Trash Free Waters/Urban Waters/NEP Integration Proposal
Santa Monica Bay Clean Bay Certified Restaurant Source Reduction Program

Every year an estimated 8 million tons of plastic are discharged into the world's oceans (Scientific American) - 10 metric tons of this plastic comes from the Los Angeles area, daily (Center for Biological Diversity). Up to two-thirds of marine debris cataloged on beaches comes from single-use, disposable plastic packaging from food and beverage-related goods and services (EPA). With roughly 50 percent of plastic being used only once and then disposed of, a tremendous opportunity for source reduction and plastic pollution prevention is presented (EcoWatch).

The Santa Monica Bay National Estuary Program (SMBNEP) will address marine debris through a two-pronged approach. First, through its existing Clean Bay Certified (CBC) Restaurants Program will engage participating restaurants to reduce single-use plastic items. Second, SMBNEP will work with one Santa Monica Bay Watershed city to analyze volumetric trash data that will serve to, simultaneously, define the impact that plastic bag and EPS bans have had on the environment and target locations for where SMBNEP's plastics reduction program will make the biggest impact.

The SMBNEP has a strong, pre-existing connection to 450 restaurants in the Santa Monica Bay Watershed through CBC. We work with 11 cities (Malibu, Santa Monica, Culver City, Inglewood, Manhattan Beach, Redondo Beach, Hermosa Beach, Torrance, Rancho Palos Verdes, Rolling Hills Estates, and Palos Verdes Estates) to inspect and certify restaurants that voluntarily implement initiatives to reduce stormwater pollution and protect the environment. Our established partnerships with cities and restaurants provides a solid foundation to implement our source reduction program. Specifically, SMBNEP staff will work with CBC cities to obtain trash data from stormdrain and Continuous Deflector Separation (CDS) unit cleanouts and, if available, street sweeping, which will help identify high trash generation zones. Restaurants located within these zones will be selected for program engagement.

The Clean Bay Certified XXXX will achieve the following results:

Dollar amount requested: $45,000.00 (scalable upon request)

Funding mechanism/grant #: Clean Water Act 320 Grant CE-99T51301

Mandatory Criteria:

1. This project is integrating TFW in a NEP CCMP study area.
2. The money will be reprogrammed into the NEP's Clean Water Act 320 FY 2017 grant.

Non-mandatory Criteria:

1. **Tech Transfer/Info Sharing:** SMNEP will engage businesses and cities in the watershed. Presentations will be made to the NEP governing board as well as the national NEP tech transfer meeting.
2. **Transferability:** the products developed under this project as well as the lessons learned could be transferred to other geographic areas in both the Los Angeles area and other coastal watersheds. A similar project was completed in the San Francisco Bay Area.
3. The project is already in the NEP's work plan, but was underfunded.
4. The project is in one of the 10 areas described by Emma Maschal on the last TFW call.
5. This project is focused on source reduction a.k.a. trash prevention.

Contact Information:

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Tasks	Outputs	Outcomes
• Contact Santa Monica Bay Watershed cities and obtain trash data • Compile of pre-ban volumetric data from stormdrain and Continuous Deflector Separation (CDS) unit cleanouts for 1 Santa Monica Bay Watershed city • Analyze trash data and map high trash generation zones • Map restaurants in high trash generation zones • Characterize trash collected from stormdrains in target areas • Analyze data for a correlation between restaurants and high density trash zone • Educate 450 CBC restaurants on plastic pollution and marine debris • Conduct targeted engagement at 10 CBC restaurants in the Santa Monica Bay Watershed on plastic pollution • Of these 10 restaurants, work with 3 to implement a source reduction plan and provide hands on assistance to reduce disposables and increase the use of durables at each establishment • Audit existing purchasing and trash hauling costs, research durable material vendors, providing financial incentive to help subsidize transition • train restaurant staff to implement source reduction program • Develop outreach materials necessary to educate restaurant patrons on the benefits of source reduction • Distribute outreach materials to all CBC restaurants	• Report on findings from analysis of pre and post ban trash data • List of 10 restaurants for future program engagement • 3 source reduction plans, which will include audit results • Number of disposable items eliminated such as utensils, cups, plates, bowls, food trays, straws, individually wrapped condiment packets, and napkins from food service operations on an annual basis by participating restaurants based on baseline metrics collected via pre-program surveys • Tons of trash diverted from landfills • Public engagement materials (i.e. table tents, messaging on flatware dispensers, etc.) used to engage restaurant patrons on plastic pollution • 3 video case studies created for public engagement and program marketing • 1 press release and bi-weekly social media outreach • Adding CBC source reduction X as a criteria in the CBC restaurant inspection checklist and handbook •	Short-Term • Educating and shifting the behavior of 3 restaurants in the Santa Monica Bay Watershed • 30-50% reduction of disposable foodware items that were targeted for reduction through a program audit • Average of ~$3,000Dollars saved at each participating restaurants (i.e. potentially $3,000 per location)s • Long-Term • Transferable model for plastics reduction program at food serving establishments • Increase in number of restaurants switching from single use to durable dining supplies due to case study results • Increased awareness in the community on plastic pollution and concrete solutions

Analyze purchases of disposables (pre-pilot) versus reusables and determine cost savings and landfill/marine debris prevention over time • Develop report on pilot project results • Create 3 videos to share case study findings			