Project Title (Limit 15 Words) required: Cal Poly Zero Waste – Cooperation (and good data) makes it happen!

Category: Innovative Waste Reduction

Project Location: Cal Poly, San Luis Obispo

Completion date or implementation period On-going until Zero Waste - March 2015 to present

Narrative of project goals and strategies (300 words) required: (200 words less than 2015)

State mandates, CSU policy, and increased awareness and concern by the campus community and campus leadership has ignited special attention on developing a comprehensive Zero Waste program with a commitment to flipping the consumer waste diversion rate from its current 80% to landfill to 80% recycled by 2020 and Zero Waste thereafter.

Starting in 2015, operations staff from all major campus organizations and student leaders came together and formed a Zero Waste Collaborative to start working on the problem. In order to make progress in achieving our ambitious goals, the Collaborative recognized that a stronger partnership with our waste management provider was crucial to the success of Cal Poly’s Zero Waste 2020 program.

The waste management contract, which happened to be expiring in 2016, was identified as an important tool for creating structures to support a collaborative relationship between the university and waste management company. The Zero Waste Collaborative developed the specific scope of work and service innovations negotiated into Cal Poly’s new contract with our waste management provider, Waste Connections. Since Waste Connections is our only regional waste hauler, our negotiations focused on strategically shifting our procurement approach from competitive to collaborative. Instead of a short-term three year contract, Cal Poly entered into a long term twenty-year contract.

An important principle of the waste contract was for Waste Connections to have a direct financial incentive to work with Cal Poly to achieve our ambitious Zero Waste diversion goals. A second principle was for Cal Poly to be empowered and supported to improve and optimize our waste collection system to increase diversion and reduce costs. Several innovative contract provisions were developed from these principles. One provision of special note was the inclusion of an incentive structure called the Recycle Diversion Escalator (RDE) (attached contract page 12).

Relevancy to the Best Practice Program (200 words) required: (100 words less than 2015)

The Innovative Waste Reduction Best Practice is development of an innovative contract to incentivize a stronger partnership with Cal Poly’s Waste Management Company

Waste Connection’s pricing structure is based on volume and frequency of dumpster tips. It costs twice as much to tip a landfill dumpster that a recycle dumpster. This means that as Cal Poly reduces our waste to landfill from 80% to 20%, Waste Connections revenues reduce accordingly. The Recycle Diversion Escalator which is implemented in the recently executed contract aligns Waste Connections financial interests with Cal Poly’s Zero Waste goal. The RDE increases Waste Connection’s recycling collection pricing as Cal Poly’s recycling rate improves. Currently, at 20% diversion, recycling collection costs 50% of landfill disposal costs. When recycling diversion increases to 80%, recycling costs will be 75% of landfill disposal costs. There are five progressive steps in the escalator’s structure to continuously incentivize incremental advancement towards the Zero Waste Goal. Recycling costs never reach landfill costs both to provide cost savings to Cal Poly and because recycling is a revenue source for Waste Connections where landfill has additional landfill costs that are being avoided.

Collaborative design and implementation (200 words) required: (100 words less than 2015)

*The Zero Waste Collaborative, composed of members from Associated Students, Housing, Dining, Utilities, Custodial, Grounds, Student Clubs, Marketing and Communication, and the Library, is an almost unprecedented example of campus-wide stakeholder collaboration. Since its inception, the team has worked to develop the vision for the Cal Poly Zero Waste program and has worked to build awareness and support for the program in each stakeholder’s respective organization.*

An early application of the new collaborative contract is in the implementation of the Housing Zero Waste Plan (attached). This plan is a whole systems approach to transforming housing’s waste diversion from landfill. It was developed collaboratively between state and housing facilities to leverage staff strengths from each team. A key measure in the plan is the realignment of collected dumpster volume from landfill to recycle. Currently 80% of collected volume is landfill destined. Through significant changes to dumpster size, type and collection frequency, this measure, empowered by the new collaborative contract with our waste management company, initially shifts waste volume destined to landfill down to 50% and then down to 20% in a few years. This change is estimated to save housing over $100,000 per year and divert 300 tons of recyclable waste.

Education and Outreach (200 words) optional: (100 words less than 2015)

Implementation of the Housing Zero Waste Plan will dramatically shift waste from landfill destined dumpsters into recycling dumpsters; likely increasing recycling contamination in the short term. While the recycling facility has sophisticated industrial equipment designed to handle a highly mixed waste stream, this change impacts our waste management partner by increasing landfill destined residuals generated at their recycling facility. To combat this increase in contamination, the Housing Zero Waste Plan includes a measure to create an end-to-end messaging and communication program that accompanies the collection infrastructure changes.

The messaging and communications program reinforces the clear message “When in doubt, recycle!” on each room-level recycling bin along with more detailed source separation information on a refrigerator magnet and an informational “table tent” in each kitchen. Cal Poly’s sustainability website, and regular social media and newsletter communications reinforce the basic messages and provide access to more detailed information as needed. The dumpster enclosures and dumpsters themselves will also have large signage that is clear and simple to understand guiding the students to separate landfill waste from recycling.

Total Project Cost - required: Contract Changes: $0, Housing Zero Waste Plan: $

Total Incentives received -optional:

QUANTITATIVE SAVINGS AND BENEFITS

Number of people reached by your program-optional

Annual kWh savings

Annual Therms Savings

Estimated GHG reduction

Annual Water Savings

Annual Waste reduction in lbs

Actual or estimated annual cost savings

Additional env, social, econ sustainability benefits (300 words) optional

Supporting Docs

Nugs 4 Hugs