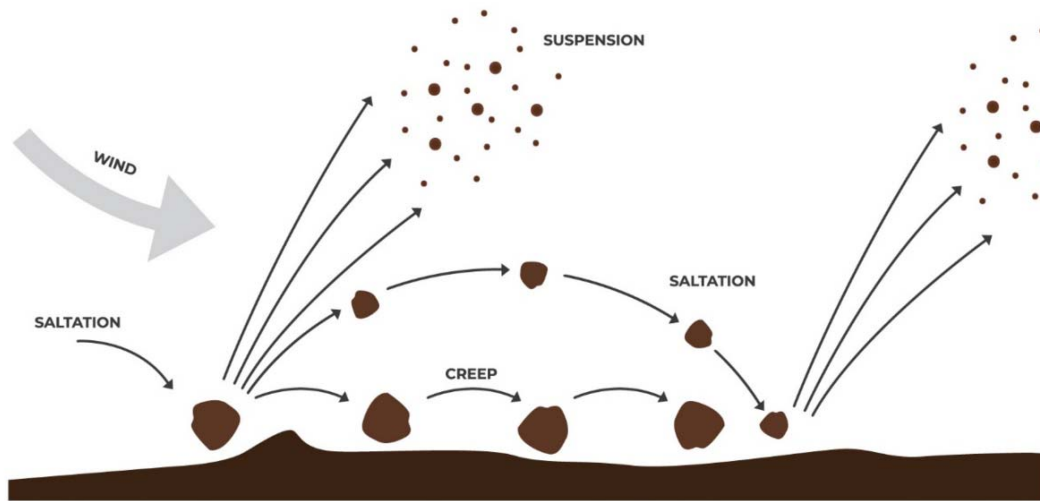
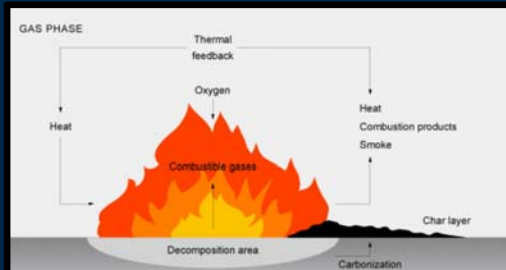


Figure 2. Processes of Dust Emission from a Dry Lakebed. (Modified from Presley and Tatarko, 2009)

Go To Tactics

Wind Side

Increase Roughness

- Induce Friction into Air Column
- Reduce Wind Shear
- Reduce Saltation Activity
- Reduce PM10 Flux

Soil Side

Increase Effective Particle Size at Surface

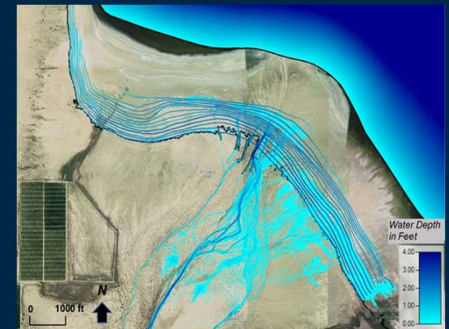
- Increase Minimum Wind Shear Required for Erosion
- Reduce Saltation Activity
- Reduce PM10 Flux

Feedback Side

Break Up Effective Fetch

- Deposit Out Saltating Particles
- Reduce Saltation Activity
- Reduce PM10 Flux

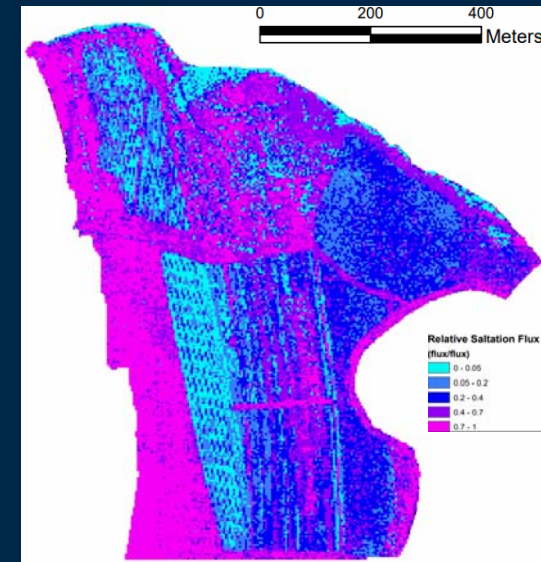
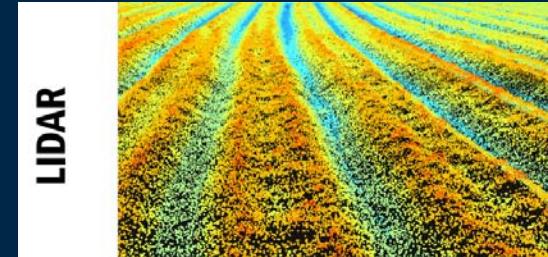
Project Areas and Example Control Measures



Project Performance Monitoring

TABLE 1. STRENGTHS OF SELECTED PERFORMANCE MONITORING TECHNIQUES

Monitoring Technique	Quantitative	Continuous Measurement	Spatially Comprehensive
Visual Surveillance Network		x	x
Surface Motion Monitoring Network	x	x	
Saltation Flux Mapping	x		x



https://saltonseaprogram.com/aqm/docs/2019_2020_Proactive_Dust_Control_Plan_Final.pdf

Collaboration

Early & Ongoing

- Communities
- Tribes
- Air Districts
- Inter-agency

Increasing our capacity

- Science
- Planning
- Implementation



Resources

Dust Suppression Action Plan

<https://saltonsea.ca.gov/planning/dust-suppression/>

CNRA SSMP eNewsletter

E-mail cnra-saltonsea@resources.ca.gov to sign-up

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Salton Sea Management Program: Dust Suppression Action Plan

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