



SACRAMENTO INTERNATIONAL AIRPORT

Sacramento International Airport All Things Sustainability

PRESENTED TO:

Western Regional Airport Property Managers

PRESENTED BY:

Bree Taylor
Sacramento County Department of Airports

PRESENTED ON:

October 4, 2022

Advancing Environmentally Responsible Operations

- The Department prepared a Sustainability Management Plan (SMP) to advance its focus on environmentally responsible operations
- The original SMP was created in 2017-2018 (but not implemented)
- The SMP is guided by the Department's Resource Stewardship Mission Statement, now Sustainability Mission Statement
- Plan update 2022-2023 initiated, embraces principles of ENVISION for civil infrastructure projects

SUSTAINABILITY MISSION STATEMENT

Our mission is to conserve resources for current and future generations by operating in a cost-effective and efficient manner that minimizes our operating impacts on the environment.



Sustainability Management Plan

- The SMP defines processes to integrate sustainability into the management of SMF
- The planning process is similar to that of a strategic plan:
 - Express the **INTENT** of the plan
 - Set a **FOUNDATION** for measuring plan success
 - Define how the plan will be **IMPLEMENTED** and maintained
- The SMP is considered a living document
 - It defines a flexible and adaptable sustainability program
 - Processes to periodically revisit and update the plan are defined

SMP PLANNING PROCESS



Sustainability Categories

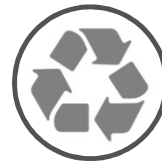
- The SMP sustainability categories comprise four important sustainability elements that support the Department's Sustainability Mission Statement
- Baselines, goals, and initiatives are defined for each sustainability category



ENERGY
(BUILDINGS & FLEET)



WATER
CONSERVATION



WASTE
MANAGEMENT



GREENHOUSE GAS
EMISSIONS



Highlights of Environmentally Responsible Projects

Energy Usage Focus

- 7.9 MW Solar Facility
 - Opened in late 2017
 - 25-year power purchase agreement
 - \$850,000 average annual savings
- LED Lighting Conversions
 - 1,800 parking garage and 396 high-mast lights
 - Approximately \$375,000 in annual energy and maintenance savings
- Electric Vehicle (EV) Charging Infrastructure
 - EV fueling station in Free Waiting Area
 - EV fueling next to AM-PM
- Airport Shuttle Bus Fleet Conversion
 - CNG to ZEV
 - 18 ZEV buses acquired (35 buses in fleet)



Waste Management Focus

- Recycling Program
 - Over 10 years old
 - Airport Operating Procedure outlines recycling procedures for Department; tenants and on-site contractor staff are required to follow recycling procedures
- Food Waste Diversion
- Liquid Diversion Station



Building Energy

Solar Arrays: North 4.5 MW; East 3.4 MW



Fleet Energy: Electric Buses

18 buses acquired



Fleet Energy: Electric Buses



Passenger EV Charging Facilities SMUD & Electrify America EV Fueling Stations



Waste Management: Working Group 2014-2016

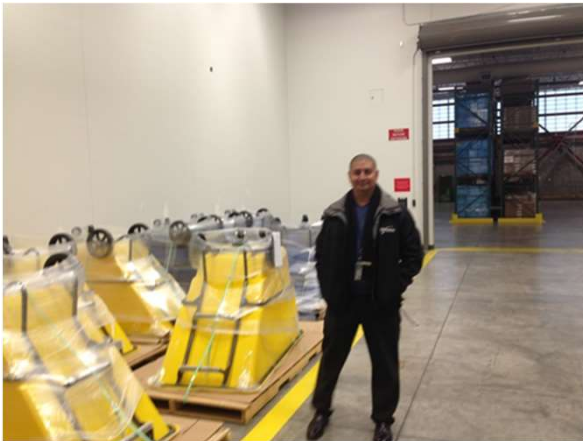
Waste Management Working Group (WaMWG)

- Core: Six airport disciplines (Facilities, Maintenance, Planning & Environment, Properties)
- Ad hoc: Four external stakeholders including waste hauler
- Goal: "By 2020, we will increase our waste diversion rate to 35% or greater."
 - 2015 diversion rate estimated at ~25%.
 - No records on tree trimmings and grasscycling
 - (now we estimate on acreage.)
 - No records on concrete and asphalt
 - (now we do track them!)
 - Now collecting weights for pallets and tires
- **GETTING THE BAND BACK TOGETHER! NEW WAMWG FORMED IN 2022; "TRASH TALK" MEETINGS**



Food waste diversion

- Pre-consumer food waste diversion began in 2015
- Reduces methane emissions from landfills
- Insufficient space for additional recycling stream
 - Terminal back-of-house design limited on space
- Recycled into renewable natural gas for first two years
- Organics now sent to Yolo County landfill for composting



Waste Audits

- 2 audits thus far – Concourse B and Parking Garage
- Passenger recycling very good in gate areas; very poor in food court (poor signage)
- Custodians empty containers on a schedule rather than necessity
- Parking Garage had an unexpected amount of liquid waste – almost entirely coffee
- Intent to systematically audit all airport locations, inc. tenant areas
- Rental Car Facility – future candidate



Liquid waste diversion

- Liquid waste collected pre-security diverted from municipal solid waste stream
- Water bottle refill stations post-security
- INCREASED SAFETY FOR CUSTODIANS DUE TO LIQUID WEIGHT REMOVAL FROM TRASH BAGS RESULTING IN REDUCED WEIGHT.
- Passenger learning curve: often water bottles and other containers are left on top without being emptied.
 - Signage ambiguous for some



2022 Project: Recycle Across America labels and signage



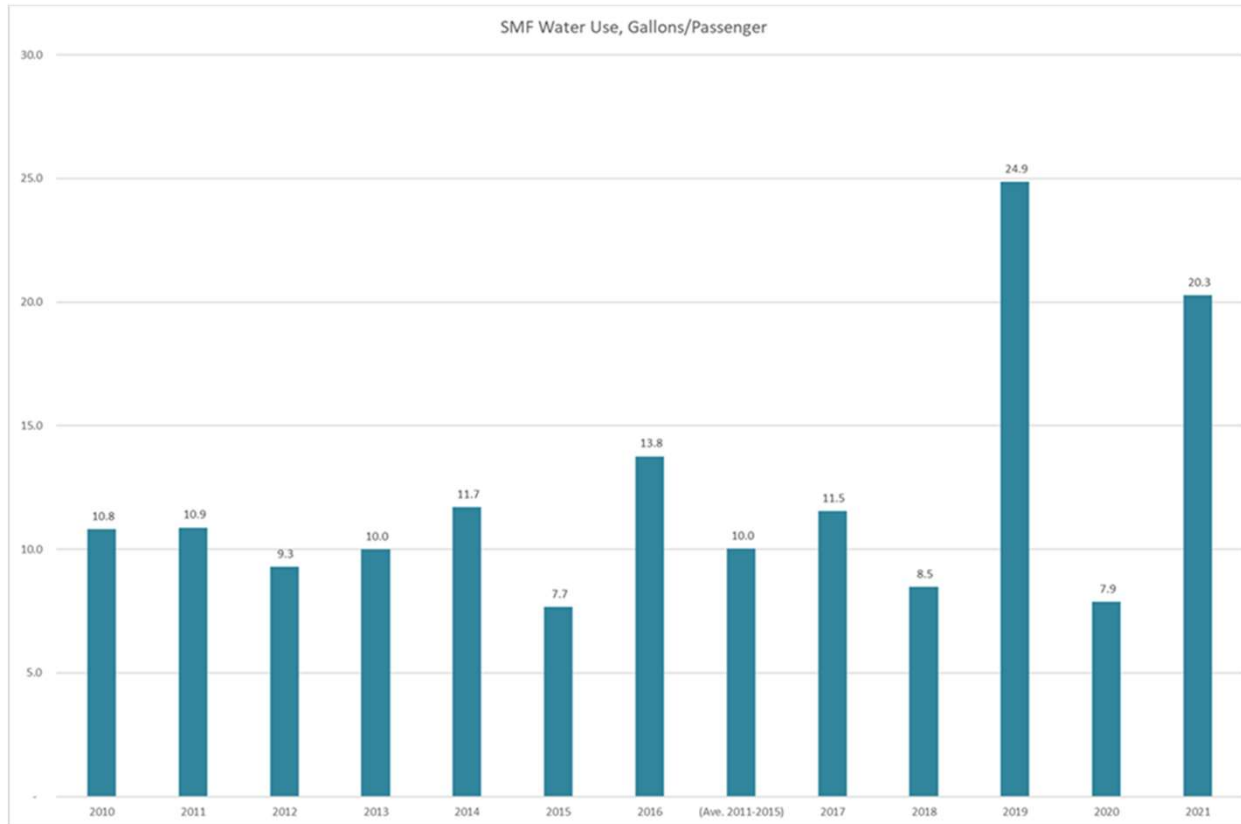
Waste Management

<https://www.recycleacrossamerica.org/>

- DRESS YOUR BINS FOR SUCCESS!
- Adding standardized labels on your bins is the #1 action we can all take to fix U.S. recycling.



Water Conservation



- Turf Reduction Master Plan
 - Non potable water used for landscaping
- Low-flow toilets and automatic water fixtures are used in both terminals. Low-flow toilets save up to 2 gallons of water per flush.
- Rental car companies at their airport use their own car wash and reclamation system. Reclaimed water is filtered and reused.
- Where do we go from here?



Coming soon to an airport near you:

The Electrification of the Transportation System CONUNDRUM



- Hertz: climate goal of 25% EVs by 2024, partnering with Tesla and Uber.
- Uber: climate goal of zero emissions in US and Canada by 2030, globally by 2040.
 - 50,000 Teslas for Uber drivers by 2024. New model for Uber because they traditionally don't own the vehicles. Helping drivers transition.
- Conrac Solutions: infrastructure has to be in place for fleet goals to be realized. There will be competitive battles for supply.
 - At some point demand for power will exceed supply. Need to have a plan to manage that.
 - Who will pay for all the infrastructure as costs will be significant? Change in business models will happen very quickly. It will be messy.
- Delta Airlines: 2025 goal of 50% eGSE, 100% by 2030



The Race for Power



Questions?

Bree Taylor, Senior Airport Planner
taylorbr@saccounty.net



SACRAMENTO INTERNATIONAL AIRPORT