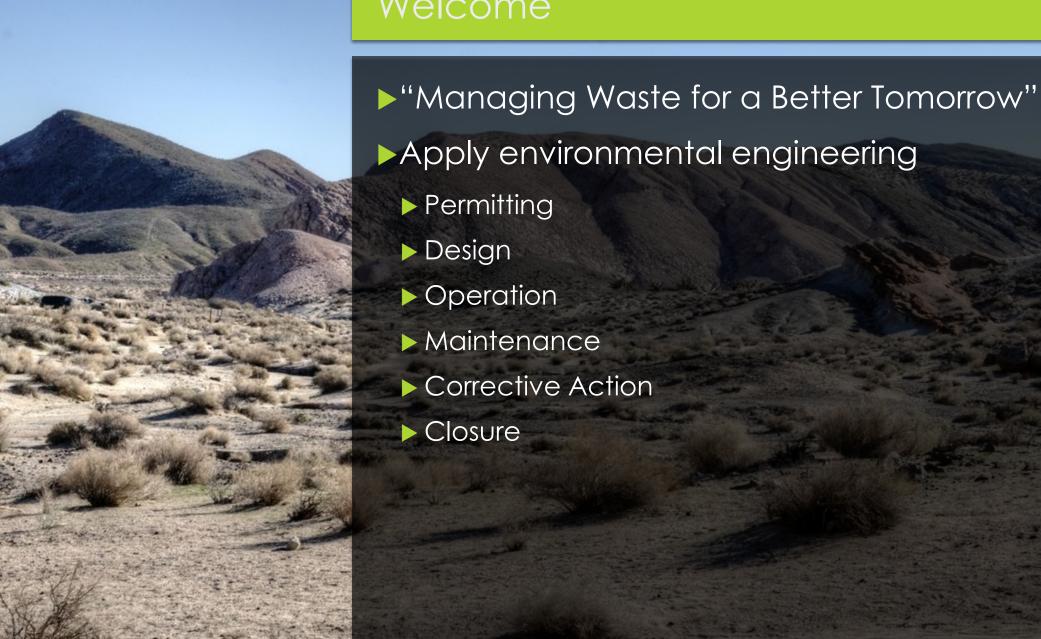
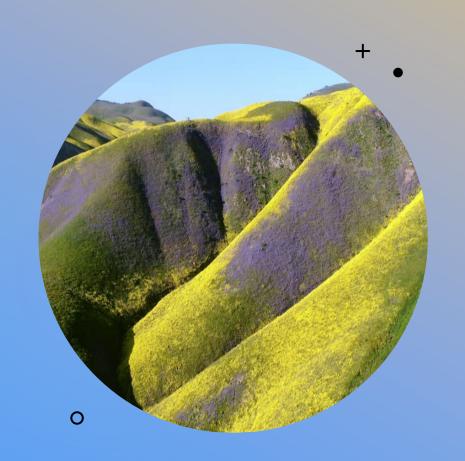
Riverside County
Department of
Waste Resources Environmental
Engineering Landfill
Systems

TODD D. SHIBATA, P.E.





AGENDA

Introduction to Landfills
Landfill Permitting and Design
Air Quality Systems
Water Quality Systems





INTRODUCTION TO LANDFILLS



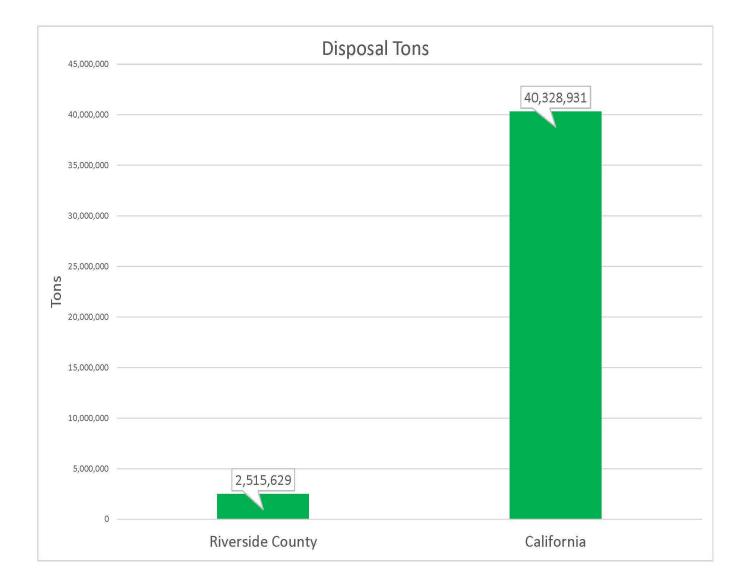
Where does our waste go?

Without Infrastructure



Modern Landfill





2019 Landfill Disposal

Landfill Primer

Background

- Integrated waste management system
- Solid waste disposal

Permitting & Design

- Federal Regulations
- State Regulations CalRecycle,
 State Regional Water Quality
 Control Board, Air Resources
 Control Board
- Local Regulations Local Enforcement Agency, Regional Water Quality Control Boards, South Coast Air Quality Management District
- Specialty Consultants

Solid Waste Facility Permit

9

Submit to CalRecycle, LEA, local planning department and California Regional Water Quality Control Board Report of Facility Information – Submit to CalRecycle, LEA and California Regional Water Quality Control Board Could include EIR, – Submit to CalRecycle and LEA Conformance with the Siting Element or the Nondisposal Facility Element of the County Integrated Waste Management Plan, Submit to CalRecycle and LEA Properly notify and include the public in the SWFP process

Applicatior

RF

CEQA Information

Conformance Finding Public Hearings and Meetings

10

Solid Waste Facility Permit

Formal plan describing the proposed landfill closure

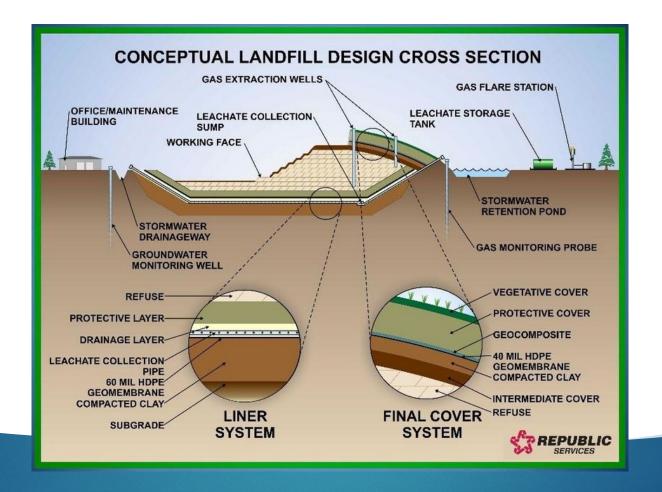
Documentation of funds for: Closure, post closure maintenance (including timely availability of funds for landfill closure and post closure maintenance) and corrective action for known or reasonably foreseeable releases Documentation of funds for: operating liability claims, for third party bodily injury and property damage Owner and operator certify the information submitted

Complete Closure Plar

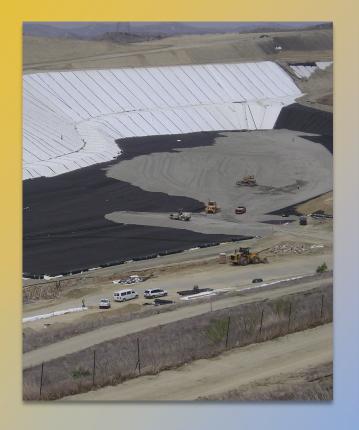
Financial Assurance

Operating Liability

Owner/Operator Certification



Design Schematic







Construction



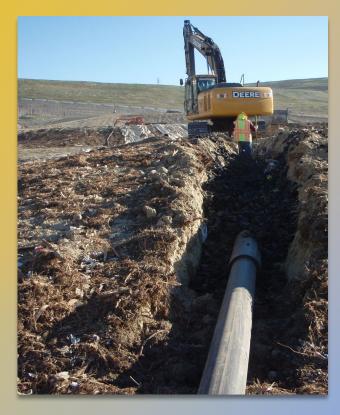
Air Quality Systems







Gas Wells



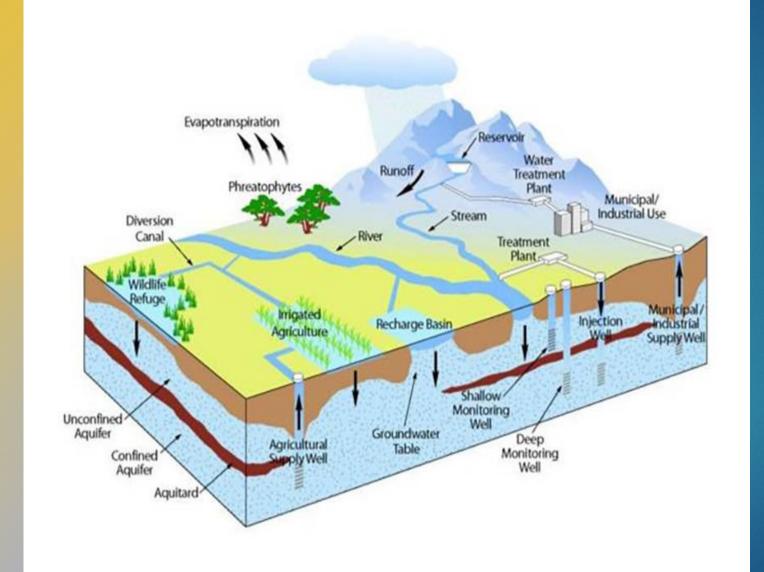




Gas Collection System



Gas Monitoring



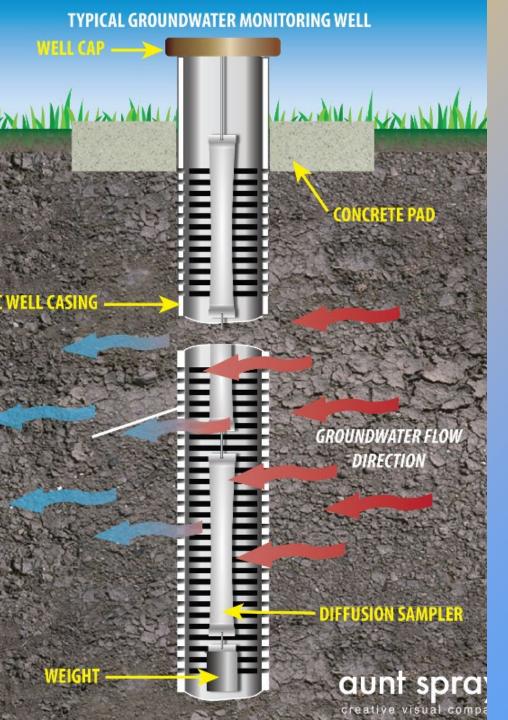
Water Quality Systems

Leachate & Gas Condensate



Stormwater





Groundwater Monitoring



Groundwater Monitoring Well Construction



Groundwater Monitoring Well Sampling

