QSA Environmental Mitigation Program

Jessica Humes Environmental Project Manager, Sr.



Environmental Mitigation Program

- Implementation of environmental mitigation measures related to the Quantification Settlement Agreement Water Transfer and IID's Water Department Operation and Maintenance Activities
- Environmental Documentation
 - Transfer Project Final EIR/EIS
 - Draft Habitat Conservation Plan
 - In-Valley Biological Opinion
 - In-Valley CESA Permit



Burrowing Owl Mitigation

- Population Estimates conducted in 2007-2008 and 2011-2012
- Population Estimate being conducted this year
- Preconstruction Surveys
- Pre O&M surveys







Desert Pupfish Mitigation

- Pupfish Refugium constructed in 2010
- Population monitoring within IID drains
- Drain connectivity









Managed Marsh Complex

- 950 acres of emergent, riparian and shrub-scrub bosque habitat to be created for operation and maintenance to IID's canal and drains
- Phase 1 built in 2009
- Phase 2 built in 2014
- Phase 3 in final design





Managed Marsh Complex



IID's Salton Sea Air Quality Mitigation Program



www.iid.com

A century of service.

Annual Emissions Monitoring

- Salton Sea Air Quality Monitoring Network
- Quantify dust emissions from exposed playa and adjacent desert areas
 - PISWERL
 - Soil coring and mapping of Salton Sea Playa
 - Mobile MET stations and cameras



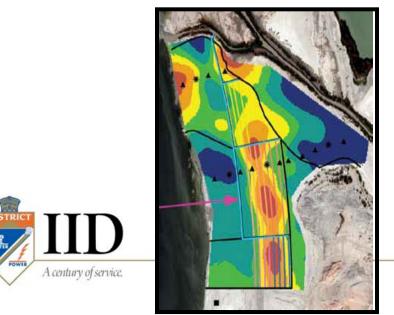






Annual Dust Control Planning

- Emissions monitoring results
- Plot and field study findings
- Playa conditions and dust control measure suitability
- Land use considerations







Surface Roughening

- Random roughness to provide quick, waterless, and effective dust control
- Suitable soils: high silt and clay
- Creates a better area for vegetation to establish naturally







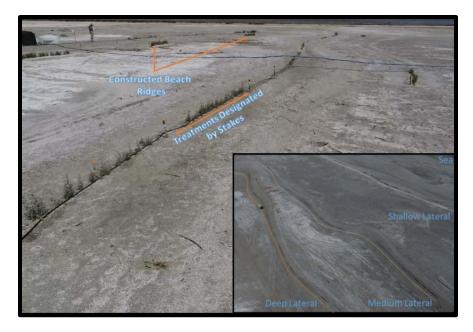


Vegetation Enhancement

- Modifies air flow and traps soil particles
- Engineer beach ridges or seed areas with surface roughening
- Promote continuous cover of native species

A century of service.





Salt Bush, Iodine Bush, Bush Seepweed and Fourwing Salt Bush

www.iid.com

11

Websites

IID Website	www.iid.com
IID Environmental Mitigation	https://www.iid.com/water/library/qsa-water- transfer/mitigation-implementation
IID Salton Sea Air Quality Mitigation Program	www.iid.com/airquality
QSA Joint Powers Authority	www.qsajpa.org





