

AN ASSESSMENT OF THE CLEAN BAY RESTAURANT CERTIFICATION PROGRAM:
ARE MANHATTAN BEACH RESTAURANTS SEEING GREEN?

A Project

Presented to the

Faculty of

California State University, Fullerton

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science

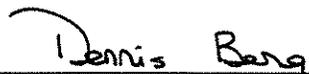
in

Environmental Studies

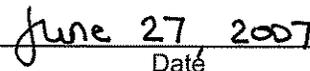
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ABSTRACT

The Santa Monica Bay endures a significant amount of pollution from urban runoff. In response to the large number of restaurants that serve as sources of pollution located throughout the Santa Monica Bay, the Cities of Manhattan Beach, Hermosa Beach, Redondo Beach, and Torrance, in cooperation with the Santa Monica Bay Restoration Commission, launched the Clean Bay Restaurant Certification Program (Program) in 2006. The goal of the Program is to recognize restaurants that are performing BMPs for pollution prevention to protect the water quality of beaches and public health. This study measures the level of public (and restaurant owner/manager) awareness of the Clean Bay Restaurant Certification Program after the first year of Program implementation. Additionally, it measures the level of education/knowledge of good and bad management practices for stormwater pollution, and determines whether the Program meets the interests of restaurant managers/owners and has an affect on consumer choice of restaurant.

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CHAPTER I

INTRODUCTION

Santa Monica Bay Water Quality Regulation Overview

The County of Los Angeles, California boasts a population of nearly 10 million people and a storm drain network that spans 6,500 miles, connecting human activity with the local water bodies that lead to the ocean (US Census Bureau, 2005; Pestrella, 2006). To protect humans from water pollution occurring throughout the state, especially in the densely populated Los Angeles region, the 1972 Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) Permit Program to regulate the discharge of pollutants from point sources to waters of the United States (Pestrella, 2006). However, pollution from land and urban runoff was largely unabated for over a decade following implementation of the NPDES Permit Program. In response, the United States Environmental Protection Agency (EPA) enhanced the NPDES Stormwater Program in 1990 by establishing a framework for regulating urban stormwater runoff and addressing sources of stormwater runoff that had the greatest potential to negatively impact water quality (Pestrella, 2006). The most significant revision for the NPDES Program was the requirement for municipalities to develop a proposed stormwater management program that would meet the

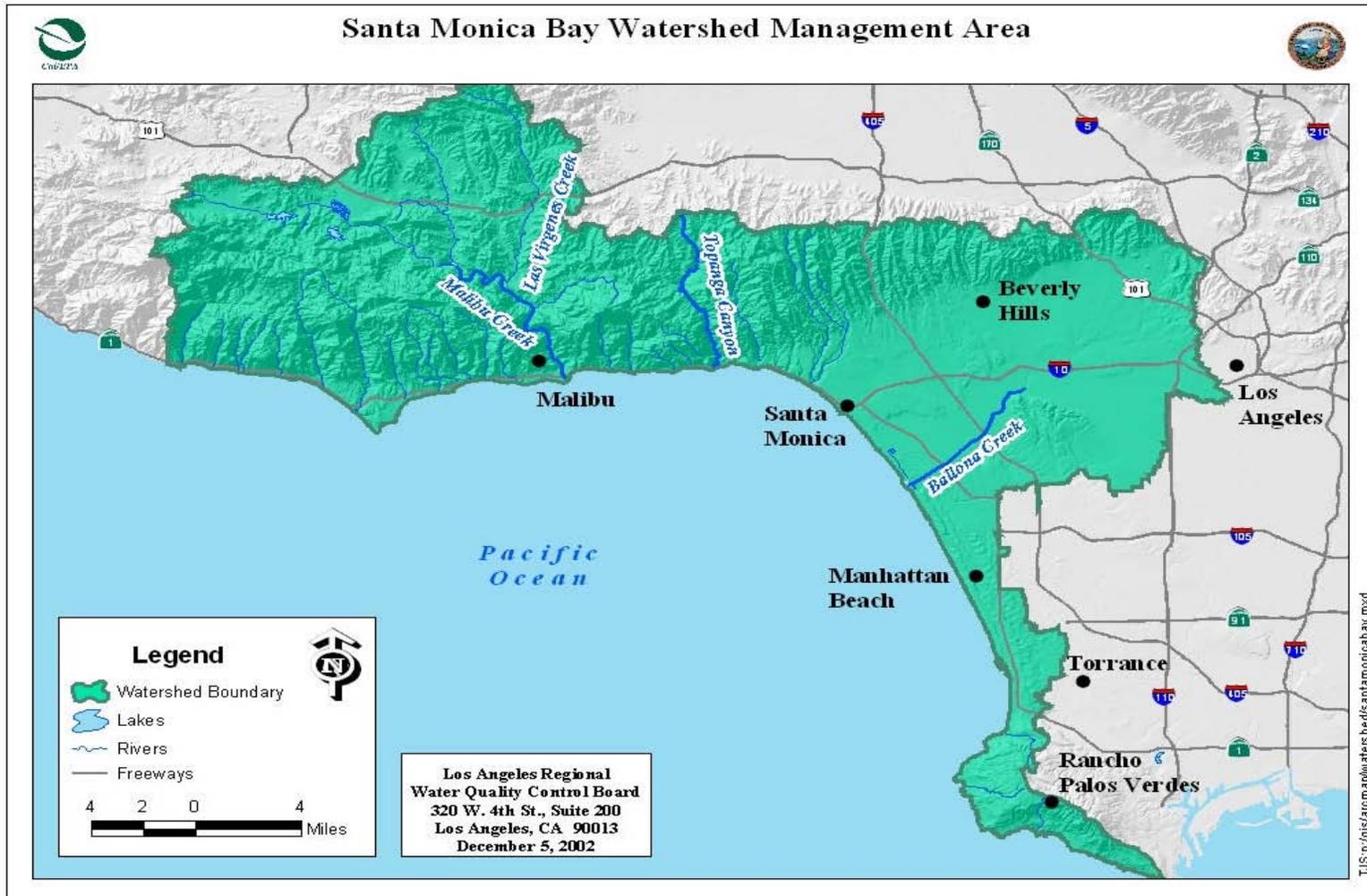
standard of “reducing pollutants to the maximum extent practicable (MEP).” This revision required cities throughout Los Angeles County, including the Cities of Manhattan Beach, Redondo Beach, Hermosa Beach, and Torrance, as shown in Figure 1, to accomplish the following:

- Identify major outfalls and pollutant loadings
- Detect and eliminate nonstormwater discharges to the system
- Reduce pollutants in runoff from industrial, commercial, and residential areas
- Reduce pollutants from construction sites within their jurisdiction

On December 13, 2001, the Regional Board adopted Order 01-182 serving as the NPDES Permit for municipal stormwater and urban runoff discharges within the County of Los Angeles (Pestrella, 2006). As part of the NPDES Permit, the Regional Board implemented a Watershed Management Approach to address water quality protection in the region by dividing Los Angeles County into six Watershed Management Areas (WMAs), one of which is the Ballona Creek and Urban Santa Monica Bay WMA, as shown in Figure 2. This WMA includes Cities of Manhattan Beach, Redondo Beach, Hermosa Beach, and Torrance, among others.

Despite the implementation of WMAs as a means to initiate more effective water quality management, Los Angeles County experienced 297 sewage spills that discharged into waterways, including the Los Angeles River, Los Angeles Harbor, Ballona Creek and Santa Monica Bay during July 1, 2001 and July 31,

Figure 2 Santa Monica Bay Watershed Management Area Map



2002 (Merchant, 2002). Due to the public health risks associated with sewage spills, as well as negative environmental impacts on the ecosystem, further action was needed to effectively manage water quality in the LA waterways, especially for the Santa Monica Bay Beaches.

Santa Monica Bay is located in Los Angeles County, California. On July 15, 2003, the Santa Monica Bay Beaches Bacteria (SMBBB) Total Maximum Daily Load (TMDL) for dry and wet weather conditions became effective (City of Los Angeles, 2007). The TMDL is a number that represents the assimilative capacity of a receiving water to absorb a pollutant (LARWQCB, 2007). A TMDL is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources plus an allotment for natural background loading, and a margin of safety. TMDLs can be expressed in terms of mass per time (the traditional approach) or in other ways such as toxicity or a percentage reduction or other appropriate measure relating to a state water quality objective. A TMDL is implemented by reallocating the total allowable pollution among the different pollutant sources (through the permitting process or other regulatory means) to ensure that the water quality objectives are achieved (LARWQCB, 2007).

The California Regional Water Quality Control Board, Los Angeles Region stated the intent of the TMDL in its Resolution No. 2002-022 with the following:

The Regional Board is establishing [this TMDL] to preserve and enhance water quality at Santa Monica Bay beaches and for the benefit of the 55 million beachgoers, on average, that visit these beaches each year.

At stake is the health of swimmers and surfers and associated health costs as well as sizeable revenues to the local and state economy. It is estimated that visitors to Santa Monica Bay beaches spend approximately \$1.7 billion annually (LARWQCB, 2002). The Regional Board's goal of establishing the SMBBB TMDL is to reduce the risk of illness associated with swimming in marine waters contaminated with bacteria. Local and national epidemiological studies show that there is a causal relationship between adverse health effects, such as gastroenteritis and upper respiratory illness, and recreational water quality, as measured by bacteria indicator densities (LARWQCB, 2002).

The SMBBB TMDL encompasses 27 areas (subwatersheds) that address documented bacteriological water quality impairments at 44 beaches from the Los Angeles/Ventura County line, to the northwest, to Outer Cabrillo Beach, just south of the Palos Verdes Peninsula, all of which drain to the Santa Monica Bay (LARWQCB, 2002). Figure 3 shows a map of the Cities of the Santa Monica Bay Watershed. These beaches were listed on the California State's 2002-303(d) list as impaired due to bacteria. There are 25 storm drains that discharge runoff from some portion of Los Angeles to Santa Monica Bay beaches. To manage this widespread runoff, the SMBBB TMDL has been divided into dry weather and wet weather conditions, each having their own compliance dates and limits. As part of the key dry weather bacteria TMDL requirements, bacterial indicators are measured at public beaches for total coliform, fecal coliform, enterococcus, and a fecal-to-total coliform ratio (City of Los Angeles, 2007). Similarly, the SMBBB wet

weather TMDL requires bacterial indicators at beaches not to exceed acceptable levels during winter wet weather.

As discussed earlier, due to the large area, the identified 27 subwatersheds are grouped into seven Jurisdictions, and each must comply with the SMBBB dry and wet weather TMDL requirements (Noyes, 2004). Of the seven jurisdictional groups, the City of Manhattan Beach is the Primary Jurisdiction for Jurisdictional Group Five (J5), while El Segundo, Hermosa Beach, Los Angeles County and Caltrans serve as additional responsible jurisdictions and agencies. For Jurisdictional Group Six (J6), the City of Redondo Beach is the Primary Jurisdiction, with Hermosa Beach, Manhattan Beach, Torrance, County of Los Angeles, and Caltrans serving as additional responsible jurisdictions and agencies (Miller, 2004). Refer to Figure 4 for a map of J5 and J6. The SMBBB dry and wet weather TMDLs require each jurisdictional group to complete an implementation plan to identify actions that would reduce water pollution. In response, members of J5 and J6 are working collaboratively to implement their TMDL Implementation Plan, which outlines pollution reduction and control measures, also known as Best Management Practices (BMPs) to reduce pollutants in stormwater runoff (Noyes, 2004).

Figure 3 Cities in the Santa Monica Bay Watershed

Cities in the Santa Monica Bay Watershed

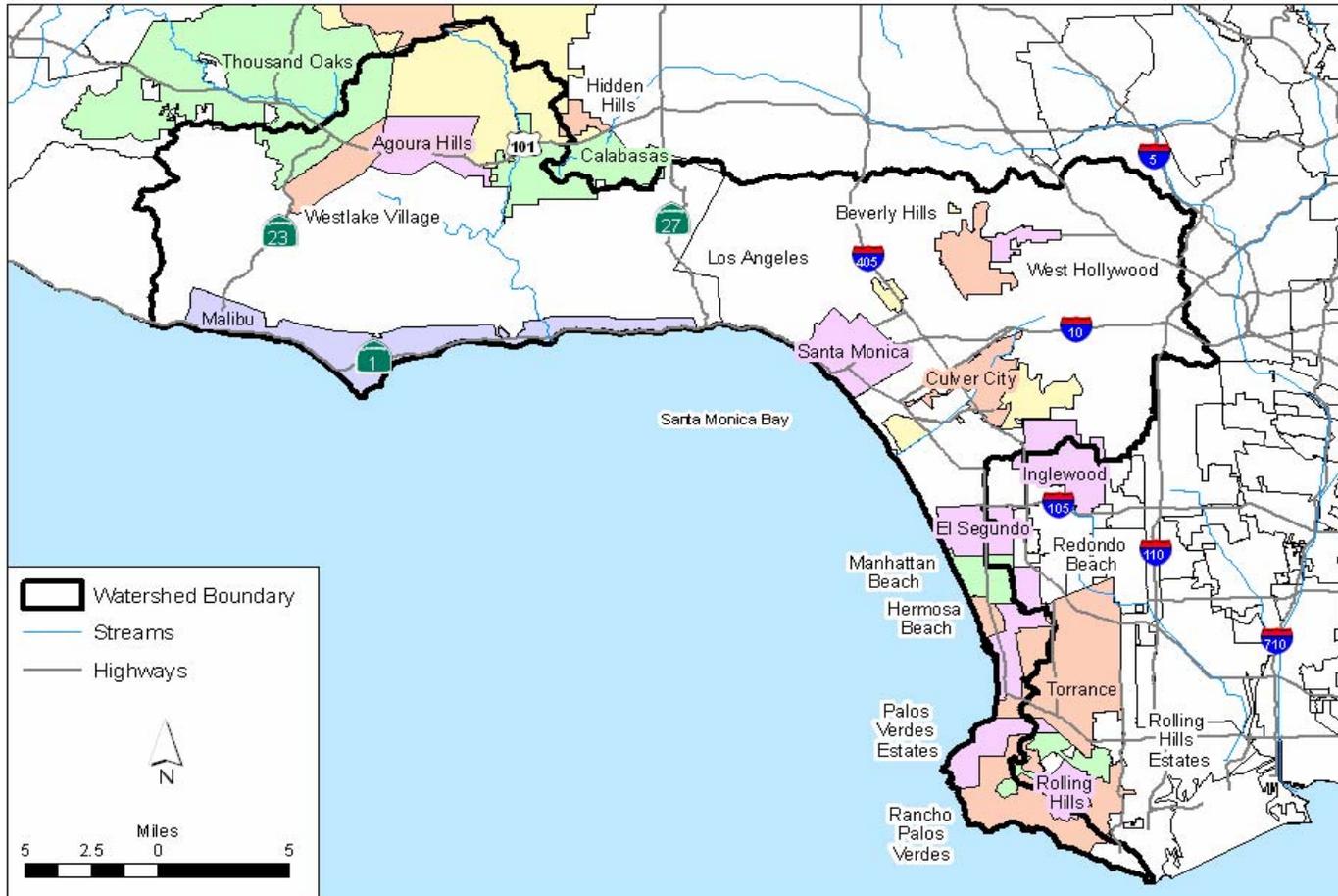
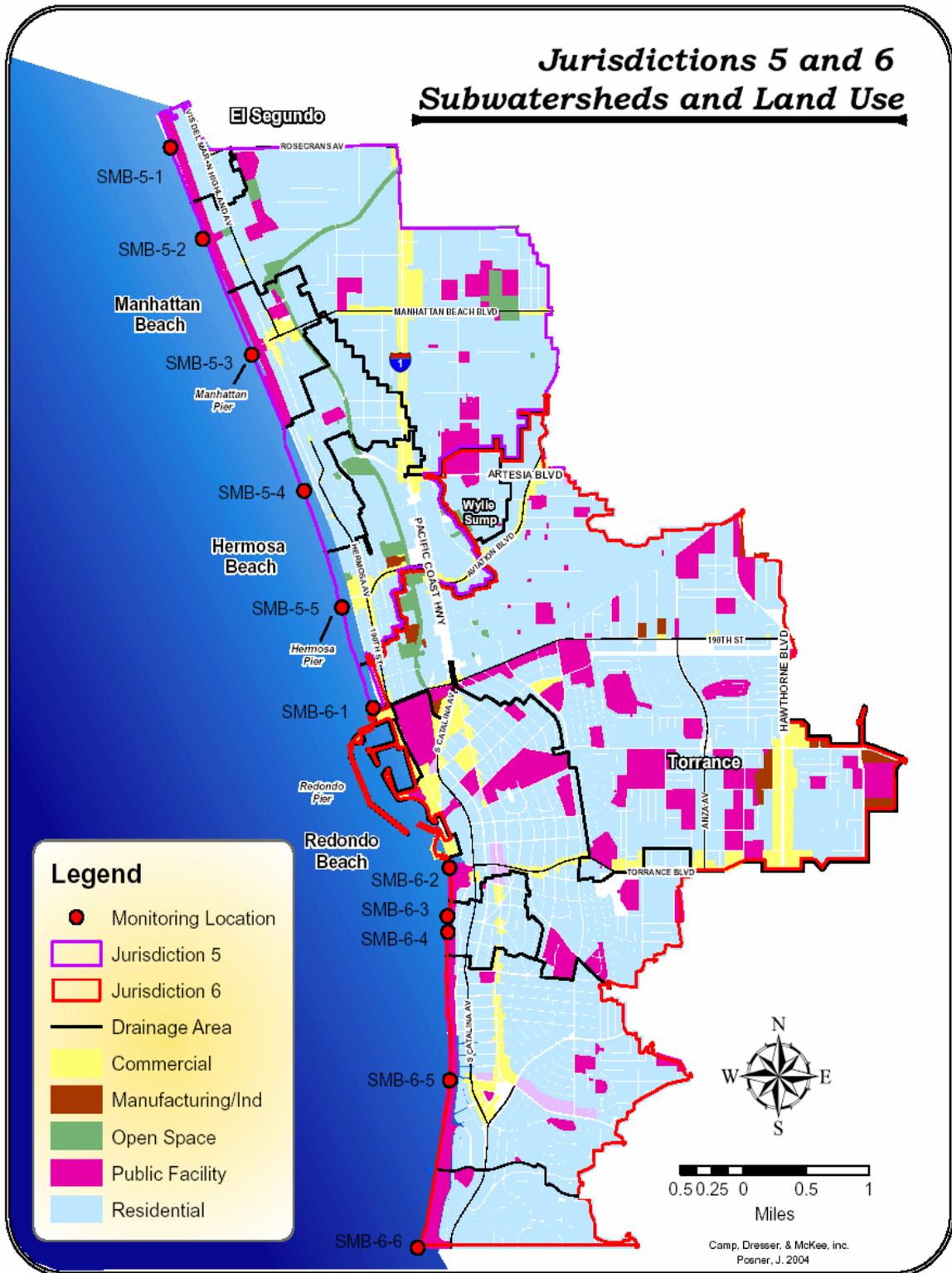


Figure 4 Jurisdictional Groups Five and Six Map



In the TMDL Implementation Plan for J5 and J6, several sources of pollution are targeted throughout their jurisdictional areas. One of the targeted sources are the numerous restaurants located throughout the South Bay Cities, serving beach bound tourists and local residents. Through improperly disposing of cooking grease, soapy water, litter/trash, automobile fluids (in parking lots), and solid waste, among other items, restaurants significantly contribute to pollution found in stormdrains and sewer system breaks/spills (LADPW, 2006). Specifically, kitchen grease and food waste may contain high concentrations of indicator bacteria and if grease interceptors installed in restaurant facilities are not properly maintained, grease clogs can result in sanitary sewer overflows. Clearly, this poses a significant risk to human health, not to mention beach closures, harm to marine life, and serious flooding issues, which may prohibit compliance with the SMBBB dry and wet weather TMDLs and associated NPDES permit, as well as inflict serious penalty fines. Therefore, members of J5 and J6 including the Cities of Manhattan Beach, Redondo Beach, Hermosa Beach, Torrance, as well as the SMBRC, implemented a program to reduce pollution from restaurants. The program, which is called the Clean Bay Restaurant Certification Program, focuses on rewarding restaurants for stormwater pollution prevention practices.

The recently implemented Clean Bay Restaurant Certification Program aims to assist the Cities of Manhattan Beach, Redondo Beach, Hermosa Beach, and Torrance in meeting water quality goals set forth in the SMBBB TMDL and the NPDES permit for the Los Angeles region. Since the City anticipates that the

Program will continue on an annual basis, developing baseline data to measure the effectiveness of the Program is needed. Therefore, the purpose of this study is to measure the effectiveness of the Clean Bay Restaurant Certification Program. The process of evaluating the effectiveness of the Program is documented in the following chapters of this report.

CHAPTER II

PURPOSE OF STUDY

Clean Bay Restaurant Certification Program Overview

In response to the large number of restaurants that serve as sources of pollution located throughout south Santa Monica Bay, the Cities of Manhattan Beach, Hermosa Beach, Redondo Beach, and Torrance, in cooperation with the Santa Monica Bay Restoration Commission, launched the Clean Bay Restaurant Certification Program (Program) in 2006. The goal of the Program is to recognize restaurants that are performing BMPs for pollution prevention to protect the water quality of beaches and public health. In order to qualify for the certification, a restaurant must pass a storm water pollution prevention inspection with a 100% score. The inspector checks to see whether the restaurants are implementing a number of BMPs for preventing storm water pollution, as described in the Letter to the Restaurant Owner/Manager included in Appendix 1. The evaluation checklist, shown in Figure 5, shows the BMPs that are evaluated at each restaurant inspection. Restaurants that meet 100% of the checklist criteria receive a Clean Bay Restaurant Certification, which is shown in Figure 6.

Figure 5 Checklist Criteria for Storm Water Inspection

Checklist Criteria for Storm Water Inspections:			
Restaurant Name:			
Site Address:			
Owner/Operator:			
Mailing Address:			
Contact Phone Number:			
Inspection Results	Y	N	N/A
<u>General</u>			
Storm drain inlet are labeled			
Area free of visible discharges to the storm drain observed			
There is a recycling program being implemented			
Maintenance records that show when rendered grease was picked up are onsite for review			
Maintenance records that show when grease traps/interceptors were last cleaned are onsite for review			
<u>Dumpster Area</u>			
Garbage container area free of trash (ground, walls, etc.)			
Outside area is free of trash			
Outside trash bin free of leakage			
Dumpster free of any liquid waste			
Trash bin lids closed			
<u>Equipment and Outdoor Cleaning</u>			
Areas around restaurant are dry swept (sidewalks, outdoor dining and other areas)			
No evidence of floor mats being washed outside			
No evidence of sidewalks/parking lots being hosed down			
Liquid waste from equipment cleaning is drained into an approved sewage system			
Ashtrays for outdoor smoking areas (no evidence of cigarette butts)			
Outdoor drains have no evidence of stains or non-storm water discharge entering outdoor drains			
Loading/unloading areas are free of leftover trash, food waste, debris, etc.			
Effective clean-out plugs on all exterior drain lines			
Outdoor storage area is free of litter			
<u>Grease Handling and Spill Disposal</u>			
Proper grease trap installed and maintained			
Grease disposal area is clean and free of spills			
Grease disposal containers and surrounding areas are free of overflow or liquid waste (ground, wall, etc.)			
Spill prevention mechanisms and secondary containment in place around grease disposal area			
Grease disposal containers are kept closed with lids			
<u>Landscaping and Grounds Maintenance</u>			
Parking areas are kept clean and regularly swept (no evidence of food particles, litter, staining, oils and grease)			
<u>Education and Training</u>			
There is information posted for employees informing them about the following areas: * Spill prevention and control * Prohibiting discharge of wastewater outside * Keeping dumpster areas clean			
Educational materials posted in a visible area onsite for employees to read Restaurant owner/manager conducts regular training of employees regarding above criteria (i.e., BMPs)			

Figure 6 Clean Bay Restaurant Certification



As a result of receiving the certification, restaurants receive the following benefits:

- A window display recognizing the restaurant's certification (to be hand delivered by a representative of the City following the inspection)
- Recognition of the restaurant in a local paper
- Recognition on the SMBRC's website
- Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings.

The letter to the restaurant manager/owner explains that the Program's inspections are separate from the Los Angeles Department of Health Services inspections, which are conducted in accordance with the NPDES permit. Although the program assists in reducing stormwater pollution, the program's inspections are not considered part of the NPDES Program, where fines and penalties are imposed for violations. Rather, the Program only provides rewards to restaurants for doing their part (no penalties are imposed on non-certified restaurants).

Although the Program is collaboratively being implemented by the Cities of Manhattan Beach, Redondo Beach, Torrance, and Hermosa Beach, the City of Manhattan Beach (City) was chosen as the focus for this study. The City has a total of 145 restaurants, and as of February 2007, 133 of the restaurants were visited and evaluated by an inspector. The City contracted with a company, Environmental Compliance Inspection Services (ECIS), to conduct the inspections at no charge to the restaurants. A total of 61 restaurants were

certified, while 72 failed the initial round of inspection and were therefore not certified. For restaurants that did not receive the certification during the first round of inspections, a follow-up visit was conducted if requested by the restaurant. Tables 1a-1f shows the results of the inspections for the City of Manhattan Beach Restaurants. The certifications for the first round of inspections will expire on December 31, 2007.

Table 1a Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBRC
1	900 MANHATTAN LLC	RESTAURANT & BAR	1/26/2007	N				
2	AMECI PIZZA & PASTA MAN BCH	SPECIALIZING IN ITALIAN FAST FOODS.						
3	AMIGOS TACOS	MEXICAN FAST FOOD RESTAURANT	1/26/2007	N				
4	AVENUE RESTAURANT	RESTAURANT	1/25/2007	N				
5	BACK HOME IN LAHAINA	RESTAURANT	11/10/2006	N				
6	BAJA FRESH	MEXICAN FAST FOOD RESTAURANT	11/8/2006	N				
7	BAJA SHARKEEZ	RESTAURANT	9/27/2006	Y				10/19/2006
8	BARNES & NOBLE CAFÉ		11/1/2006	Y				11/20/2006
9	BASKIN ROBINS #41		11/15/2006	Y				12/5/2006
10	BEACH CHINESE FOOD TO GO	TAKE OUT RESTAURANT	9/27/2006	N	11/15/2006	Y	Y	2/5/2007
11	BEACH HUT: THE	RESTAURANT	9/27/2006	Y				10/19/2006
12	BEACH PIZZA INC	PIZZA RESTAURANT	1/26/2007	N				
13	BEACH VENTURES	CONCESSION STAND AT EL PORTO SECTION, no posted hours						
14	BEACHES	RESTAURANT	1/23/2007	N				
15	BEACHES N CREAM	ICE CREAM SHOP						
16	BIG WOK	RESTAURANT - MONGOLIAN B-B-Q	11/8/2006	N				
17	BO BO'S CHINESE DELI INC	FAST FOOD RESTAURANT	1/26/2007	N				
18	BOHEMIAN BEACH CAFE	RESTAURANT CONCESSION AT ROUNDHOUSE MANHATTAN BEACH PIER	1/25/2007	Y				2/5/2007
19	BORA BORA	RESTAURANT AND BAR OPERATION AT SHADE HOTEL	9/27/2006	Y				10/19/2006
20	BRAVO CATERING & EVENT MKTG	CATERING						
21	BRISTOL FARMS		11/1/2006	N				
22	BROOKLYN BRICK OVEN PIZZA		11/8/2006	Y				11/20/2006

Table 1b Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBRC
23	CAFE PIERRE	FULL SERVICE RESTAURANT.	11/15/2006	Y				12/5/2006
24	CAIOTI PIZZA CAFÉ/HARVEY WASHBA	RESTAURANT	9/27/2006	Y				10/19/2006
25	CALIFORNIA PIZZA KITCHEN	RESTAURANT	11/3/2006	Y				11/20/2006
26	CAMPANELLI'S DELI	DELI SANDWICHES, SALADS, CHEESES	11/15/06`	N				
27	CHAKRA	RESTAURANT	1/24/2007	N				
28	CHICAGO FOR RIBS - MANHATTAN BE	RESTAURANT	11/17/2006	N				
29	CHILI'S GRILL & BAR #860	FULL SERVICE RESTAURANT	11/3/2006	N				
30	CHINA GRILL	CHINESE RESTAURANT	11/3/2006	N	1/25/2007	N	N	
31	COCO NOCHE	CHOCOLATE, TAPAS AND WINE	1/23/2007	N				
32	COCOS #017		11/3/2006	N				
33	COFFEE BEAN & TEA LEAF #76	SPECIALTY COFFEE & RETAIL	11/8/2006	Y				11/20/2006
34	COFFEE BEAN & TEA LEAF #30	RETAIL COFFEE & TEA HOUSE	11/15/2006	Y				12/5/2006
35	COFFEE BEAN: THE #22	COFFEE SHOP.	11/3/2006	Y				11/20/2006
36	COLD STONE CREAMERY	ICE CREAM STORE	11/17/2006	Y				12/5/2006
37	CORNER BAKERY CAFE	RESTAURANT	11/3/2006	Y				11/20/2006
38	DOMINO'S PIZZA	RESTAURANT	1/25/2007	Y				2/5/2007
39	EAST COAST BAGEL #105		11/3/2006	Y				11/20/2006
40	EBIZO'S SKEWER	JAPANESE RESTAURANT	1/23/2007	N				
41	EL GRINGO MANHATTAN	RESTAURANT	11/15/2006	N				
42	EL POLLO LOCO #5905	FAST FOOD RESTAURANT	11/10/2006	N				
43	EL SOMBRERO	RESTAURANT						
44	EL SOMBRERO 2	RESTAURANT	11/8/2006	Y				11/20/2006

Table 1c Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBC
45	EL TARASCO	RESTAURANT	9/27/2006	N	11/15/2006	Y		2/5/2007
46	EL TARASCO	MEXICAN FOOD	11/8/2006	N				
47	EL TORITO RESTAURANT	RESTAURANT	11/8/2006	N				
48	ERCOLES BAR & Grill		1/26/2007	Y			Y	2/5/2007
49	FATBURGER #114	QUICK SERVICE RESTAURANT.	11/8/2006	N				
50	FONZ'S	RESTAURANT	1/26/2007	N				
51	FUSION SUSHI	JAPANESE RESTAURANT	11/15/2006	Y				12/5/2006
52	GRUNIONS	FULL SERVICE RESTAURANT	11/15/2006	Y				12/5/2006
53	HARRY O'S	RESTAURANT/NIGHTCLUB	1/25/2007	N				
54	HENNESSEY'S TAVERN	RESTAURANT	11/17/2006	N				
55	HOUSTON'S RESTAURANT	FULL SERVICE/RESTAURANT	11/1/2006	N				
56	IL FORNAIO	FULL SERVICE ITALIAN RESTAURANT ESTABLISHMENT	11/1/2006	N				
57	IMPERIAL FOOD CATERING	DELIVERY OF RENTALS AND FOOD						
58	ISLANDS FINE BURGERS & DRINKS	FULL SERVICE RESTAURANT BURGERS AND SANDWICHES ETC.	11/3/2006	Y				11/20/2006
59	JACK IN THE BOX	FAST FOOD	11/15/2006	Y				12/5/2006
60	JAMBA JUICE 1		11/1/2006	Y				11/20/2006
61	JAMBA JUICE 2		11/17/2006	N				
62	JOHNNY ROCKETS	RETAIL RESTAURANT	11/1/2006	N				
63	JSF - HOWS LLC	RESTAURANT	1/26/2007	N				
64	JUNIORS DELIBOYS	RESTAURANT	11/15/2006	Y				12/5/2006
65	KAI SUSHI MANHATTAN BEACH	JAPANESE TAKE OUT	1/25/2007	Y				2/5/2007
66	KATSU!	JAPANESE RESTAURANT	11/15/2006	Y				12/5/2006
67	KETTLE: THE	RESTAURANT	11/17/2006	N				

Table 1d Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBRC
68	KOFFEE KART	RESTAURANT	1/23/2007	Y				2/5/2007
69	KOO-KOO-ROO		11/3/2006	N				
70	L A FOOD SHOW INC	RESTAURANT - CASUAL DINING	11/3/2006	Y				11/20/2006
71	LE PAIN QUOTIDIEN	RESTAURANT / CAFE	11/17/2006	Y				12/5/2006
72	LICKITY SPLIT INC	ICE CREAM SHOP	1/25/2007	Y				2/5/2007
73	LIDO DI MANHATTAN BAKERY	BAKERY--WEDDING & SPECIALCAKES	1/25/2007	Y				2/5/2007
74	LIDO DI MANHATTAN ITALIAN REST	FULL SERVICE RESTAURANT	11/1/2006	N				
75	LOCAL YOLK: THE	RESTAURANT	9/27/2006	Y				10/19/2007
76	MAGIC SKEWERS RESTAURANT	SEAFOOD RESTAURANT	1/25/2007	N				
77	MAMA D'S ITALIAN KITCHEN	EATING & DRINKING ESTABLISHMENT	1/23/2007	N				
78	MAN BCH BREWING COMPANY INC	RESTAURANT	1/23/2007	Y				2/5/2007
79	MANGIAMO	RESTAURANT	1/25/2007	N				
80	MANHATTAN BEACH CREAMERY	ICE CREAM STORE W/PRODUCTION ON PREMISES	1/23/2007	Y				2/5/2007
81	MANHATTAN BREAD AND BAGEL		11/15/2006	Y				12/5/2006
82	MANHATTAN COFFEE COMPANY	COFFEE HOUSE	11/8/2006	N				
83	MANHATTAN PIZZERIA	PIZZERIA	1/23/2007	N				
84	MC DONALD'S #11194	FAST FOOD RESTAURANT	1/25/2007	Y				2/5/2007
85	MC DONALD'S OF MAN BCH INC.	FAST FOOD	11/8/2006	Y				11/20/2006
86	MICHIKAZU	RESTAURANT	1/25/2007	N				
87	MRS. BEASLEY'S MUFFINS/GIFT BSKT	BAKERY & GIFT BASKET COMPANY		Y				12/5/2006
88	NOAH'S BAGELS #2546	RESTAURANT	11/17/2006	N				
89	NORTH END CAFE	CAFE	9/27/2006	Y				10/19/2006

Table 1e Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBRC
90	OB'S GRILL & BAR	GRILL & BAR	11/15/2006	N				
91	OCEAN VIEW CUISINE	SANDWICH & COFFEE SHOP	1/24/2007	Y				2/5/2007
92	OCTOPUS	JAPANESE RESTAURANT	1/25/2007	N				
93	OLD VENICE	RESTAURANT						
94	OLIVE GARDEN #1017: THE	RESTAURANT	11/3/2006	N				
95	ONCE UPON A PARTY	CATERING						
96	O-SHO RESTAURANT	RESTAURANT/AKA: B.B. AND K. ENTERPRISES INC.	1/25/2007	Y				2/5/2007
97	PACHANGA MEXICAN GRILL		11/1/2006	N				
98	PANCHO'S MEXICAN FOOD	RESTAURANT	9/27/2006	N	11/15/2006	Y		2/5/2007
99	PANDA EXPRESS INC #356	CHINESE FAST FOOD RESTAURANT	11/17/2006	Y				12/5/2006
100	PAPA JAKE'S	RESTAURANT	9/27/2006	N	11/15/2006	N		
101	PEET'S COFFEE & TEA	RESTAURANT	11/17/2006	N				
102	PENNY LANE	RESTAURANT	1/23/2007	N				
103	PETROS	FULL SERVICE RESTAURANT	11/15/2006	Y				12/5/2006
104	PISCES	TAKE-OUT ONLY RESTAURANT	1/26/2007	Y				2/5/2007
105	PIZZA HUT #751126	RETAIL RESTAURANT	11/8/2006	N				
106	POMODORO CUCINA ITALIANA	FULL SERVICE RESTAURANT	11/15/2006	Y				12/5/2006
107	RALPHS		11/3/2006	Y				12/5/2006
108	RED SESAME	RESTAURANT	11/1/2006	N				
109	REED'S		11/3/2006	Y				11/20/2006
110	REUBENS #17	EATING & DRINKING						
111	ROCK 'N FISH	RESTAURANT	1/23/2007	Y				2/5/2007

Table 1f Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBRC
112	RUBIO'S FRESH MEXICAN GRILL #24	QUICK SERVICE MEXICAN FOOD RESTAURANT	11/15/2006	N				
113	SAMURAI SAM'S	RESTAURANT	11/1/2006	N				
114	SCHOONER, THE	GAME PERMIT FOR BEER BAR	1/25/2007	N				
115	SHARKS COVE RESTAURANT & SPO	FULL SERVICE RESTAURANT AND BAR	11/17/2006	N				
116	SHELLBACK TAVERN	TAVERN	1/25/2007	Y				2/5/2007
117	SION'S MEXICAN RESTAURANT	SERVICE OF FOOD WITH BEER & WINE.	11/15/2006	Y				12/5/2006
118	SLOOPYS INC	EATING AND DRINKING	11/15/2006	Y				12/5/2006
119	STARBUCKS #542		11/15/2006	Y				12/5/2006
120	STEAK ESCAPE	FAST FOOD RESTAURANT						
121	STIR-FRY GRILL	RESTAURANT	1/25/2007	Y				2/5/2007
122	SUBWAY #14669	SANDWICHES AND SALADS	1/23/2007	Y				2/5/2007
123	SUBWAY SANDWICHES #S-579	FAST FOOD	11/1/2006	Y				11/20/2006
124	SUBWAY SANDWICHES/SALADS #294	SUBWAY SANDWICHES AND SALADS	11/8/2006	Y				11/20/2006
125	SUMMER'S SPORT BAR	SPORT BAR/ RESTAURANT	1/25/2007	N				
126	SURF CITY SQUEEZE	RETAIL FRESH JUICE & SMOOTHIE STORE						
127	SUSHI YA MATSU	RESTAURANT	1/26/2007	N				
128	SZECHWAN	RESTAURANT	11/10/2006	N				
129	TACO BELL 757	FAST FOOD RESTAURANT	11/15/2006	N				
130	TACONE	QUICK SERVICE RESTAURANT	1/25/2007	Y				2/5/2007
131	TALIA'S DELI & FINE CONT RES	DELI AND RESTAURANT	1/25/2007	N				
132	TEPPAN AMERICANA	RESTAURANT	11/8/2006	Y				11/20/2006
133	THAI DISHES RESTAURANT	FULL SERVICE RESTAURANT	11/15/2006	N				

Table 1g Restaurant Inspection Results

	BUS NAME	DESCRIPTION	Date Initial Inspection	Recommend Cert.?	Date of Follow-Up Inspection	Compliance?	Recommend Cert.?	Date Form Sent to SMBRC
134	THE CASTLE		11/15/2006	Y				12/5/2006
135	TOMBOY'S	RESTAURANT	1/25/2007	N				
136	TONY MARONI'S PIZZA		11/15/2006	N				
137	TOWNE RESTAURANT & BAR	RESTAURANT	1/25/2007	N				
138	UNCLE BILL'S PANCAKE HOUSE	PANCAKE HOUSE	1/25/2007	N				
139	VALENTINO PIZZA	PIZZA FAST FOOD	1/26/2007	N				
140	VERANDAS	EVENT VENUE	1/26/2007	N				
141	VERSAILLES RESTAURANT	RESTAURANT	11/10/2006	N				
142	VONS		11/17/2006	N				
143	WAHOO'S FISH TACOS	RESTAURANT	1/23/2007	N				
144	XO WINE BISTRO	RESTAURANT						
145	ZINC AT SHADE HOTEL	RESTAURANT AND BAR OPERATION AT SHADE HOTEL	11/17/2006	Y				12/5/2006

CERTIFIED INITIAL INSPECTION	61
FAILED INITIAL INSPECTION	72
TOTAL CERTIFIED	64
TOTAL NON-CERTIFIED	69

Research Study Goals

The purpose of this study is measure the effectiveness of the Clean Bay Restaurant Certification Program. Since the City anticipates that the Program will continue on an annual basis, developing baseline data to measure the effectiveness of the Program is needed. Therefore, the goals of the study were to accomplish the following:

- 1) Assess the level of public (and restaurant owner/manager) awareness of the Program.
- 2) Measure the level of education/knowledge of good and bad management practices for stormwater pollution, and
- 3) Determine if the Program meets the interests of restaurant managers/owners
- 4) Determine if the Program has an affect on consumer choice of restaurant.

The goals listed above include information that collectively serves as the baseline data to be used for the Program's annual implementation and evaluation. The design of the Program is supported by several studies that have shown that association with environmentally friendly businesses practice can positively effect consumer's buying decisions.

This study measures the effectiveness of the Clean Bay Restaurant Certification Program by 1) conducting surveys with certified and non-certified

restaurant managers/owners and 2) conducting 100 public intercept surveys. The objective of the study was to measure behavior change of restaurants and to gauge public awareness of the Program.

The results of the study will provide the Cities with baseline data for measuring the success of the Program, and how the Program can be modified in the future to be more effective in encouraging behavior change and reducing stormwater pollution on behalf of the restaurants. To accomplish this, the benefits of the Program were evaluated as part of the restaurant manager/owner questionnaire in the research study, as detailed in Chapter III.

CHAPTER III

METHODOLOGY

Questionnaire Development

As previously mentioned in Chapter II, the goal of this study was to measure the effectiveness of the Clean Bay Restaurant Certification Program by 1) conducting surveys with certified and non-certified restaurant managers/owners and 2) conducting 100 public intercept surveys. The methodology for this study involved first developing two separate questionnaires for assessing both the restaurant managers/owners perspectives (for certified and non-certified restaurants), and the public/consumer perspectives. Representatives from the Cities of Manhattan Beach, Torrance, Hermosa Beach, Redondo Beach, and the SMBRC provided feedback on the draft questionnaires.

Restaurant Manager/Owner Questionnaire Development

The restaurant manager/owner questionnaire was designed to solicit feedback from the restaurant manager or owner, depending on who was responsible for the daily operations within the restaurant, on the Clean Bay Restaurant Certification Program. The intent was to measure behavior change of restaurants as a result of the Program. Appendix 2 includes the questionnaires used for this study. The questions were open-ended and qualitative in nature with the intention of evaluating the restaurant manager/owner's overall feeling about

the Program, as well as the motivation for implementing or not implementing stormwater pollution prevention best management practices.

Public Intercept Survey Questionnaire Development

The public intercept survey questionnaire was designed to gauge public awareness of the Clean Bay Restaurant Certification Program. Refer to Appendix 2 for a copy of the public intercept survey questionnaire. Similar to the restaurant manager/owner questionnaire, the questionnaire for the public intercept survey included questions that were open-ended and qualitative in nature with the intention of assessing the frequency that individuals eat at restaurants, as well as visit the beach. The questionnaire also explored whether individuals have seen the certification posted (and if so, in what locations); the understanding of what the certification stands for; whether the certification improves the image of the restaurant; and the level of importance of the certification in choosing a restaurant. The last question evaluated public knowledge of good and bad management practices for stormwater pollution by requesting the public respondent to provide examples of each.

Sampling and Participant Selection

The sampling frame for this study included only restaurants in the City of Manhattan Beach that were evaluated as part of the Program, which included a total of 133 restaurants. The sampling plan originally involved a sample size of 20 total restaurants (10 certified and 10 non-certified) to be used as a sample of the total 133 restaurants. The sample size for the public intercept survey included 100 individuals. Both sample plans are detailed below.

Certified and Non-Certified Restaurant Selection

Out of the 133 restaurants evaluated from August 2006-February 2007, 64 restaurants were certified and 69 were not certified. These evaluations are compiled in a database maintained by the Santa Monica Bay Restoration Commission, and the results are shown in Table 1.

Table 2 shows the proposed restaurant selection that was intended to serve as the sampling of 10 certified and 10 non-certified restaurants.

Table 2: Proposed Restaurant Selection

Certified?	Restaurant/ Bar	Restaurant	Fast Food	Coffee	Pizza	Grocery Store
Yes	Islands Fine Burgers & Drinks	California Pizza Kitchen	Mc Donald's Of Man Bch Inc.	Coffee Bean & Tea Leaf	Brooklyn Brick Oven Pizza	Ralphs
	Sloopys Inc	Katsu!	Subway Sandwiches			
		Pomodoro Cucina Italiana				
No	El Tarasco	Back Home In Lahaina	Taco Bell 757	Manhattan Coffee Company	Pizza Hut	Bristol Farms
	Hennessey's Tavern	China Grill	El Pollo Loco			
		Versailles Restaurant				

The restaurants in Table 2 were selected based on the type of restaurant and receipt of the Clean Bay Restaurant Certification. The categories for restaurant type were chosen to provide a diverse sampling of restaurants. The sampling technique used was non-probability and purposeful sampling, which involves selecting restaurants that are varied by location/type, for example those located in indoor malls, outdoor strip malls, fast food establishments, and stand alone

restaurants. The sampling takes into account restaurants that may be smaller, meaning they may have less total area that they are responsible for managing. For example, a stand alone restaurant may have its own parking lot and large dumpster area, whereas a restaurant located in an indoor mall or outdoor strip mall may share its parking lot and dumpster area with others, so the management responsibility for such areas are shared.

Public Intercept Survey Participant Selection

The intent of the public intercept surveys was to provide feedback to the restaurants on the level of public awareness of Program. Pedestrians were simply approached in the City and asked to complete the questionnaire, which is included in Appendix 2.

To ensure age diversity in the sample size, volunteers were generally solicited based on four age groups: 1) 18-25 2) 26-45 3) 46-65 4) 66+. These groups are consistent with the age ranges provided on the public questionnaire. Age was the only characteristic or personal trait that was considered while selecting potential participants; gender for example was not a consideration in sample selection.

Soliciting Questionnaire Completion

Soliciting questionnaire completion from the restaurant managers/owners required an approach different than soliciting input from the public during the intercept surveys. Input from the restaurant manager/owner on his/her general knowledge and perspectives of the Program served as the main focus of the questionnaire. On the other hand, extracting the level of understanding of

stormwater pollution prevention and awareness of the Program was the intent of the public intercept surveys.

Restaurant Manager/Owner Questionnaire Solicitation

The restaurant manager/owners of each of the restaurants in Table 2 were contacted several times from February 2007 through April 2007 via telephone calls. The City provided a contact name for each restaurant. However, in some cases the contact person was no longer at the establishment and the appropriate new contact needed to be identified. Each phone call with the restaurant manager/owner included a quick introduction to the City of Manhattan Beach's Clean Bay Restaurant Certification Program in order to gauge familiarity with the program. Most individuals were not aware of the Program, so the introduction was expanded upon with a brief explanation of the Program's goals and benefits. The lack of awareness of the Program was often due to changes in restaurant management, where a new manager had taken over since the City had conducted its inspections for the Program.

Following the introduction, the restaurant managers/owners were asked to complete the questionnaire along with an informed consent form. A copy of the informed consent form is included in Appendix 2. The questionnaire and informed consent form were provided to the restaurant manager/owner by e-mail, mail, or fax, depending on his/her preference. Although each restaurant manager/owner was contacted several times, and the consent form and questionnaire provided multiple times, obtaining a response proved more difficult than anticipated.

As a result of the lack of response, only a total of eight responses out of the total 20 that were proposed, were obtained. The eight responses include four certified and four non-certified restaurants.

Public Intercept Survey Solicitation

On Saturday, March 3, 2007 the first session of public intercept survey was conducted in downtown Manhattan Beach. Figure 7 shows the location where the survey was conducted. A total of 4 volunteers (including myself) asked (solicited) the public to complete the informed consent form and questionnaire from 10am to 2pm. Approximately 70 completed questionnaires were obtained during this initial visit.

On Saturday, March 10, 2007 the second session of public intercept survey solicitation was conducted in the same downtown Manhattan Beach location. The session took place from 10am to 12pm. A total of two volunteers (including myself) obtained an additional 30 completed questionnaires, which brought the total to the proposed 100 completed public intercept surveys.

Individuals were approached and asked a few basic questions to gauge their interest in completing the questionnaire. Some of the opening questions included the following:

1. Do you eat out at restaurants in the City of Manhattan Beach?
2. Would you mind taking a few minutes to complete this survey on restaurants and stormwater pollution prevention?
3. Have you heard of the City of Manhattan Beach's Clean Bay Restaurant Certification Program?

4. Are you from this area (South Bay region)?

There was an overall general understanding of stormwater pollution prevention practices on behalf of the public.

Development of the restaurant manager/owner questionnaire and the public intercept surveys was geared toward measuring the understanding and awareness of stormwater pollution prevention practices. The lack of awareness about the Program on behalf of restaurant managers and owners required thorough overviews of the Program prior to soliciting questionnaire completion. This additional effort made soliciting questionnaire completion more time consuming. The public intercept surveys proved much more successful with a high participation on behalf of the public. The responses obtained from both the restaurant manager/owner questionnaires and the public intercept surveys provided significant information that was used to evaluate the Program, as discussed in the following Chapter.

CHAPTER IV

RESULTS

Restaurant Questionnaire Results

Although the goal was to obtain completed questionnaires from 10 certified and 10 non-certified restaurant managers/owners, the total number of completed questionnaires resulted in only 4 certified and 4 non-certified. Tables 3a-3d below summarize the results of the survey from the eight restaurants that provided completed questionnaires. Note that Table 3c includes shaded cells that denote incomplete answers to questions. Unfortunately, these incomplete answers slightly skewed the results of the survey. Each table includes total and average percentages to statistically reflect the responses. As shown in Table 3a, responses were obtained from restaurants for each restaurant/type location category. Under question #3, a total of three restaurant owners and three restaurant managers completed the questionnaire, which provides balanced feedback in terms of different role perspectives. Question #4 shows a range of operation for the restaurants, including a maximum of 30 years and a minimum of 2 years, 11 months.

Table 3a: Restaurant Survey Results

1. Restaurant Name and Address		2. Restaurant Type/Location (Circle one)						3. Position		4 How long has the restaurant been in business?	
		Indoor Mall	Outdoor Strip Mall	Fast Food	Stand Alone Restaurant	Other		Owner	Manager	Years	Months
Taco Bell Corp	301 N. Sepulveda Blvd,			1	1				1	30	
Pasta Pomodoro	401 Manhattan Beach Blvd				1				1	3	4
China Grill	3282 Sepulveda Blvd		1					1		10	
Back Home Lahaina	916 N. Sepulveda Blvd				1			1		6	2
California Pizza Kitchen	3280 North Sepulveda				1				1	13	
Bristol Farms	1570 Rosecrans Ave						1	Inside grocery store	1	16	2
Katsu	302 Rosecrans Ave				1			1		2	11
Islands	3200 Sepulveda Ave	1							1	18	2
Total		1	1	1	5	1		4	4	98	21
Average		14%	14%	14%	71%	14%		57%	57%	14	3

Table 3b: Restaurant Survey Results

Restaurant Name	5. What is the most important change you have made in management practice with regard to stormwater pollution prevention?	6. Have you received the Clean Bay Certification?		7. How do you display your Certificate?				8. What is your overall feeling about this program on a scale from 1-5 (1=mostly negative; 5=mostly positive)?	9. Do you think the certification has or will have an affect on customer's choice of restaurant?	
		Yes	No	Window	Wall	Don't Display	Other		Yes	No
Taco Bell Corp	Training our employees about why it is important to prevent pollution		1					5		1
Pasta Pomodoro	No soap or chemicals for outside cleaning only hot water.	1						5		1
China Grill	Mopping instead of washing down grease and dirt		1					5		1
Back Home Lahaina	Management awareness and practice hiring professionals for certain cleaning jobs.		1					5		1
California Pizza Kitchen	Having our backflow tested annually	1			1			5		1
Bristol Farms	Keeping dock clean, trash lids closed, grease recovery		1	1				5		1
Katsu	None	1				1		4		1
Islands	None	1			1			3		1
Total		4	4	1	2	1	0	37	4	4
Average		57%	57%	14%	29%	14%	0%	5	57%	57%

Table 3c: Restaurant Survey Results

Restaurant Name	10. Which of the following possible benefits of receiving a Certification through the Clean Bay Certification Program are most important to YOUR business? Place a rank of '1' next to the most important benefit, a rank of '2' next to the second most important benefit; a rank of '3' next to the third most important benefit, and so on until you place a rank of '8' next to the least important benefit to your business. Use each number only once:										
	A window display recognizing the restaurant's certification	Recognition of the restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Logo on restaurant website	Recognition at City Council Meeting	Mention on Local Cable Channel	Promotion at public event (for example, a booth at a Taste of the Bay Fair)	Other		
Taco Bell Corp	2	3	3	3	3	3	3	3	3	1	Knowing that we are doing our part to keep the ocean waters clean.
Pasta Pomodoro	5	1	6	8	7	3	2	4			
China Grill	2	5	7	8	1	6	3	4			
Back Home Lahaina	3	1	5	4	6	7	2	8			
California Pizza Kitchen	6	4	5	7	8	3	1	2			
Bristol Farms	1	2	5	3	6	7	8	4			
Katsu	7	2	6	3	8	4	1	5			
Islands		1									
Total	26	19	37	36	39	33	20	30	1		
Average	4	3	5	5	6	5	3	4	0		

Table 3d: Restaurant Survey Results

Restaurant Name	11. What is the primary reason you chose to get this certification? Circle one or complete "Other"				12. Is there anything else you would like to comment on?
	Social responsibility	Business Marketing	Health Dept. Inspection	Other	
Taco Bell Corp	1				Didn't get certified in Fall due to receipts not on site, but we have grease pickups and barrels. Should have been given certification
Pasta Pomodoro	1				Great Program
China Grill	1				No
Back Home Lahaina	1				Literature on future rules and regulations for training purposes.
California Pizza Kitchen	1				No
Bristol Farms	1				Right for business
Katsu			1		
Islands	1				
Total	7	1	0	0	
Average	100%	17%	0%	0%	

Table 3b consists of Questions #5-9. For Question #5, six of the responses included specific examples of stormwater pollution prevention best management practices, while the remaining two did not respond. The accuracy of these responses reflect a positive achievement on behalf of the City of Manhattan Beach. The responses to Question #6 were somewhat already known since the restaurants were selected based on whether they had been certified. As a result, the responses show a total of four certified and four noncertified. In responding to this question, some of the restaurants were unsure since they were aware that they had been certified, but they had not received the actual certification to display.

Responses to Question #7 show that of the four certified restaurants, one displays the certification in the window, two display it on the wall, and one does not display the certification at all. These responses suggest that the importance of the visual component of the certification may not be truly understood. The certification is meant to be publicly viewed in order to serve as a symbol of distinction for the restaurants practicing stormwater pollution prevention. Without a commitment to publicly displaying the certification, enhancing awareness of stormwater pollution prevention may be a challenge.

Question #8 yielded positive responses that show overwhelming support for the Program. On a scale of 1 to 5, with 1 being mostly negative and 5 being mostly positive, the average response from all eight restaurants was 5. The responses to Question #9 provide insight into the restaurant's true perspective of the Program's potential impact on consumer choices. Interestingly, 50% thought

that the certification has or will have an affect on customer's choice of restaurant, and 50% did not.

Table 3b reflects the responses to Question #10. This question is important in that it specifically evaluates the benefits that the Program offers to restaurants if they receive the certification. The respondents were asked to rank the benefits from 1-8, with 1 being most important and 8 being least important. Unfortunately, two respondents did not follow the ranking system provided and as a result, the numbers had to be slightly adjusted. The totals of the rankings show that the benefits with the lowest average scores (those most important) are the recognition of the restaurant in a local paper and mention on a local cable channel. The next most important benefits are promotion at a public event and a window display recognizing the restaurant's certification. Benefits that averaged a 5 ranking include recognition on the Santa Monica Bay Restoration Commission's website, recognition through the California Restaurant Association's national newsletter/monthly meetings, and recognition at a City Council meeting. The least important benefit is the certification posted on the restaurant websites. One respondent did describe an additional benefit of knowing that the establishment is doing its part to keep the ocean waters clean.

Table 3d includes the last two questions on the questionnaire, #11 and #12. Question #11 reveals the primary motivations behind implementing stormwater pollution prevention best management practices, and consequently obtaining the certification. The overwhelming reason restaurants achieved the certification was

based on social responsibility (86%), while only one selected (13%) selected business marketing. Raw data from the surveys are included in Appendix 3.

Public Intercept Survey Results

The goal of the public intercept survey was to obtain 100 complete surveys. This goal was surpassed with a total of 103 completed surveys. The results of the public intercept surveys are shown in Table 4a and 4b below. Question #1 was used to obtain the names of respondents for identification and organizational purposes. This turned out to be an important indicator since it was discovered that a few people completed the questionnaire more than once and, as a result, the subsequent surveys were omitted from the analysis.

Under Question #2, the number of females and males that completed the questionnaire was roughly split in half, with 55% males and 45% females. The results of Question #3 shows that the majority of respondents were within the 26-45 age range. The percentage of people 18-25 years of age and 46-65 years of age was roughly the same, making up 21% and 22% of the total respondents, respectively. Those that were 66 years of age or older only amounted to nine percent of the total.

Question #4 reveals that a majority (54%) of the respondents lived in the City of Manhattan Beach. Approximately 25% of the respondents lived in Cities other than Manhattan Beach, Hermosa Beach, Redondo Beach, or Torrance. These respondents resided within Los Angeles County, Orange County, or states outside of California. Hermosa Beach had the next greatest representation among residents with 13% of respondents, while Redondo Beach had

Table 4a: Public Intercept Survey Results

Question	Type of Responses	Number of Responses	Statistics
1. Name			103
2. Gender?	Male	57	55%
	Female	46	45%
3. Age?	18-25	22	21%
	26-45	49	48%
	46-65	23	22%
	66+	9	9%
4. City of residence?	Manhattan Beach	56	54%
	Hermosa Beach	13	13%
	Redondo Beach	7	7%
	Torrance	0	0%
	Other	26	25%
5. How often do you go to the beach?	_____ Never	1	1%
	_____ Rarely	9	9%
	_____ Sometimes	24	23%
	_____ Often	68	66%
6. How many days per week do you eat out at a restaurant? (Circle one)	1-2	33	32%
	2-3	25	24%
	3-4	26	25%
	4-5	0	0%
	5-6	11	11%
	6-7	6	6%
7. What types of restaurants do you usually eat at? (Circle all that apply)	Indoor Mall	14	14%
	Outdoor Strip Mall	22	21%
	Fast Food	22	21%
	Stand Alone Restaurant	92	89%
	Take Out	50	49%
8. Are you aware of the Clean Bay Certification Program?	Yes_____	23	22%
	No_____	78	76%
9. Have you seen the certification before?	Yes_____	10	10%
	No_____	91	88%
10. Do you know what the certification stands for?	Yes_____	30	29%
	No_____	71	69%

approximately 7%. None of the respondents were residents of the City of Torrance.

Question #5 analyzes the frequency that the respondents go to the beach. The results show that a majority (66%) go to the beach often, while 23% go to the beach sometimes. Only 9% of the respondents go to the beach rarely and 1% claim they never go at all. These statistics show that going to the beach is a regular outing and may be considered part of the culture for the cities represented. Those that claim they never go at all may correlate with respondents that live farther away from the beach, including those that live in other states.

The results of Question #6 are important in that it shows how often the respondents eat out at restaurants. The majority (32%) eat out only 1-2 days per week, while the number of people that eat out 2-3 and 3-4 days per week is roughly split, with 24% and 25% respectively. Interestingly, not one of the respondents selected 4-5 days per week. A total of 11% eat out 5-6 days per week and 6% eat out almost every day, or 6-7 days per week. People who eat out regularly for business, including lunches and dinners, may make up those who chose the 6-7 days per week response.

Question #7 shows the types of restaurants that the respondents said they usually eat at. Overwhelmingly, stand alone restaurants made up 89% of the total, and 49% consisted of take out. Fast food and outdoor strip mall restaurants were equally selected with each including 21% of the total. Finally, indoor malls made up only 14% of the respondents.

The responses to Question #8, #9, and #10 depict the true level of public awareness of the Clean Bay Restaurant Certification Program. For Question #8, only 22% of respondents claimed to be aware of the Program. The majority (76%) stated that they were not aware of the Program. These results are not surprising considering this is the first year the Program has been implemented and, therefore, these statistics will be used as baseline data to reflect changes in Program awareness over future years. Along the same lines, the responses to Question #9 show that only 10% of respondents said that they had seen the certification before and 88% said that they had not.

The next Question #10 includes 69% of respondents stating that they do not know what the certification stands for, while 29% claimed that they did. Collectively, the responses for Questions #8, #9, and #10 correlate. More people had seen the certification than were aware of the Program and/or knew what the certification stands for. The “Yes” responses to Questions #8 and #10 should increase as the program continues to be implemented on an annual basis.

Question #11 supports the responses to Questions #8, #9, and #10 by identifying the means in which the Program is being publicized. The responses to this question were minimal, including a total of 30 responses, since only those who had seen/heard about restaurants certified under the Program were able to respond. However, the validity of the 30 responses is enhanced by the consistency with the 30 “yes” responses in Question #10. The statistics

Table 4b: Public Intercept Survey Results

Question	Type of Responses	Number of Responses	Statistics
11. Where have you seen/heard about restaurants certified under the Clean Bay Certification Program? (Mark an "x" for those that apply below)	A window display of the certification	9	9%
	Recognition of restaurant in a local paper	7	7%
	Recognition on the Santa Monica Bay Restoration Commission's website	4	4%
	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	2	2%
	Other	8	8%
12. Does the certification improve the image of the restaurant?	Yes_____	77	75%
	No_____	13	13%
13. How important is the certification to your choice of restaurant? (Circle one)	Very Important	22	21%
	Somewhat Important	44	43%
	Not Too Important	5	5%
	Not At All Important	9	9%
	Don't Know	20	19%
14. Provide an example of a good and a bad management practice for stormwater pollution:	Good:	51	50%
	Bad:	51	50%

reflect low percentages, including 9% for a window display, 7% for recognition in the local paper, and 8% for other. The "other" responses included those who had heard about it the Program from City employees or friends directly connected to the Program. The lower percentages of 4% and 2% were respectively related to the recognition on the SMBRC's website, and recognition through the California

Restaurant Association's national newsletter and monthly meetings. This information is useful in knowing the forms of publicity that the public has been most receptive to.

Improving the image of the restaurant is a key consideration for the Program. Responses to Question #12 show that most people think that the certification does improve the image of the restaurant, with a total of 75% of responses, while only 13% said that it did not. The responses to this question were not directly correlated with Questions #8-11, which gauged the overall awareness of the program. Rather, it provides a stand alone opportunity to state whether the certificate itself affects the restaurant's image.

Question #13 targets the level of importance the certification plays into consumer choice of restaurant. Most people felt that the certification was somewhat important (43%). About one fifth, 21%, felt that the certification was very important to their choice of restaurant, and 19% said they didn't know. More people said the certification was not at all important (9%) than those that said it was not too important (5%).

The final Question #14 requested that respondents provide examples of good and bad management practices in order to test their knowledge of stormwater pollution prevention in general. The majority, 51%, provided examples of good management and the same percentage provided examples of bad management. However, many respondents only responded by providing either a good or bad management practice, which means that the equal number of responses were not due to the same respondent providing both examples.

CHAPTER V

CONCLUSION

Overview of Results

This study measures the level of public (and restaurant owner/manager) awareness of the Clean Bay Restaurant Certification Program after the first year of Program implementation. In addition, it measures the level of education/knowledge of good and bad management practices for stormwater pollution, and determines whether the Program meets the interests of restaurant managers/owners and has an affect on consumer choice of restaurant. The results of the study collectively show that the majority of the public are not aware of the Program, yet they think that the certification would improve the image of the restaurant, and that certification would be somewhat important to the choice of restaurant.

The public provided examples of good and bad management practices, expressing their knowledge of stormwater pollution prevention. Most of the examples were not restaurant specific, but rather were general stormwater pollution observations that reflect the public's overall pollution awareness. Almost all the restaurant managers/owners provided concrete examples of the most important change they had made in management practice with regard to

stormwater pollution prevention. This also shows a common public understanding of stormwater pollution prevention practices.

The restaurant managers/owners generally have a positive feeling about the Program, but only half of them think that the certification has (or would have) an affect on the customer's choice of restaurant. In developing the questionnaire, it was assumed that restaurants would be interested in receiving the certification primarily for business marketing purposes. However, the majority of restaurants stated that the primary reason for participating was attributed to social responsibility.

Reliability and Validity

This study was focused on the City of Manhattan Beach with the intent to share the results with the Cities of Torrance, Redondo Beach, and Hermosa Beach who are also participating in the Clean Bay Restaurant Certification Program. However, the results of this study may not be entirely transferable to all participating cities in the Program because the City of Manhattan Beach has community characteristics, such as economy, type of restaurants, level of public education, financial resources, etc. that may be unique to its demographic. Therefore, these traits must be taken into consideration when assessing the reliability and validity of applying the results to other cities.

The validity of the restaurant manager/owner aspect of the study is low because only 8 total respondents were acquired out of the 133 restaurants that were evaluated in the Program. Although 10 certified and 10 non-certified restaurants were contacted several times and asked to complete the

questionnaires, only 4 certified and 4 non-certified restaurants responded. The lack of responsiveness on behalf of the restaurant managers/owners in completing the questionnaires may be attributed to a cautious approach to dealing with the City. Many restaurants are wary about City inspections because of fines or violations that may result from the LA County Health Department inspections. Therefore, it is important that restaurants understand that the Program is focused on providing rewards for implementing best management practices; there is not a possibility of receiving a violation through the Program at this time. In addition, restaurants may be accustomed to receiving City related material in the mail, and as a result, the likelihood of responding to telephone calls may be greatly reduced.

The overall reliability of the methodology rests on the level of trust included in the public's response to questions. The time of day and time of year are key validity factors, since people may have an increased awareness of stormwater pollution during the winter months due to increase rain storms. During the summer months the demographic/population of the City may significantly change due to an influx of tourists. This would greatly alter the public responses to the questionnaires, as the responses would not necessarily reflect those of residents.

It is likely that the results of the Program will be much different in a year or two as overall awareness of environmental and health issues may continue to increase among public consumers. This increase in awareness would have an impact on the motivation behind achieving the certification, as consumer demand may drive efforts toward a more "green" restaurant market.

Recommendations

During the initial phone calls to the restaurant managers/owners, many were unfamiliar with the Program, regardless of whether they had achieved the certification or not. Thus, it is recommended that the City enhance the publicity and marketing for the Program to increase familiarity of the program. The results of the study showed that mention on the local cable channel and recognition in the local paper are the most important benefits to the restaurants. It is likely that these benefits were rated as most important due to past experiences where positive business impacts have resulted from exposure in these mediums. Therefore, increasing the amount of mention about the Program on the local cable channel and local paper would be effective in targeting restaurant manager/owner awareness as well as the public in general.

It was noted that the City distributed the certifications to the awarded restaurants by hand, as opposed to mail. This may have affected the restaurant's knowledge of receiving their certification and overall engagement in the Program. Therefore, it is recommended that the City choose an alternative method of distributing the Certifications, perhaps by regular mail since this is the method used to distribute other City information to restaurants.

It is recommended that a follow-up study for the other cities participating in the Program be conducted in order to resolve any validity issues related to differences in general restaurant practices in the City of Manhattan Beach. It is also recommended that the City focuses on conducting the public intercept

surveys annually to measure changes in public awareness of the Program and other stormwater pollution issues addressed by the study. The public intercept surveys proved more effective in terms of obtaining reliable data, than the restaurant manager/owner surveys. Therefore, the City may consider eliminating the restaurant questionnaire aspect of the study. If the City wishes to maintain the restaurant questionnaire, then it is recommended that the questionnaires be distributed via regular mail to increase the chances of receiving responses.

Participant Feedback

Some of the restaurant managers/owners provided comments on the Program, which included two positive comments (“Great Program” and “Right for Business”) and two constructive comments. One of the constructive comments stated that the restaurant had been inspected in the Fall, but didn’t get certified because they didn’t have receipts on site, but they had grease pickups and barrels and therefore, felt that they should have been certified. The second constructive comment stated that literature on future rules and regulations for training employees on proper stormwater pollution prevention BMPs should be provided by the City. Both comments should be carefully considered by the City for next year’s Program implementation.

Several comments were obtained from the public during the survey. The feedback includes the following:

- Most people, especially those that are older (senior citizens) expressed a genuine interest in the certification and thanked us for making them aware of it.

- People said they will now be looking for the certification and were disappointed that they had not been better informed.
- Some people said they would like the checklist publicized so that they could be more vigilant and watchful of procedures.
- Some wanted a clear distinction to be made public regarding the meaning of the LA County Health Department letter ratings and the Program certification.
- People that participated in the survey are now looking forward to more publicity and greater promotion of this project, especially by looking for the certifications in local restaurants.
- Many people were pleased that the logo was memorable as opposed to a letter or number.
- Some people asked volunteers for an identification badge. Perhaps next time the Chamber of Commerce or City Hall can supply some id's for the volunteers.
- The fact that the survey was only one page was important in obtaining responses since it was fairly quick to complete.
- People liked that there was an information sheet and that they had to sign consent forms.

Overall, the results of the study show the importance of significantly increasing awareness of the program for the restaurant managers/owners. The fact that some restaurants were unsure whether they were certified reflects the need to increase public outreach and educate restaurants about the Program.

APPENDIX

Appendix 1

- Notification Letter to the Restaurant Owner/Manager (City of Manhattan Beach Department of Public Works)



City Hall 1400 Highland Avenue Manhattan Beach, CA 90266-4795
Telephone (310) 802-5000 FAX (310) 802-5001 TDD (310) 546-3501

September 19, 2006

Dear Restaurant Owner/Manager:

The City of Manhattan Beach, along with the Cities of Hermosa Beach, Redondo Beach and Torrance and the Santa Monica Bay Restoration Commission (SMBRC), is pleased to announce the launch of the *Clean Bay Certification Program*. This goal of this program is to recognize restaurants that are doing their part to prevent pollution from their establishments and in turn protecting the water quality at our beaches.

In order to qualify for the certification, a restaurant must pass a storm water pollution prevention inspection with a 100% score. The inspector will be checking to see whether the restaurants are implementing a number of best management practices for preventing storm water pollution (please see the attached list of BMPs that will be covered during the inspection).

Restaurants that pass the storm water inspection with a 100% score will be certified under the *Clean Bay Certification Program*. The program includes the following benefits:

- A window display recognizing the restaurant's certification (to be hand delivered by a representative of the City following the inspection)
- Recognition of the restaurant in a local paper
- Recognition on the SMBRC's website
- Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings

Your restaurant may have recently received a storm water inspection from a representative of the County of Los Angeles Department of Health Services in accordance with the National Pollutant Discharge Elimination System (NPDES). The *Clean Bay Certification Program* is a separate process; although, we hope to combine the inspections in the future. The City of Manhattan Beach has contracted with a company named *Environmental Compliance Inspection Services (ECIS)* to conduct the *Clean Bay Certification Program* inspections, which will be conducted at no charge to your restaurant. An inspector from ECIS will be visiting your restaurant within the next several months.

The City of Manhattan Beach looks forward to working with you to prevent storm water pollution and to recognize those restaurants that qualify for the certification. We would appreciate your positive interaction with our contract inspector upon arrival at your restaurant. If you have any questions regarding this certification program, please feel free to contact me at 310-802-5363.

Sincerely,

Lindy Coe-Juell
Senior Management Analyst
Public Works Department

Enclosed: BMP Inspection List

Fire Department Address: 400 15TH Street, Manhattan Beach, CA 90266 FAX (310) 802-5201
Police Department Address: 420 15TH Street, Manhattan Beach, CA 90266 FAX (310) 802-5101
Public Works Department Address: 3621 Bell Avenue, Manhattan Beach, CA 90266 FAX (310) 802-5301
Visit the City of Manhattan Beach Web Site at www.citymb.info

Storm Water Pollution Prevention Best Management Practices for Restaurants

General

1. All storm drain inlets should be labeled with a no dumping message.
2. All areas surrounding the storm drains should be free of visible discharges.
3. The restaurant should have implemented a recycling program.
4. The restaurant should have maintenance records onsite that show when rendered grease was picked up.
5. The restaurant should have maintenance records onsite that show when grease traps/interceptors were last cleaned.

Dumpster Area

6. The garbage container area should be free of trash (ground, walls, etc.).
7. The outside garbage/dumpster area should be free of trash.
8. The outside garbage/dumpster area should be free of leakage.
9. The dumpster should be free of liquid waste.
10. The trash bin lids should be closed.

Equipment and Outdoor Cleaning

11. The area around the restaurant should be dry swept (sidewalks, outdoor dining and other areas).
12. There should be no evidence of floor mats being washed outside (floor mats should always be rinsed in a cleaning area where there is a drain that is plumbed to the sanitary sewer).
13. There should be no evidence of sidewalks/parking lots being hosed down.
14. Liquid waste from equipment cleaning should be drained into an approved sewage system.
15. There should be no evidence of cigarette butts on the ground (restaurants should provide ashtrays for outdoor smoking areas).
16. Outdoor drains should have no evidence of stains or non-storm water discharge entering outdoor areas.
17. Loading/unloading areas should be free of leftover trash, food waste, debris, etc.
18. Exterior drain lines should be effectively cleared of plugs.
19. Outdoor storage areas should be free of litter.

Grease Handling and Spill Disposal

20. A proper grease trap should be installed and maintained.
21. The grease disposal area should be clean and free of spills.
22. Grease disposal containers and surrounding areas should be free of overflow or liquid waste.
23. Spill prevention mechanisms and secondary containment should be in place around the grease trap disposal area.
24. The grease disposal containers should be kept closed with lids.
25. Rooftop grease exhausts for Class 1 Hoods should be properly maintained and cleaned.

Landscaping and Grounds Maintenance

26. Parking areas should be kept clean and regularly swept (no evidence of food particles, litter, staining, oils and grease).

Education and Training

27. There should be information posted for employees informing them about spill prevention and control, prohibiting discharge of wastewater outside, and keeping the dumpster areas clean.
28. Educational materials should be posted in a visible area onsite for employees to read.
29. The restaurant owner/manager should conduct regular training of employees regarding all of the above BMPs.

Appendix 2

- Informed Consent Form
- Questionnaires for Restaurant Manager/Owner
- Public Intercept Survey

California State University, Fullerton (CSUF)
CONSENT TO ACT AS A HUMAN RESEARCH SUBJECT

An Assessment of the Clean Bay Certification Program: Are the City of Manhattan Beach
Restaurants Seeing Green?

Participants must be 18 years of age or older to ensure no minor participation. No other conditions are required of participants for the study. Participation in this research study is completely voluntary. Please read this information below and ask questions about anything that you do not understand before deciding if you want to participate. A researcher listed below will be available to answer your questions.

INVESTIGATORS AND SPONSOR

Lead Researcher

- Joey Soto MS Environmental Policy and Planning - Department of MS Environmental Studies

Faculty Advisor screen)

- Dr. Dennis Berg - Department of Sociology

Study Location(s):

- City of Manhattan Beach

Study Sponsor(s):

- This study is a student project.

PURPOSE OF STUDY

The purpose of this research study is to evaluate the effectiveness of the Clean Bay Certification Program, which is a reward program for restaurants that recycle, properly dispose of waste, and practice other pollution prevention management. The City of Manhattan Beach launched the program in 2006 and evaluated all restaurants in the City based on a checklist of criteria. If a restaurant meets 100% of the criteria, it receives a certification. Using questionnaires, I will conduct 1) public intercept surveys and 2) depth interviews with restaurant managers/owners to measure the public awareness of the program, the understanding of pollution prevention practices of restaurants, and the impact on consumer choice of restaurant (in terms of certified vs. non-certified restaurants). The results of the research will provide recommendations on how the program should be modified to ensure greater future success in the program, including increase in restaurant participation and public awareness of the program, as well as

understanding of pollution prevention practices.

SUBJECTS

Inclusion Requirements:

Participants must be 18 years of age or older to ensure no minor participation. No other conditions are required of participants for the study.

Exclusion Requirements:

None

Number of participants:

The investigator plans to enroll 100 participants at this site.

PROCEDURES

- **Surveys/Questionnaires** - Each participant will be involved only during the duration of completing the questionnaire, which is estimated to take approximately 5 minutes to complete.
- **Standard Paper/Pencil format (handwritten)** - The data will be collected by standard paper and pencil format.

Total Time Involved:

Each participant will be involved only during the duration of completing the questionnaire, which is estimated to take approximately 5 minutes to complete.

RISKS

Known risks

- This study involves no more than minimal risk. There are no known harms or discomforts associated with this study beyond those encountered in daily life. The participant will simply be asked to complete a questionnaire based on his/her knowledge and perceptions of the Clean Bay Certification Program administered by the City of Manhattan Beach.

BENEFITS

To Others or Society

Others may benefit from their information gathered from this study because the study evaluates the effectiveness of the Clean Bay Certification Program, which rewards restaurants for implementing pollution prevention practices. These practices will help protect public health by preventing pollution at Manhattan Beach.

ALTERNATIVES TO PARTICIPATION

The alternative is to not participate in this study.

COMPENSATION/COST/REIMBURSEMENT

You will not be required to pay for research related procedures/treatments.

WITHDRAWAL OR TERMINATION FROM STUDY

You are free to withdraw from the study at any time. If you choose to withdraw from the study or are asked to stop participation in the study, you may be asked to ...

CONFIDENTIALITY

Data Storage

My research records, including notes on methodology and completed questionnaires, will be stored in a locked cabinet. I will provide information as to a data destruction date which will inform my subjects when data will be destroyed. If I wish to retain the data for use in educational seminars or conferences, my subjects will be informed accordingly.

Data Access

The research team, authorized CSUF personnel, and regulatory entities (City of Manhattan Beach representatives of the Clean Bay Certification Program) may have access to my study records to protect my safety and welfare. Data will be kept confidential to the extent allowed by law. Data will be reported without identifiers.

Level of Privacy

- Any information derived from this questionnaire (research project) that personally identifies you will not be voluntarily released or disclosed by these entities without your separate consent, except as specifically required by law.

Data Privacy

- The research data will be maintained indefinitely.

NEW FINDINGS

If during the course of this study, significant new information becomes available that may relate to your willingness to continue to participate, this information will be provided to you by the investigator

IF I HAVE QUESTIONS

For questions about your rights as a research participant, you may contact California State University, Fullerton Regulatory Compliance Coordinator at (714) 278-2327, or the Institutional Review Board (IRB) Chair at (714) 278-2141

Contacts:

- Dr. Dennis Berg , Department of Sociology
Daytime Phone: 714-278-7044 **Email:** dberg@fullerton.edu
- Joey Soto MS Environmental Policy and Planning, Department of MS Environmental Studies
Daytime Phone: (949) 370-6079 **Email:** jsoto@psomas.com

OTHER CONSIDERATIONS

Conflict of Interest

Investigators must satisfy campus requirements for identifying and managing potential conflicts of interest before a research study can be approved. The purpose of these requirements is to ensure that the design, conduct and reporting of the research will not be affected by any conflicting interests. If at any time you have specific questions about the financial arrangements or other potential conflicts for this study, please feel free to contact any of the individuals listed above.

You have been informed that Joey Soto has no personal financial interest in this. You also have been informed that the nature of this financial interest and the design of the study have been reviewed by the campus conflict of interest review committee, which has determined that the investigator's financial interests would not compromise the quality or reliability of the study. Furthermore, the Institutional Review Board has determined that the investigator's financial interests will not adversely affect your welfare.

VOLUNTARY PARTICIPATION

I understand that participation in this study is voluntary. I may refuse to answer any question or discontinue my involvement at any time without penalty or loss of benefits to which I might otherwise be entitled. My decision will not affect my future relationship with CSU Fullerton. My signature below indicates that I have read the information in this consent form and have had a chance to ask any questions I have about the study. I consent to participate.

Signature of Participant

Date

Signature of Investigator

Date

Questionnaire for Restaurant Managers/Owners

The Cities of Manhattan Beach, Hermosa Beach, Redondo Beach, Torrance and the Santa Monica Bay Restoration Commission (SMBRC), have implemented the *Clean Bay Restaurant Certification Program (CBCP)*. The goal of this program is to improve the water quality of the ocean by encouraging restaurants to modify their operational behavior. I'd like to ask you some questions concerning your knowledge and perceptions of this program. The interview will only take about 10 minutes. Your participation, of course, is voluntary.

1. Restaurant Name and Address: _____

2. Restaurant Type/Location (Circle one): Indoor Mall Outdoor Strip Mall
Fast Food Stand Alone Restaurant Other _____
3. Position? Owner Manager
4. How long has the restaurant been in business? Years _____ Months _____
5. What is the most important change you have made in management practice with regard to stormwater pollution prevention? _____
6. Have you received the Clean Bay Certification? Yes ___ No ___
7. How do you display your Certificate? Window ___ Wall ___ Don't Display ___ Other _____
8. What is your overall feeling about this program on a scale from 1-5 (1=mostly negative; 5=mostly positive)? _____
9. Do you think the certification has or will have an affect on customer's choice of restaurant? Yes ___ No ___
10. Which of the following possible benefits of receiving a Certification through the Clean Bay Certification Program are most important to YOUR business? Place a rank of '1' next to the most important benefit, a rank of '2' next to the second most important benefit; a rank of '3' next to the third most important benefit, and so on until you place a rank of '8' next to the least important benefit to your business. Use each number only once:
_____ A window display recognizing the restaurant's certification
_____ Recognition of the restaurant in a local paper
_____ Recognition on the Santa Monica Bay Restoration Commission's website
_____ Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings
_____ Logo on restaurant website
_____ Recognition at City Council Meeting
_____ Mention on Local Cable Channel
_____ Promotion at public event (for example, a booth at a *Taste of the Bay Fair*)
_____ Other: _____
11. What is the primary reason you chose to get this certification? Circle one or complete "Other"
Social responsibility Business Marketing Health Dept. Inspection Other _____
12. Is there anything else you would like to comment on? _____

Questionnaire for Public Intercept Survey

The Cities of Manhattan Beach, Hermosa Beach, Redondo Beach, Torrance and the Santa Monica Bay Restoration Commission (SMBRC), have implemented the *Clean Bay Restaurant Certification Program (CBCP)*. The goal of this program is to improve the water quality of the ocean by encouraging restaurants to modify their operational behavior. I'd like to ask you some questions concerning your knowledge and perceptions of this program. The survey will only take about 5 minutes. Your participation, of course, is voluntary.

1. Name: _____
2. Gender? Male Female
3. Age? 18-25 26-45 46-65 66+
4. City of residence? _____
5. How often do you go to the beach? ____Never ____Rarely ____Sometimes ____Often
6. How many days per week do you eat out at a restaurant? (Circle one)
1-2 2-3 3-4 5-6 6-7
7. What types of restaurants do you usually eat at? (Circle all that apply)
Indoor Mall Outdoor Strip Mall Fast Food Stand Alone Restaurant Take Out
8. Are you aware of the Clean Bay Certification Program? Yes____ No____
9. Have you seen the certification before? Yes____ No____
10. Do you know what the certification stands for? Yes____ No____
11. Where have you seen/heard about restaurants certified under the Clean Bay Certification Program? (Mark an "x" for those that apply below)
____A window display of the certification
____Recognition of restaurant in a local paper
____Recognition on the Santa Monica Bay Restoration Commission's website
____Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings
____Other: _____
12. Does the certification improve the image of the restaurant? Yes____ No____
13. How important is the certification to your choice of restaurant? (Circle one)
Very Important Somewhat Important Don't Know
Not Too Important Not At All Important
14. Provide an example of a good and a bad management practice for stormwater pollution:
Good: _____
Bad: _____

Appendix 3

- Response Data from Restaurant Managers/Owners and Public Intercept Survey.

Public Survey Results
 Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
1	1			1			1				
2	1			1				1			
3		1		1				1			
4		1		1					1		
5	1			1					1		
6	1		1					1			
7		1	1								1 Long Beach
8	1				1			1			
9	1				1			1			
10		1			1			1			

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
11		1			1		1				
12	1					1	1				
13	1				1		1				
14	1			1			1				
15	1			1			1				
16	1			1			1				
17		1	1				1				
18	1		1					1			
19		1	1				1				
20		1	1								1 El Segundo
21		1	1								1 Lakewood
22		1	1					1			
23	1			1				1			

Public Survey Results
 Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
24		1	1								1 Los Angeles
25	1					1	1				
26	1					1					1 Lancaster
27	1					1					1 Hawthorne
28	1			1					1		
29		1			1						1 Playa Vista
30	1			1			1				
31		1		1					1		
32	1			1			1				
33	1		1								1 Downy
34		1		1			1				

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
47		1	1					1			
48	1				1			1			
49	1			1					1		
50	1				1			1			
51		1		1				1			
52	1			1					1		
53		1		1				1			
54	1			1				1			
55	1			1				1			
56		1	1					1			
57		1		1				1			
58	1			1				1			
59		1		1					1		

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
60		1		1				1			
61	1				1			1			
62		1				1		1			
63		1	1							1	
64	1			1					1		
65	1		1						1		
66	1		1								1 Southgate
67	1		1								1 Southgate
68	1					1		1			
69	1				1			1			
70		1		1							Marina del Rey
71	1			1				1			
72		1	1						1		
73	1				1			1			
74		1	1					1			
75		1			1			1			
76		1		1							1 El Segundo
77	1			1				1			
78	1			1							1 Dana Point
79	1		1					1			

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
80		1		1				1			
81	1			1					1		
82	1			1							1 HolyGlen
83	1			1				1			
84	1				1				1		
85	1				1			1			
86	1					1					Butte, 1 Montana
87		1		1					1		
88		1		1				1			
89		1		1					1		
90		1			1			1			
91		1		1				1			

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	2. Gender?		3. Age?				4. City of residence?				
	Male	Female	18-25	26-45	46-65	66+	Manhattan Beach	Hermosa Beach	Redondo Beach	Torrance	Other
92	1			1				1			
93		1		1				1			
94	1				1						1 Hawthorne
95	1			1				1			
96		1		1				1			
97	1		1					1			
98		1	1								Rochester, 1 New York
99		1	1					1			
100	1					1					
101	1			1							Rancho Park, 1 Los Angeles
Totals	55	46	22	49	21	9	54	13	7	0	26 0
101	54%	46%	22%	49%	21%	9%	53%	13%	7%	0%	26% 0%

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	5. How often do you go to the beach?				6. How many days per week do you eat out at a restaurant? (Circle one)						7. What types of restaurants do you usually eat at? (Circle all that apply)				
	Never	Rarely	Sometimes	Often	1-2	2-3	3-4	4-5	5-6	6-7	Indoor Mall	Outdoor Strip Mall	Fast Food	Stand Alone Restaurant	Take Out
35				1			1								1
36		1			1										1
37			1			1									1
38				1	1										1
39				1		1					1	1	1	1	1
40				1	1						1	1	1	1	1
41				1		1					1	1	1	1	1
42				1						1		1		1	1
43				1			1						1	1	1
44				1			1						1	1	1
45			1				1							1	
46				1		1					1	1	1		

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	5. How often do you go to the beach?				6. How many days per week do you eat out at a restaurant? (Circle one)						7. What types of restaurants do you usually eat at? (Circle all that apply)				
	Never	Rarely	Sometimes	Often	1-2	2-3	3-4	4-5	5-6	6-7	Indoor Mall	Outdoor Strip Mall	Fast Food	Stand Alone Restaurant	Take Out
60				1	1										1
61				1			1								1
62				1	1								1		
63			1		1										1
64		1							1						1
65				1			1				1	1	1	1	1
66				1					1						1
67			1						1						
68				1	1										1
69				1	1										1
70				1		1					1	1	1	1	1
71				1		1							1	1	
72				1	1									1	1
73	1				1								1	1	
74			1							1		1		1	1
75				1		1									1
76				1			1								1
77				1			1					1		1	
78				1					1						1
79				1					1				1	1	1

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	5. How often do you go to the beach?				6. How many days per week do you eat out at a restaurant? (Circle one)						7. What types of restaurants do you usually eat at? (Circle all that apply)				
	Never	Rarely	Sometimes	Often	1-2	2-3	3-4	4-5	5-6	6-7	Indoor Mall	Outdoor Strip Mall	Fast Food	Stand Alone Restaurant	Take Out
80				1	1						1	1	1	1	1
81				1	1									1	
82				1			1								1
83				1	1							1			1
84				1			1								1
85				1			1				1				1
86				1			1				1	1	1	1	1
87				1			1					1			1
88				1			1								1
89				1			1								1
90				1	1										
91				1			1				1	1			1

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	5. How often do you go to the beach?				6. How many days per week do you eat out at a restaurant? (Circle one)						7. What types of restaurants do you usually eat at? (Circle all that apply)					
	Never	Rarely	Sometimes	Often	1-2	2-3	3-4	4-5	5-6	6-7	Indoor Mall	Outdoor Strip Mall	Fast Food	Stand Alone Restaurant	Take Out	
92				1		1								1		
93				1		1						1	1	1	1	
94				1	1									1		
95				1		1								1	1	
96		1				1								1	1	
97				1	1									1	1	
98		1				1								1		
99				1		1								1		
100		1				1							1	1	1	
101				1		1							1	1		
Totals	1	9	24	66	33	25	24	0	11	6	14	21	22	90	49	
	10	1%	9%	24%	65%	33%	25%	24%	0%	11%	6%	14%	21%	22%	89%	49%

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	8. Are you aware of the Clean Bay Certification Program?		9. Have you seen the certification before?		10. Do you know what the certification stands for?		11. Where have you seen/heard about restaurants certified under the Clean Bay Certification Program? (Mark an "x" for those that apply below)					
	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other	
1	1			1	1							
2		1		1		1						
3		1		1		1						
4	1			1	1				1			
5		1		1		1						
6		1		1		1						
7	1		1			1						1 Volunteer
8	1		1			1		1				
9	1			1	1					1		
10		1		1		1						

Public Survey Results
 Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other	
11	1			1			1					
12												
13		1		1			1					
14	1			1	1							
15	1			1	1							
16			1		1	1						
17			1		1		1					
18				1			1					
19			1		1	1						
20				1			1					
21			1		1	1						
22				1			1					
23				1			1					

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other	
24	1		1			1	1					
25		1		1	1							
26												
27		1		1		1						
28			1		1		1					
29	1			1		1				1		
30	1			1		1						1 Friend
31	1			1		1						1 Friend
32	1			1		1		1				1 Friend
33		1		1		1						
34		1		1		1						

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other
35		1		1		1					
36		1		1	1		1	1	1	1	
37		1		1		1					
38		1		1	1						1
39	1			1	1						
40		1		1	1						
41		1		1	1						
42		1		1		1					
43		1		1		1					
44		1		1		1					
45	1		1		1			1			
46		1		1		1					

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other
47		1		1		1					
48		1		1		1					
49		1		1		1					
50		1		1		1					
51		1		1		1					
52		1		1		1					
53		1		1		1					
54		1		1		1					
55		1		1		1					
56	1			1	1			1			
57		1		1		1					
58		1		1		1					
59	1			1		1					

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other
60		1		1		1					
61		1		1		1					
62		1		1		1					
63		1		1		1					
64		1		1		1					
65		1		1		1					
66		1		1		1					
67	1			1	1			1		1	
68		1		1		1					
69		1		1		1					
70		1		1		1					
71		1		1		1					
72		1		1		1					
73		1		1		1					
74		1		1		1					
75		1		1		1					
76		1		1		1					
77		1		1		1					
78		1		1		1					
79		1		1	1		1	1			

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other	
80		1		1		1						
81		1		1		1						
82		1		1		1						
83		1		1		1						
84		1		1		1						
85	1		1		1		1	1				
86	1			1	1			1				
87		1		1		1						
88		1		1	1						1	Volunteer
89	1			1	1							
90		1		1		1						
91	1		1		1					1		

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Yes	No	Yes	No	A window display of the certification	Recognition of restaurant in a local paper	Recognition on the Santa Monica Bay Restoration Commission's website	Recognition of the restaurant through the California Restaurant Association's national newsletter and monthly meetings	Other		
92		1		1		1							
93		1		1		1							
94		1	1			1	1						
95		1		1		1							
96		1		1		1							
97		1		1		1							
98		1		1	1							1 Volunteer	
99		1		1		1							
100		1		1		1							
101		1		1		1							
Totals	22	77	9	90	29	70	9	7	4	2	7	0	
	99	22%	76%	9%	89%	29%	69%	9%	7%	4%	2%	7%	0%

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	12. Does the certification improve the image of the restaurant?		13. How important is the certification to your choice of restaurant? (Circle one)					14. Provide an example of a good and a bad management practice for stormwater pollution:			
	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
1	1			1							
2					1				1	1	Collect poor water in curb drainage Rinsing floor mats in streets
3	1				1				1	1	Recycling program Hosing off floor mats with chemicals/cleaning products
4	1				1				1	1	Disposal of appropriate materials in appropriate manner Dumping toxics directly into drain
5	1				1				1	1	Proper disposal of waste Using the drain for all waste
6	1		1						1	1	Recycling bottles Bad grease trap maintenance
7	1		1						1	1	No trash around dumpsters Dirty, trash all over the place
8	1				1				1	1	Proper disposal of grease Non biodegradable substances down drains
9	1		1								
10		1					1				

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	12. Does the certification improve the image of the restaurant?		13. How important is the certification to your choice of restaurant? (Circle one)					14. Provide an example of a good and a bad management practice for stormwater pollution:			
	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
11	1						1				
12		1					1			1	Pollution of Beach
13							1	1		1	Keeping water out of stormdrains
14	1			1							Dumping waste in storm drains
15	1					1					Disposing of waste improperly
16	1						1				
17				1							
18	1			1				1		1	Not dumping grease down the drain
19	1		1					1		1	Proper disposal
20	1			1							
21	1						1	1		1	Restaurants that have dumpsters
22	1			1				1		1	Avoiding washing off frease mats into street
23	1		1								Negligence - not pouring grease down drain

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	12. Does the certification improve the image of the restaurant?		13. How important is the certification to your choice of restaurant? (Circle one)					14. Provide an example of a good and a bad management practice for stormwater pollution:			
	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
24	1			1				1		Cleaning the outside of the restaurant	Having a lot of litter outside
25	1					1					
26											
27	1			1							
28	1			1				1		Regularly sweeping parking lots and sidewalks	Illegally dumping waste directly into catch basins
29	1			1				1		Control litter effectively	Washing pavement and spills into street, alley
30	1			1				1		Screens on storm drains	Too much impervious pavement
31	1			1				1		Keep outside trashcans covered, away from stormdrains	Washing mats/hoods outside, allowing runoff into stormdrains
32		1				1		1		Avoid grease in drains or trash bins	Grease/paint down sink drains
33	1		1								
34	1							1			

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	12. Does the certification improve the image of the restaurant?		13. How important is the certification to your choice of restaurant? (Circle one)					14. Provide an example of a good and a bad management practice for stormwater pollution:				
	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:	
35	1			1				1		1	Regular grey water used for non-food cleaning	Unfiltered runoff from cleaning outdoor area
36	1			1								
37	1			1								
38	1		1									
39	1		1									
40	1		1									
41	1		1					1		1	Compost	Dumping oil down the drain (fry cooking oil)
42	1			1								
43	1					1				1		Wasting water, no water conservation
44	1					1						
45	1		1									
46	1							1	1		Education and training, area free and visible of the stormdrain	

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	12. Does the certification improve the image of the restaurant?		13. How important is the certification to your choice of restaurant? (Circle one)					14. Provide an example of a good and a bad management practice for stormwater pollution:			
	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
47	1			1							
48	1			1							
48	1						1				
49	1			1				1		General cleanliness, grease and food disposal	Poor trash disposal
49	1		1					1		Covered trash dumpsters	Food on floor
50	1		1					1		Outdoor cleanliness	Dumping grease in street
50	1			1				1		Dispose of trash properly	Dispose of waste in non-environmentally friendly way
51				1							
51				1				1		Ash tray outside 1 Rockin Fish	Cigarettes in front of Mangiamo
52	1			1				1		Dumping out dish water in swamps	Dumping out dishwater in ocean
52	1		1					1		Proper disposal of grease	Overflowing garbage
53	1			1				1		1 Recycle oil	No recycling
53		1					1	1		Recycling - garbage and water	Outside spraying mats off

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
60	1			1				1		Improper disposal of food	Puring grease down drain
61							1				
62											
63											
64		1					1	1		Clean	No service
65								1			
66		1					1				
67		1	1								
68	1		1								
69	1		1							1	Poor cleaning products in stordrain
70	1						1				
71	1		1								
72	1						1				
73		1					1				
74		1					1				
75	1			1				1		Screens over drains, signs on drains	Doing nothing
76	1			1				1		Dumping dirty mop water into drain in the restaurant	Dumping dirty mop water into the alley
77	1			1				1		Treatment plants	storm drain runoff
78	1			1							
79	1			1				1		1 Clean water	not clean water

Public Survey Results
Clean Bay Restaurant Certification Program

1. Name?	12. Does the certification improve the image of the restaurant?		13. How important is the certification to your choice of restaurant? (Circle one)					14. Provide an example of a good and a bad management practice for stormwater pollution:			
	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
80	1			1				1		1 Disposal in dumpsters vs. garbage disposal	Garbage disposal
81		1					1	1		1 Not disposing of trash properly	
82	1		1					1		1 Use solar energy/alternative energy green power sources	grease - improper disposal of waste
83	1						1	1		No dumping signs	
84		1					1			Signs-warning hazard	
85	1		1					1		Signs	
86	1			1				1		1 Open drains	Closed drains with screens
87	1						1				
88	1		1								
89				1				1		1 Using purified water	Not using purified water
90		1					1				
91	1			1				1		1 Recycling	Cleaning parking lot with hose

Public Survey Results
Clean Bay Restaurant Certification Program

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	Yes	No	Very Important	Somewhat Important	Not Too Important	Not At All Important	Don't Know	Good:	Bad:	Good:	Bad:
92							1				Dumping of water/ice into streets
93	1			1				1		Clean dishes and clean water	Dirty surroundings and water
94	1			1							
95		1					1	1		Some sort of cleaning and purification process	No drinking stormwater pollution
96							1				
97	1			1				1		1 Servers	Street Drinking water
98	1			1							
99							1				
100	1						1	1		1 Fine all violators	Guidance on the conditions
101	1					1		1		1 Filtering plants - not just straight into the ocean	Straight into the ocean
Totals	75	13	21	43	5	9	20	49		49	
	88	74%	13%	21%	43%	5%	9%	20%		49%	

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