9.0 EXISTING DEVELOPMENT

9.1 Introduction

Stormwater discharges from commercial and industrial facilities can become contaminated when material management practices allow exposure to stormwater and/or there is commingling of runoff with wastes. The purpose of **DAMP Section 9.0** is to provide a programmatic framework for the regulatory oversight of activities in commercial and industrial areas. Through inspections, outreach and requiring compliance with water quality ordinances, the Permittees are able to pro-actively address the quality of urban and stormwater runoff from industrial and commercial facilities. In addition, **DAMP Section 9.0** also provides a programmatic framework, based upon education and outreach approaches, for addressing activities in residential areas. Both the industrial/commercial and residential elements were added to the Program by the Third Term Permits.

9.2 Accomplishments

9.2.1 Model Industrial/Commercial Program

The Model Industrial/Commercial Program was developed and implemented in 2002-03. It transformed the Permittees oversight of commercial and industrial facilities/activities by establishing a formal inspection program where previously there had been a series of notifications and inspections initiated by complaints. The Model Industrial/Commercial Program requires the Permittees to:

- Identify and inventory facilities/activities with the potential to discharge pollutants:

  Initially, 8,546 industrial facilities **(Table 9.1; Figure 9.1)** and 22,789 commercial facilities were identified and inventoried **(Table 9.2; Figure 9.2).**

- Prioritize facilities based upon water quality threat and receiving water sensitivity:

  The Permittees prioritized 8,546, 8,604 and 2,821 industrial facilities in 2002-03, 2003-04 and 2004-05 respectively. Concurrently, 22,789, 23,778, and 25,411 commercial facilities were similarly evaluated and prioritized over the same respective periods.

- Establish Model Maintenance Procedures:

  Twenty-two (22) model BMP fact sheets have been prepared which include a description of specific minimum source control BMPs for common industrial and commercial activities that may discharge pollutants. Specific BMPs may be adjusted on a jurisdictional basis as necessary. Where applicable, optional controls have been identified that should be considered for implementation at high priority facilities.

  Typically each fact sheet contains the following sections:
  - Pollution Prevention

- Suggested Best Management Practices
- Training
- References and Resources

- Conduct inspections and monitoring to ensure that commercial and industrial facilities are minimizing their impacts on the environment:

  In the 2002-03, 2003-04 and 2004-05 reporting periods the Permittees completed 1,017, 4,029 and 2,706 inspections, respectively.

- Conduct inspections of food facilities:

  The Orange County Permittees developed and submitted a food facility inspection program to the Santa Ana Regional Board on July 1, 2002. This program, which also meets the inspection requirements of the San Diego Regional Board, involves inspections and the distribution of educational materials at the approximately 10,000 existing restaurants countywide. The implementation of the Program is an addition to the environmental health inspections conducted by the County of Orange Health Care Agency (HCA). The HCA inspectors identify NPDES issues during these inspections, and they are forwarded to the respective Permittees and addressed by Permittee staff.

  For the 2004-05 reporting period, 25,078 food facility inspections were conducted and 1,416 were reported to have NPDES issues **(Table 9.3)**.

- Undertake Non-compliance Notification and Enforcement:

  Enforcement for the industrial and commercial component of the Existing Development Program is the responsibility of individual Permittees. Each Permittee has several different levels of enforcement to choose from for different types of situations. This includes – from least severe to most severe – issuance of an educational letter, a notice of non-compliance, an administrative compliance order, a cease and desist order, or a misdemeanor/infraction.

  The Permittees reported a total of 371 enforcement actions against industrial facilities during the 2004-05 reporting period

- Participate in Training:

  To assist municipal staff in implementing the Existing Development Program for industrial and commercial facilities, five training modules were developed:

  1. Existing Development Program Management Module (targeting jurisdictional program coordinators and providing guidance regarding management of an inspection program;
  2. Field Implementation of Existing Development Program Module (targeting inspectors and providing guidance on conducting inspections);

3. Existing Development Program Training – Automobile Mechanical Repair, Maintenance, Fueling and Cleaning Businesses Module;
4. Existing Development Program Training – Landscape Maintenance Businesses Module, and
5. Existing Development Program Training – Industrial Stormwater Monitoring Module.

- Conduct Education and Outreach:

A number of education and outreach efforts, conducted under the overall public education element of the Program (see **DAMP Section 6.0**), directly supported implementation of the Model Industrial Commercial Program, specifically:

Mailings – During 2003-05 there was one mass mailing of an outreach letter for corporate environmental managers of food service establishments (FSE) and one mass mailing of education materials to all Orange County FSEs.

Outreach Materials –The following materials were developed by the Public Education Committee supportive of **Section 9.0:**

Brochures

- *Mobile Detailing and the Water Quality Act*
- *Water Quality Guidelines for Exterior Restaurant Cleaning Operations*
- *Water Quality Guidelines for Carpet Cleaning Activities*
- *Help Prevent Ocean Pollution: Tips for Hardscape and Landscape Drains*
- *Help Prevent Ocean Pollution: Tips for Home Improvement*

Posters

- Food/Restaurant Industry
- *"Help Prevent Ocean Pollution"* Food Facility BMPs Poster
- Auto Repair Industry
- Good Gas Station Operating Practices

"The Quad" - "The Quad" was developed as a tool to communicate with Cities, Businesses, Utilities and Organizations. Each Quad contains a newsletter, press release, fact sheet and billing insert focusing on a seasonal stormwater theme. Four seasonal quads were created during this reporting period, two of which were distributed in this reporting period. The following were the 2004-05 Quad themes:

- "Spring Into Cleaning – Disposal of Household Hazardous Waste"
- "Summer: Yard Care"
- "Fall: Prepare for the Rainy Season"
- "Winter: New Years Resolution – Green in the New Year"

FSE Outreach – The following materials were developed specifically for FSEs.

- *"Help Prevent Ocean Pollution": A Guide for Food Service Establishments*
- *"Help Prevent Ocean Pollution"* Food Facility BMPs Poster
- *"Help Prevent Ocean Pollution"* Food Facility BMPs Stickers
- Bilingual CD-Rom illustrating appropriate Food Facility BMPs
- Food Facility BMP PowerPoint Presentation
- Food Facility BMP Fact Sheet

Other: Developed an urban nutrient outreach program targeting independent gardeners operating in the San Diego Creek/Newport Bay Watershed with Proposition 13 funding awarded to the County to investigate the sources of nutrients from the urban environment and test the effectiveness of structural and non-structural BMPs.

9.2.2 Model Residential Program

The Model Residential Program was developed and implemented in 2002-03 to further reduce pollutants potentially released into the environment from residential activities, including efforts to reduce over-watering. The main thrust of the residential program is to advocate pollution prevention practices as the most effective method to protect receiving water quality. The Model Residential Program requires the Permittees under the jurisdiction of the San Diego Regional Board to:

- Develop a source identification procedure and prioritize residential areas based on proximity to Environmentally Sensitive Areas (ESAs) within the Permittee's jurisdiction.

- Identify Best Management Practices (BMPs) most appropriate for each area, based on residential activities:

  See discussion of Outreach Materials (below).

- Conduct public outreach and education:

  A number of education and outreach efforts, conducted under the overall public education element of the Program (see **DAMP Section 6.0**), directly supported implementation of the Model Residential Program, specifically:

  Outreach Materials –The following materials were developed by the Public Education Committee supportive of **Section 9.0:**

  Brochures
  - *Help Prevent Ocean Pollution: Tips for Hardscape and Landscape Drains*
    Help Prevent Ocean Pollution:Tips for Horse Care
  - *Help Prevent Ocean Pollution: Tips for Using Paint*
  - *Help Prevent Ocean Pollution: Tips for Home Improvement*

  "The Quad" - "The Quad" was developed as a tool to communicate with

cities, businesses, utilities and organizations such as home owner associations. Each Quad contains a newsletter, press release, fact sheet and billing insert focusing on a seasonal stormwater theme. Four seasonal quads were created during this reporting period, two of which were distributed in this reporting period. The following were the 2004-05 Quad themes:

- "Spring Into Cleaning – Disposal of Household Hazardous Waste"
- "Summer: Yard Care"
- "Fall: Prepare for the Rainy Season"
- "Winter: New Years Resolution – Green in the New Year"

9.2.3 Other Programs

During the reporting period, the Principal Permittee developed an urban nutrient outreach program targeting residential gardeners operating in the San Diego Creek/Newport Bay Watershed. The outreach program was one element of a Proposition 13 funded investigation of nutrient sources in an urban environment and structural and non-structural BMP effectiveness.

9.3 Assessment

The current and potential Program Effectiveness Assessment Outcome Levels that could be assessed within the current program are summarized in **Table 9-4** (Industrial/Commercial) **and Table 9.5** (Residential).

9.3.1 Model Industrial/Commercial Program

Inventories: Completing the inventory of industrial and commercial facilities has been problematic for some jurisdictions since the Standard Industrial Classification (SIC) codes on the business licenses (the primary source of this information for those jurisdictions with a business license program) have been incorrectly provided by businesses.[1] In addition, inventorying commercial facilities is extremely difficult because they are numerous, often transitory, and can only be identified through site visits. Mobile businesses are particularly problematic because they typically do not have a permanent facility location.

The Unified Annual Progress Reports include tables reporting the total number of commercial and industrial facilities and their respective prioritizations, organized by

[1] The Notice of Intent (NOI) form attached to the Draft Industrial General Permit (February 2005) and the SWRCB's NOI processing system have been modified to accept both Standard Industrial Classification (SIC) codes and North American Industrial Classification System (NAICS) codes. The USEPA has indicated it intends to incorporate the NAICS codes into the storm water regulations but has not yet done so. The Proposed 2006 Multi-Sector General Permits for Stormwater Discharges Associated with Industrial Activity (MSGP) contains a note that "a complete list of SIC Codes (and conversions from the newer North American Industry Classification System [NAICS]) can be obtained from the Internet at www.census.gov/epcd/www/naics.html or in paper form from various locations in the document titled Handbook of Standard Industrial Classifications, Office of Management and Budget, 1987."

Permittee. However, since the structure and content of the jurisdictional databases can differ between the Permittees, analysis of data on a regional or countywide basis is challenging. Indeed, there appears to be a persistent disparity between the number of industrial and commercial facilities inventoried and the number of industrial and commercial facilities that were prioritized over the reporting period (see **Tables 9.1** through **9.3** and **Figures 9.1** through **9.2**). This disparity points to the need to augment facility descriptions beyond SIC codes.

DAMP Modification:

- Provide more detailed industrial and commercial facility descriptions to assist in inventory standardization.

Prioritization: Commercial and industrial facilities must be classified as high, medium, or low priority to determine the frequency of inspection. The DAMP details a risk and receiving water sensitivity based point system for classification, the result of which is a total score indicating the facility priority. A change in facility prioritization can be indicative of programmatic success, since a finding that BMPs are being implemented (a behavior change) reduces the risk of pollutants being discharged which can result in a change in prioritization. However, both Permits specify mandatory high-priority commercial and industrial facilities. In addition, the San Diego Region Permittees are required to inventory only high-priority commercial facilities i.e. there are no designation of medium and low priority commercial facilities.

Headline Indicator – Prioritization of Facilities (Industrial Facilities): For 2004-05, 2,821 industrial facilities were prioritized, 27% of which were ranked as high priority; for 2003-04, 8,604 industrial facilities were prioritized, 13% of which were ranked as high priority; and for 2002-03, 8,546 industrial facilities were prioritized, 15% of which were ranked as high priority **(Table 9.1; Figure 9.1)**.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

Headline Indicator – Prioritization of Facilities (Commercial Facilities): For 2004-05, 25,411 commercial facilities were prioritized, 20% of which were ranked as high priority; for 2003-04, 23,778 commercial facilities were prioritized, 24% of which were ranked as high priority; and for 2002-03, 22,789 commercial facilities were prioritized, 22% of which were ranked as high priority **(Table 9.2; Figure 9.2)**.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

The year-to-year comparisons suggest some inconsistent reporting of this indicator. Part of this inconsistency arises from the interpretation of the extent to which a facility "tributary to" a sensitive receiving water, which is a key determinant in prioritization. From the Annual Progress Reports (See **DAMP Appendix C**), it is evident that "tributary to" is variously being interpreted as more than "next to" but "less than the whole watershed." Also, although the point system is used by many of the Permittees, some perceive it as time-consuming and too subjective, and, as a result, may rely primarily on professional judgment. In addition, the ability of the prioritization process to meaningfully provide for a risk-based approach is also dampened by the requirements for mandatory high priority sites. Despite these reservations, it is possible that the decreased numbers of high priority sites in the most recent annual reporting period may also reflect increased findings of no stormwater exposures and diminished site risk.

ROWD Commitment:

- Develop a more detailed prioritization process to improve standardized reporting and to support re-direction of inspection resources to significant sources of priority constituents of concern

Inspection: The Permittees generally conduct two types of inspections: compliance inspections and follow-up inspections. Should an inspected site demonstrate non-compliance, inspection frequency must be increased as specified in the Permits until compliance is achieved. Although these inspections are generally viewed as beneficial, there is a regulatory agency perception (highlighted in meetings with Regional Board staff) that the inspections may be missing key items of concern and discouraging findings of non-compliance which add to the inspection burden by requiring additional follow-up activity.

Headline Indicator – Number of BMPs Implemented (Industrial Facilities): For 2004-05, 2,706 industrial facilities were reported to have BMP implementation, 68% of which have full BMP implementation; for 2003-04, 4,029 industrial facilities were reported to have BMP implementation, 59% of which have full BMP implementation; and for 2002-03, 1,026 industrial facilities were reported to have BMP implementation, 53% of which have full BMP implementation **(Table 9.6; Figure 9.3)**.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

Headline Indicator – Number of BMPs Implemented (Commercial Facilities): For 2004-05, 5,566 commercial facilities were reported to have BMP implementation, 59% of which have full BMP implementation; for 2003-04, 8,484 commercial facilities were reported to have BMP implementation, 77% of which have full BMP implementation; and for 2002-03, 1,389 commercial facilities were reported to have BMP implementation, 63% of which have full BMP implementation **(Table 9.7; Figure 9.4)**.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

It is also proving difficult for the inspectors to categorize BMP implementation at commercial and industrial sites along a three-point scale (fully, partially, or not implemented) because such a scale requires overly subjective determinations. Lastly, the requirement for follow-up inspections of all non-compliant sites every month is perceived to be excessive due to the already large number of sites in many cities' inventories.

ROWD Commitment:

- Develop effective alternative to re-inspection such as self-certification.

Headline Indicator – Food Facility Inspections: For the 2004-05 reporting period, 25,078 food facility inspections were conducted and 1,416 were reported to have NPDES issues **(Table 9.3)**. For the 2003-04 reporting period, 12,635 food facility inspections were conducted and 1,298 were reported to have NPDES issues in the six month period of program implementation.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

The 2003-04 comparison suggests that food facility inspections and the associated education and outreach efforts are having a positive impact since the incidence of NPDES issues decreases from 1 in 10 inspections to 1 in 17 inspections .

Enforcement: Permittees are required to use a progressive enforcement approach and initiate enforcement actions where commercial and industrial facilities are found to be out of compliance. In general, specific facilities that are repeat offenders are identified through active database inventories and, in most cases, progressive enforcement is used to bring repeat offenders into compliance.

Headline Indicator – Number and Level of Enforcement Actions (Industrial Facilities): The Permittees reported a total of 371 enforcement actions against industrial facilities during the 2004-05 reporting period, 3,146 during the 2003-04 reporting period, and 533 during the 2002-03 reporting period **(Table 9.8)**. The 2004-05 figure represents an 89% decrease from the total reported in 2003-04.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

Headline Indicator – Number and Level of Enforcement Actions (Commercial Facilities): The Permittees reported a total of 1,192 enforcement actions against commercial facilities during the 2004-05 reporting period, 1,534 during the 2003-04 reporting period, and 490 during the 2002-03 reporting period **(Table 9.9)**. The 2004-05 figure represents a 22% decrease from the total reported in 2003-04.

☒ Level 1: Implement Program

☒ Level 3: Behavior Change

The 2003-04 comparison suggests some inconsistent reporting (e.g. Newport Beach, which compiled enforcement activity data in 2004-05 Unified Report, Section 2.10.0). However, the consistent pattern of reduced enforcement activity in the most recent reporting period across the Construction, Existing Development, and Illegal Discharges/Illicit Connections areas of the Program also suggests an increased level of compliance, also viewed as behavior change, by the regulated community.

Training: The Permits require that staff is adequately trained. In response, the Permittees developed several training modules, which are provided annually throughout the year. The training that has taken place has been deemed helpful. However, the training modules need to be updated frequently enough to keep pace with the developments in the field of stormwater management, maintain staff interest, and to provide inspectors with a technical understanding of a broad array of BMPs that can be shared with facility owner/operators.

ROWD Commitment:

- Prepare defined expertise and competencies for authorized inspector positions and develop a training schedule to meet these requirements

9.3.2 Model Residential Program

The Residential Model Program was developed to fulfill the residential activity and related commitments and requirements of Section F.3.d of the SDR Permit. The Common Interest Areas/Homeowners Associations (CIA/HOA) Activities Program was developed to fulfill the existing CIA/HOA activity commitments and requirements of Section F.6 of the SDR Permit.

Identification and Inventory: The SDR Permittees are required to identify high priority areas and activities as defined in the Permit. CIAs are considered to include high-priority areas and activities.

BMP Implementation: The SDR Permittees are required to identify minimum BMPs for high-priority areas and activities and, as necessary, additional controls. Some Permittees use a baseline BMP implementation approach for Residential areas and CIAs/HOAs unless inspectors notice a specific concern.

Enforcement and Reporting: SDR Permittees are required to enforce their stormwater ordinances for all residential areas and activities as necessary to maintain Permit compliance. The primary issue with residential areas and CIAs/HOAs concerns over irrigation. Enforcement actions taken against CIAs/HOAs include letters or notices, which generally leads to resolution of the issues. Some Permittees have reported some limited success using self certifications as a tool for effective implementation of the program within residential and CIA/HOA areas.

9.4 Summary

The Third Term Permits have required the Permittees to develop and implement a formal inspection program commencing with an initial inventory of potentially 30,000 facilities being subject to municipal oversight for stormwater and urban runoff issues. Over the first three years of this effort, there has been a clear trend in the level of inspection and enforcement activity that, despite some uncertainties with respect to reporting, suggests increased BMP implementation and compliance with local water quality ordinances by the existing industrial and commercial sector in Orange County. Based upon perceived positive outcomes of the Existing Development elements of the DAMP, the Permittees are proposing minor program modifications based upon the need for the continued training of inspectors and the sensitizing of the prioritization and inspection process toward a more effective risk-based approach.

Table 9.1: Countywide Permittees' Industrial Inventory and Prioritization, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEE	HIGH 2002-03	HIGH 2003-04	HIGH 2004-05	MEDIUM 2002-03	MEDIUM 2003-04	MEDIUM 2004-05	LOW 2002-03	LOW 2003-04	LOW 2004-05	TOTAL 2002-03	TOTAL 2003-04	TOTAL 2004-05
Aliso Viejo	2	2	2	65	65	42	0	0	0	67	67	44
Anaheim	129	115	93	419	45	0	868	1,126	299	1,416	1,286	392
Brea	11	14	13	32	28	27	167	137	111	210	179	151
Buena Park	24	184	115	52	18	17	0	17	27	76	219	159
Costa Mesa	489	287	13	329	475	2	0	40	128	818	802	143
Cypress	2	4	0	5	2	0	34	38	0	41	44	0
Dana Point	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Fountain Valley	4	44	4	0	0	48	32	0	0	36	44	52
Fullerton	36	38	37	23	23	0	554	344	0	613	405	37
Garden Grove	25	41	30	35	51	11	310	296	25	370	388	66
Huntington Beach	30	25	30	38	69	13	645	529	23	713	623	66
Irvine	236	3	95	98	21	0	841	520	0	1,175	544	95
La Habra	NA	65	65	NA	249	48	NA	228	59	NA	542	172
La Palma	8	5	5	2	3	5	9	11	0	19	19	10
Laguna Beach	0	0	0	28	23		35	14		63	37	0
Laguna Hills	NA	1	0	NA	0	0	NA	0	0	NA	1	0
Laguna Niguel	2	1	0	0	0	0	0	0	0	2	1	0
Laguna Woods	0	0	0	0	0	0	0	0	0	0	0	0
Lake Forest	11	11	12	0	0		0	0		11	11	12
Los Alamitos	6	7	1	71	19	27	24	96	23	101	122	51
Mission Viejo	5	4	4	30	31		56	56		91	91	4
Newport Beach	2	2	2	0	0	0	11	11	11	13	13	13
Orange	69	52	72	422	416	228	256	249	0	747	717	300
Placentia	21	16	12	18	0		6	109	40	45	125	52
R S Margarita	1	1	3	10	10	10	19	19	19	30	30	32
San Clemente	2	3	2	72	72		0	0		74	75	2
S J Capistrano	1	1	1	11	5	5	15	8	4	27	14	10
Santa Ana	102	100	82	1,266	1,031	615	0	574	5	1,368	1,705	702
Seal Beach	2	2	2	0	0	0	0	0	0	2	2	2
Stanton	NA	18	18	NA	17	15	NA	118	0	NA	153	33
Tustin	9	11	13	59	6	7	0	49	55	68	66	75
Villa Park	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Westminster	10	4	4	37	18	18	34	6	6	81	28	28
Yorba Linda	29	4	7	214	206	88	0	13	2	243	223	97
County of Orange	13	16	12	13	12	9	0	0	0	26	28	21
TOTALS	**1,281**	**1,081**	**749**	**3,349**	**2,915**	**1,235**	**3,916**	**4,608**	**837**	**8,546**	**8,604**	**2,821**

NA = Not Available

Table 9.2: Countywide Permittees' Commercial Inventory and Prioritization, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEE	HIGH 2002-03	HIGH 2003-04	HIGH 2004-05	MEDIUM 2002-03	MEDIUM 2003-04	MEDIUM 2004-05	LOW 2002-03	LOW 2003-04	LOW 2004-05	TOTAL 2002-03	TOTAL 2003-04	TOTAL 2004-05
Aliso Viejo	153	153	110	0	0		0	0		153	153	110
Anaheim	114	14	13	278	310	310	194	307	307	586	631	630
Brea	0	0	0	138	117	129	0	180	228	138	297	357
Buena Park	0	119	283	5	40	20	0	50	26	5	209	329
Costa Mesa	1,306	1,107	969	587	555	483	4,559	2,548	2,083	6,452	4,210	3,535
Cypress	0	56	2	38	162	19	39	6	203	77	224	224
Dana Point	238	205	228	0	0		0	0		238	205	228
Fountain Valley	0	112	40	0	0	77	314	139	139	314	251	256
Fullerton	7	7	126	23	23	164	639	631	116	669	661	406
Garden Grove	0	7	47	102	90	204	5,797	5,807	5,587	5,899	5,904	5,838
Huntington Beach	403	261	276	7	170	206	233	920	831	643	1,351	1,313
Irvine	0	0		105	103	148	1,040	1,038	1,132	1,145	1,141	1,280
La Habra	NA	378	414	NA	340	306	NA	177	254	NA	895	974
La Palma	0	0		17	18	12	25	30	31	42	48	43
Laguna Beach	336	356		0	2		0	7		336	365	0
Laguna Hills	NA	237	325	NA	0		NA	0		NA	237	325
Laguna Niguel	182	183	177	0	0		0	0		182	183	177
Laguna Woods	28	24	24	3	3	3	65	83	89	96	110	116
Lake Forest	10	124	150	17	68		50	182		77	374	150
Los Alamitos	NA	98		173	32		800	0		973	130	0
Mission Viejo	426	423	484	0	0		0	0		426	423	484
Newport Beach	41	41	41	40	40	40	40	40	42	121	121	123
Orange	269	0		241	311	311	54	700	725	564	1,011	1,036
Placentia	127	375		44	0		310	0	373	481	375	373
R S Margarita	126	146	141	13	0	0	377	0	438	516	146	579
San Clemente	463	688	626	0	0		0	0		463	688	626
S J Capistrano	248	316	216	0	0	277	0	0	1,401	248	316	1,894
Santa Ana	0	0		779	26	26	1	917	923	780	943	949
Seal Beach	NA	0	23	NA	183	2	NA	0	859	NA	183	884
Stanton	NA	31	31	NA	168	168	NA	476	476	NA	675	675
Tustin	1	0	1	103	104	39	0	0	40	104	104	80
Villa Park	0	0	0	0	1	1	0	6	6	0	7	7
Westminster	354	140	213	95	365	443	278	354	428	727	859	1,084
Yorba Linda	20	25	42	171	162	126	0	6	5	191	193	173
County of Orange	97	107	106	46	48	47	0	0	0	143	155	153
TOTALS	**4,949**	**5,733**	**5,108**	**3,025**	**3,441**	**3,561**	**14,815**	**14,604**	**16,742**	**22,789**	**23,778**	**25,411**

NA = Not Available

Table 9.3: Food Facility Inspections 2003-04 and 2004-05

PERMITTEE	2003-04		2004-05	
	No. of Routine Inspections	No. of NPDES Issues	No. of Routine Inspections	No. of NPDES Issues
Aliso Viejo	116	50	218	37
Anaheim	1721	40	3,285	22
Brea	256	19	506	23
Buena Park	301	91	686	12
Costa Mesa	724	98	1,412	74
Cypress	175	12	421	0
Dana Point	186	9	374	12
Fountain Valley	313	72	545	22
Fullerton	539	46	1,054	123
Garden Grove	738	2	1,412	280
Huntington Beach	691	64	1,420	17
Irvine	718	169	1,388	52
La Habra	273	11	548	40
La Palma	42	18	118	1
Laguna Beach	203	7	382	31
Laguna Hills	149	91	332	72
Laguna Niguel	193	21	406	16
Laguna Woods	24	18	59	13
Lake Forest	307	8	547	27
Los Alamitos	98	12	193	8
Mission Viejo	325	51	591	40
Newport Beach	501	33	1,037	20
Orange	725	25	1,451	61
Placentia	185	8	386	18
Rancho Santa Margarita	95	0	179	23
San Clemente	284	5	529	7
San Juan Capistrano	1261	111	302	17
Santa Ana	141	28	2,436	145
Seal Beach	122	13	217	3
Stanton	168	20	504	1
Tustin	377	12	648	60
Villa Park	18	1	26	1
Westminster	418	123	931	96
Yorba Linda	139	4	328	23
County of Orange	109	6	207	19
Totals	**12635**	**1298**	**25,078**	**1,416**

Table 9.4: Current and Potential Outcome Levels (Industrial/Commercial)

Industrial/Commercial Program Component	Effectiveness Assessment Outcome Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Implement Program	Increase Awareness	Behavior Change	Load Reduction	Runoff Quality	Receiving Water Quality
Inventory	✓ Maintain inventory					
Prioritization	✓ Assign priorities		✓ Change in prioritization level			
Inspection	✓ Conduct and Track number of inspections		✓ # BMPs implement	P Load reduction associated with BMPs		
Enforcement/ Reporting	✓ Conduct enforcement		✓ Extent and correction of problem level of enforcement			
Training	✓ Track number/type of training sessions	P Surveys show improved knowledge				

Key:
✓ = Currently Achieved Outcome Level
P = Potentially Achievable Outcome Level

Table 9.5: Current and Potential Outcome Levels (Residential)

Residential & CIA/HOA Program Component	Effectiveness Assessment Outcome Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Implement Program	Increase Awareness	Behavior Change	Load Reduction	Runoff Quality	Receiving Water Quality
Identification/Inventory	✓ Maintain inventory					
BMP Implementation	✓ Conduct Inspections	✓ BMP Implementation	✓ Track number of BMPs implemented	P Load reduction associated with BMPs		
Enforcement/ Reporting	✓ Issue EAs	✓ Track number of EAs issued & response	P Correction of problem			

Key:
✓ = Currently Achieved Outcome Level
P = Potentially Achievable Outcome Level

Table 9.6: Industrial Inventory and BMP Implementation, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEE	NUMBER OF FACILITIES WITH BMPs:												
	FULLY Implemented 2002-03	FULLY Implemented 2003-04	FULLY Implemented 2004-05	PARTIALLY Implemented 2002-03	PARTIALLY Implemented 2003-04	PARTIALLY Implemented 2004-05	NO BMPs Implemented 2002-03	NO BMPs Implemented 2003-04	NO BMPs Implemented 2004-05	Modify/Upgrade or Implement BMP's 2002-03[a]	TOTAL 2002-03	TOTAL 2003-04	TOTAL 2004-05
Aliso Viejo	2	49	31	1	15	11	0	0		1	4	64	42
Anaheim	0	160	312	0	82	80	0	0		0	0	242	392
Brea	NA	NA	15	NA	NA		NA	NA	10	NA	NA	NA	25
Buena Park	NA	188	151	NA	33	102	NA	0	29	NA	NA	221	282
Costa Mesa	142	530	115	0	168	28	0	0		193	335	698	143
Cypress	NA	0	NA	NA	4	NA	NA	0	NA	NA	0	4	NA
Dana Point	NA	0	NA	NA	0	NA	NA	0	NA	NA	NA	0	NA
Fountain Valley	10	36	52	5	8		5	0		5	25	44	52
Fullerton	36	38	34	NA	23	2	NA	344		NA	36	405	36
Garden Grove	NA	55	28	NA	43	38	NA	3	1	NA	NA	101	67
Huntington Bch	3	52	14	4	19	20	17	28	33	4	28	99	67
Irvine	136	132	37	31	467	58	12	68		26	205	667	95
La Habra	NA	8	49	NA	57	108	NA	28	15	NA	NA	93	172
La Palma	0	NA	1	0	NA	6	0	NA	1	0	0	NA	8
Laguna Beach	NA	21		NA	16		NA	0		NA	NA	37	0
Laguna Hills	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	NA	0
Laguna Niguel	3	0		0	0		0	0		0	3	0	0
Laguna Woods	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	0	NA
Lake Forest	0	0	12	11	11		0	0		0	11	11	12
Los Alamitos	NA	8		NA	0		NA	0		NA	0	8	0
Mission Viejo	24	0	2	43	4	2	13	0		56	136	4	4
Newport Beach	4	1	1	0	1	2	0	0		0	4	2	3
Orange	NA	64	142	NA	2	149	NA	0	9	NA	NA	66	300
Placentia	16	0	3	14	19	7	12	2	1	14	56	21	11
R S Margarita	0	0	2	0	0	2	0	0	28	0	0	0	32
San Clemente	NA	NA	2	NA	NA	0	NA	NA	0	NA	NA	NA	2
S J Capistrano	1	10	8	2	4	2	0	0	0	1	4	14	10
Santa Ana	NA	818	639	NA	132	63	NA	0		NA	NA	950	702
Seal Beach	NA	0	1	NA	2	1	NA	0	0	NA	NA	2	2
Stanton	NA	28	28	NA	4	58	NA	1	1	NA	NA	33	87
Tustin	NA	17	17	NA	49		NA	0		NA	NA	66	17
Villa Park	0	0	0	1	0	0	0	0	0	0	1	0	0
Westminster	1	24	25	0	3	3	0	1		0	1	28	28
Yorba Linda	166	130	94	0	0	3	1	0		1	168	130	97
County of Orange	NA	19	16	NA	0	2	NA	0	0	NA	0	19	18
TOTALS	**544**	**2,388**	**1,831**	**112**	**1,166**	**747**	**60**	**475**	**128**	**301**	**1,017**	**4,029**	**2,706**

NA = Not Available

[a] Modifications/Upgrades only applicable to 2002-03 reporting year.

Table 9.7: Commercial Inventory and BMP Implementation, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEE	Number of Facilities with BMPs:											
	FULLY Implemented 2002-03	FULLY Implemented 2003-04	FULLY Implemented 2004-05	PARTIALLY Implemented 2002-03	PARTIALLY Implemented 2003-04	PARTIALLY Implemented 2004-05	NO BMPs Implemented 2002-03	NO BMPs Implemented 2003-04	NO BMPs Implemented 2004-05	TOTAL 2002-03	TOTAL 2003-04	TOTAL 2004-05
Aliso Viejo	69	35	35	4	64	75	8	4		81	103	110
Anaheim	0	35	46	0	2	27	0	0		0	37	73
Brea	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Buena Park	0	183	98	5	29	60	0	0	43	5	212	201
Costa Mesa	623	3,298	64	0	665	2	0	0		623	3,963	66
Cypress	NA	0		NA	2	2	NA	0		0	2	2
Dana Point	NA	NA	25	NA	NA	145	NA	NA	11	NA	NA	181
Fountain Valley	0	251	225	0	0		0	0		0	251	225
Fullerton	NA	0		NA	0		NA	0		NA	0	0
Garden Grove	NA	66	824	NA	29	455	NA	3	4	NA	98	1,283
Huntington Bch	9	59	26	2	108	21	11	120	34	22	287	81
Irvine	NA	DNR		NA	DNR		NA	DNR		NA	DNR	0
La Habra	NA	28	85	NA	107	111	NA	36	77	NA	171	273
La Palma	0	24	22	0	18	13	0	0		0	42	35
Laguna Beach	NA	NA		NA	NA		NA	NA		NA	NA	0
Laguna Hills	31	150	222	0	0		3	10	5	34	160	227
Laguna Niguel	0	123	27	0	15	18	0	0		0	138	45
Laguna Woods	NA	0		NA	27	28	NA	0		0	27	28
Lake Forest	0	0		77	48	19	0	0		77	48	19
Los Alamitos	NA	86		NA	12		NA	0		0	98	0
Mission Viejo	68	164	268	314	51	29	57	0		439	215	297
Newport Beach	NA	NA	6	NA	NA	6	NA	NA		NA	NA	12
Orange	NA	207	0	NA	0	0	NA	0	0	NA	207	0
Placentia	NA	0	32	9	63	32	NA	0		9	63	64
R S Margarita	0	0	64	0	0	21	0	0	482	0	0	567
San Clemente	NA	139	NA	NA	12	NA	NA	0	NA	NA	151	NA
Santa Ana	NA	818	304	NA	132	109	NA	0		NA	950	413
S J Capistrano	75	139	132	7	12	0	15	0	0	97	151	132
Seal Beach	NA	0	0	NA	122	0	NA	0	0	NA	122	0
Stanton	NA	35	35	NA	10	10	NA	3	10	NA	48	55
Tustin	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA
Villa Park	0	0	0	0	0	0	0	0	0	0	0	0
Westminster	0	633	675	0	219	409	0	7		0	859	1,084
Yorba Linda	NA	10	27	NA	27	7	NA	0		NA	37	34
County of Orange	2	41	49	NA	3	10	NA	NA	0	2	44	59
TOTALS	**877**	**6,524**	**3,291**	**418**	**1,777**	**1,609**	**94**	**183**	**666**	**1,389**	**8,484**	**5,566**

NA = Not Available **DNR = Did Not Report**

Table 9.8: Permittee Enforcement Actions for Industrial Facilities, Comparison of 2002-03, 2003-04 and 2004-05

PERMITTEE	EL 2002-03	EL 2003-04	EL 2004-05	NON 2002-03	NON 2003-04	NON 2004-05	ACO 2002-03	ACO 2003-04	ACO 2004-05	CDO 2002-03	CDO 2003-04	CDO 2004-05	M/I 2002-03	M/I 2003-04	M/I 2004-05	TOTAL 2002-03	TOTAL 2003-04	TOTAL 2004-05
Aliso Viejo	0	2	3	0	1	17	0	0	8	0	0		0	0		0	3	28
Anaheim	NA	0	0	NA	2	0	NA	1	0	NA	0	0	NA	0	0	NA	3	0
Brea	2	0	13	0	0	1	0	0		0	0		0	0		2	0	14
Buena Park	NA	0	2	NA	39	6	NA	5	13	NA	1	4	NA	0	1	NA	45	26
Costa Mesa	NA	0		NA	0		NA	0		NA	0		NA	0		NA	0	0
Cypress	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
Dana Point	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Fountain Valley	5	393	52	0	8		0	12	1	0	6	1	0	0		5	419	54
Fullerton	36	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	36	0	NA
Garden Grove	2	5	2	0	0		0	0		0	0		0	0		2	5	2
Huntington Beach	6	0		0	0	5	0	15		0	0		0	0	1	6	15	6
Irvine	NA	939	95	NA	0		NA	0		NA	0		NA	0		NA	939	95
La Habra	NA	0		NA	0	28	NA	0		NA	0		NA	0		NA	0	28
La Palma	0	19	10	0	0		0	0		0	0	1	0	0		0	19	11
Laguna Beach	NA	0		NA	0		NA	0		NA	0		NA	0		NA	0	0
Laguna Hills	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	0
Laguna Niguel	0	0		0	0		0	0	0	0	0		0	0		0	0	0
Laguna Woods	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA
Lake Forest	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0
Los Alamitos	NA	0		NA	0		NA	0		NA	0		NA	0		NA	0	0
Mission Viejo^	NA	0		NA	103		NA	0		NA	0		NA	0		NA	103	0
Newport Beach	6	8	2	250	618	0	200	315	0	0	0	0	0	550	0	456	1491	2
Orange	NA	66	0	NA	4	1	NA	0	0	NA	0	0	NA	0	0	NA	70	1
Placentia	7	7	10	0	0		0	0		0	0		0	0		7	7	10
R S Margarita	0	0	2	0	0		0	0		0	0		0	0		0	0	2
San Clemente	NA	7	0	NA	2	0	NA	2	0	NA	0	0	NA	0	0	NA	11	0
S J Capistrano	1	14	10	1	0	2	0	0	0	0	0	0	0	0	0	2	14	12
Santa Ana	NA	0	1	NA	0	2	NA	0		NA	0		NA	0		NA	0	3
Seal Beach	NA	NA	5	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	5
Stanton	DNR	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	0
Tustin	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Villa Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westminster	0	0	9	5	0	4	0	0		0	0		0	0		5	5	13
Yorba Linda	0	0	59	1	0	0	0	0	0	0	0	0	0	0	0	1	0	59
County of Orange	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0
TOTALS	**76**	**1,460**	**275**	**257**	**779**	**66**	**200**	**350**	**22**	**0**	**7**	**6**	**0**	**550**	**2**	**533**	**3,151**	**371**

NA = Not Available **EL = Educational Letter** **ACO = Administrative Compliance Orde** **M/I = Misdemeanor/Infraction**

DNR = Did Not Report **NON = Notice of Non-Compliance** **CDO = Cease and Desist Order**

^ Enforcement actions against industrial facilities are included with commercial facilities.

Table 9.9: Permittee Enforcement Actions for Commercial Facilities, Comparison of 2002-03, 2003-04, and 2004-05

PERMITTEE	EL 2002-03	EL 2003-04	EL 2004-05	NON 2002-03	NON 2003-04	NON 2004-05	ACO 2002-03	ACO 2003-04	ACO 2004-05	CDO 2002-03	CDO 2003-04	CDO 2004-05	M/I 2002-03	M/I 2003-04	M/I 2004-05	TOTAL 2002-03	TOTAL 2003-04	TOTAL 2004-05
Aliso Viejo	70	3	4	0	0	4	2	13	2	0	0	2	0	0	1	72	16	13
Anaheim	NA	0		NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Brea	NA	4	3	NA	1		NA	0		NA	0		NA	0		NA	5	3
Buena Park	5	0		0	87	16	0	19	33	0	4	16	0	0	4	5	110	69
Costa Mesa	2	10	6	3	3	67	0	10		0	0		0	0		5	23	73
Cypress	2	0		4	2		0	0		0	0		0	0		6	2	0
Dana Point	13	14	57	41	19	3	1	0	1	0	0		1	0	1	56	33	62
Fountain Valley	6	251	256	6	2	4	21	3	7	5	1	2	0	0		38	257	269
Fullerton	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA	NA	0	NA
Garden Grove	5	37	5	2	8	1	0	0		0	0		0	0		7	45	6
Huntington Beach	16	0		3	10	13	0	80		1	0		0	0	5	20	90	18
Irvine	NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	0
La Habra	NA	0		NA	0	25	NA	0	1	NA	0		NA	0		NA	0	26
La Palma	0	0	15	0	0		0	0		0	0		0	0		0	0	15
Laguna Beach	NA	0		NA	0		NA	0	2	NA	0		NA	0		NA	0	2
Laguna Hills	NA	11	6	NA	9	4	NA	1		NA	0		NA	0		NA	20	10
Laguna Niguel	0	127		1	15	32	0	0		0	0		0	0		1	142	32
Laguna Woods	3	0	15	4	0	18	1	0	10	0	0		0	0		8	0	43
Lake Forest	77	1		1	14	12	0	0		0	0	1	0	0		78	15	13
Los Alamitos	NA	0		NA	0		NA	0		NA	0		NA	0		NA	0	0
Mission Viejo	118	0	2	20	103	16	0	0	17	1	0	0	0	0	2	139	103	37
Newport Beach	NA	NA	2	NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	2
Orange	NA	269	0	NA	13	0	NA	0	0	NA	0	0	NA	0	0	NA	283	0
Placentia	10	30	64	0	0	13	1	0	1	2	0	1	0	0	1	13	30	80
R S Margarita	10	0	32	0	0	7	0	0		0	0		0	0		10	0	39
San Clemente	NA	187	91	NA	82	63	NA	15		NA	2		NA	7	24	NA	293	178
S J Capistrano	25	10	150	7	2	5	0	0	0	0	0	0	0	0	0	32	12	155
Santa Ana	NA	0	1	NA	3	18	NA	0	1	NA	0		NA	0		NA	3	20
Seal Beach	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Stanton	DNR	DNR		DNR	DNR		DNR	DNR		DNR	DNR		DNR	DNR		NA	DNR	0
Tustin	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0	NA	0	0
Villa Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westminster	0	0	2	0	2	3	0	0		0	0		0	0		0	2	5
Yorba Linda	0	45	19	0	1	0	0	0	0	0	0	0	0	0	0	0	46	19
County of Orange	NA	0	0	NA	4	3	NA	0	0	NA	0	0	NA	0	0	NA	4	3
TOTALS	**362**	**999**	**730**	**92**	**380**	**327**	**26**	**141**	**75**	**9**	**7**	**22**	**1**	**7**	**38**	**490**	**1,534**	**1,192**

NA = Not Available **EL = Educational Letter** **ACO = Administrative Compliance Order** **M/I = Misdemeanor/Infraction**

DNR = Did Not Report **NON = Notice of Non-Compliance** **CDO = Cease and Desist Order**

Figure 9.1: Countywide Permittees' Industrial Inventory and Prioritization, Comparison of 2002-03, 2003-04 and 2004-05

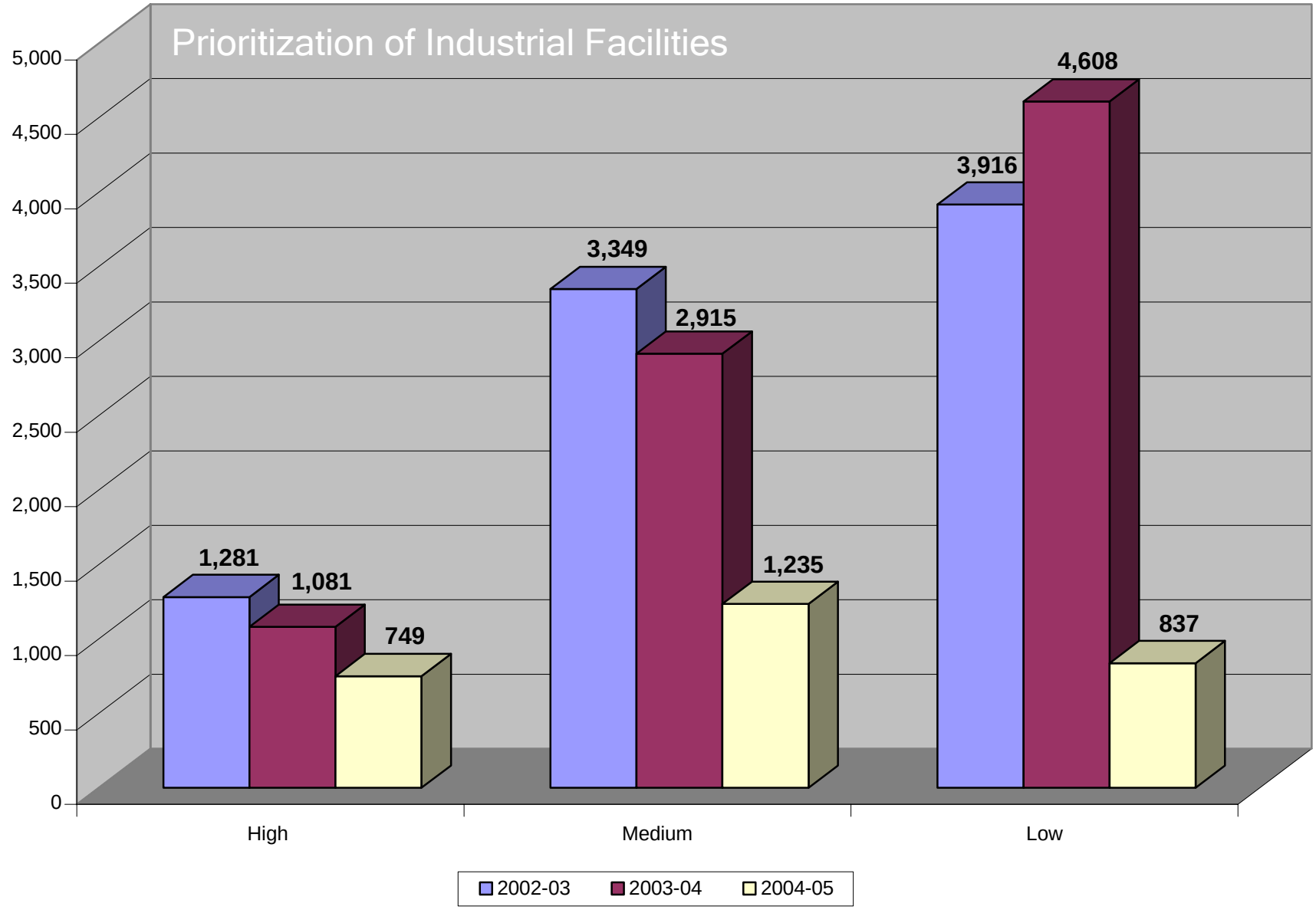

Figure 9.2: Countywide Permittees' Commercial Inventory and Prioritization, Comparison of 2002-03, 2003-04 and 2004-05

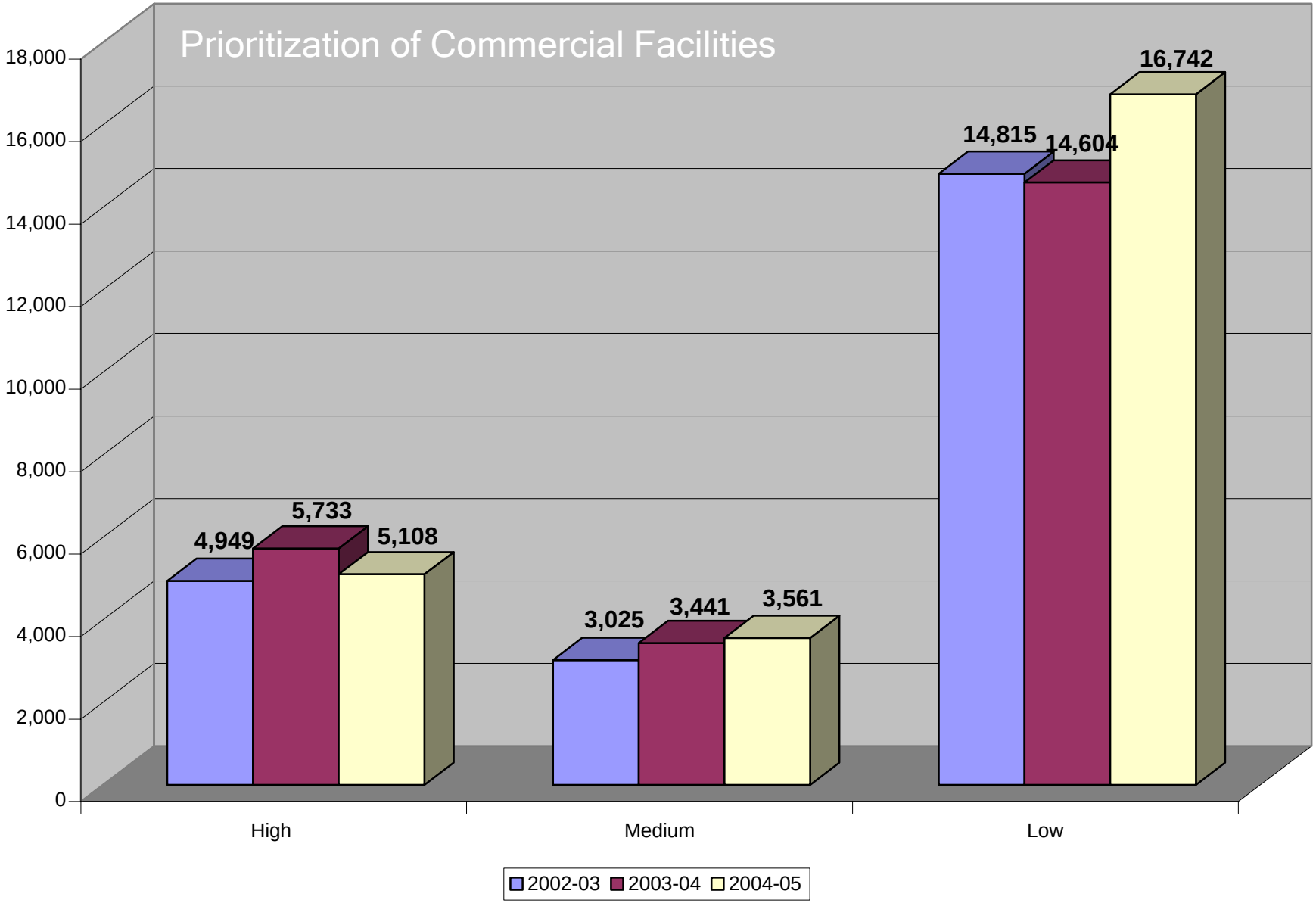

Figure 9.3: Industrial Inventory and BMP Implementation, Comparison of 2002-03, 2003-04 and 2004-05

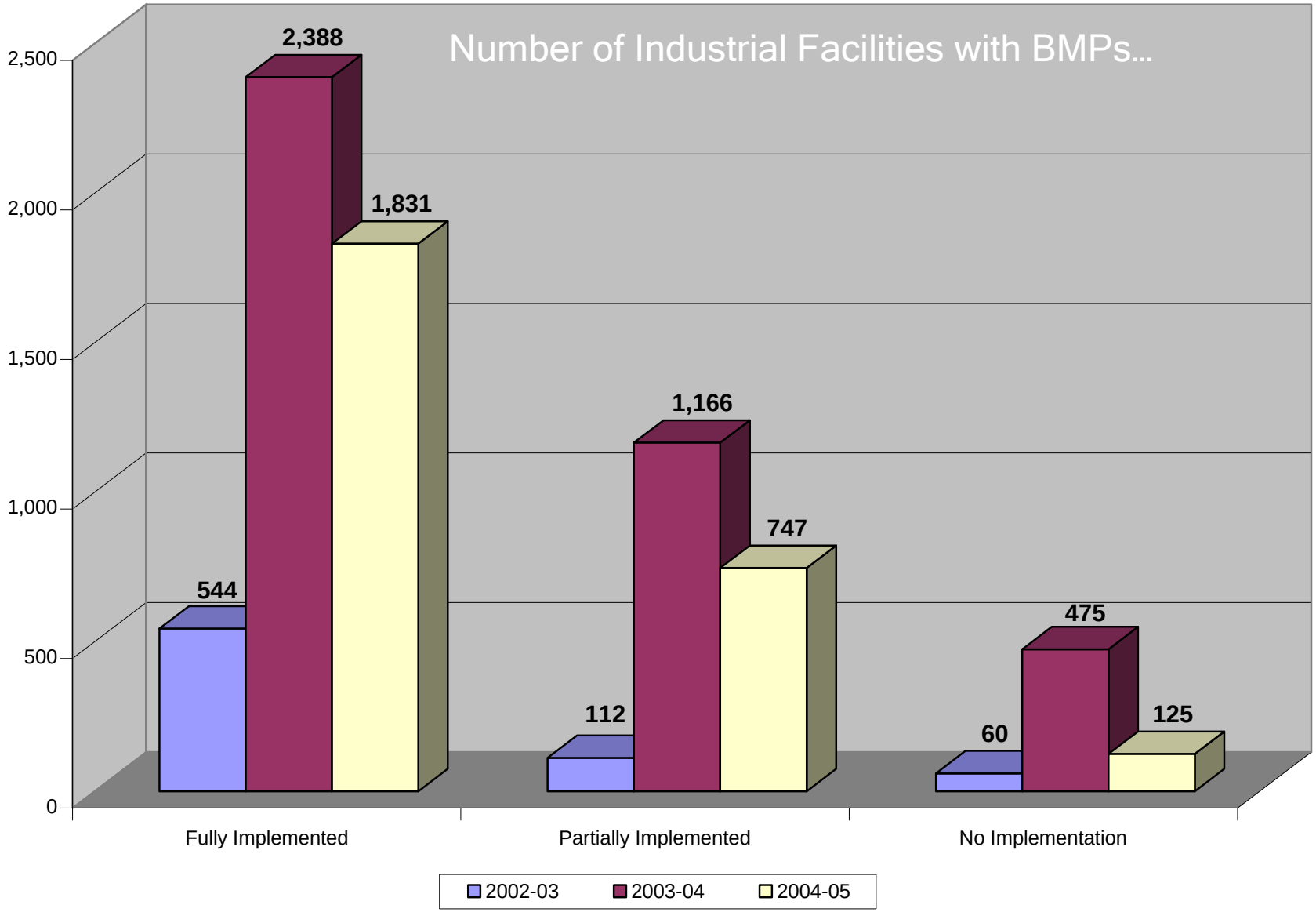
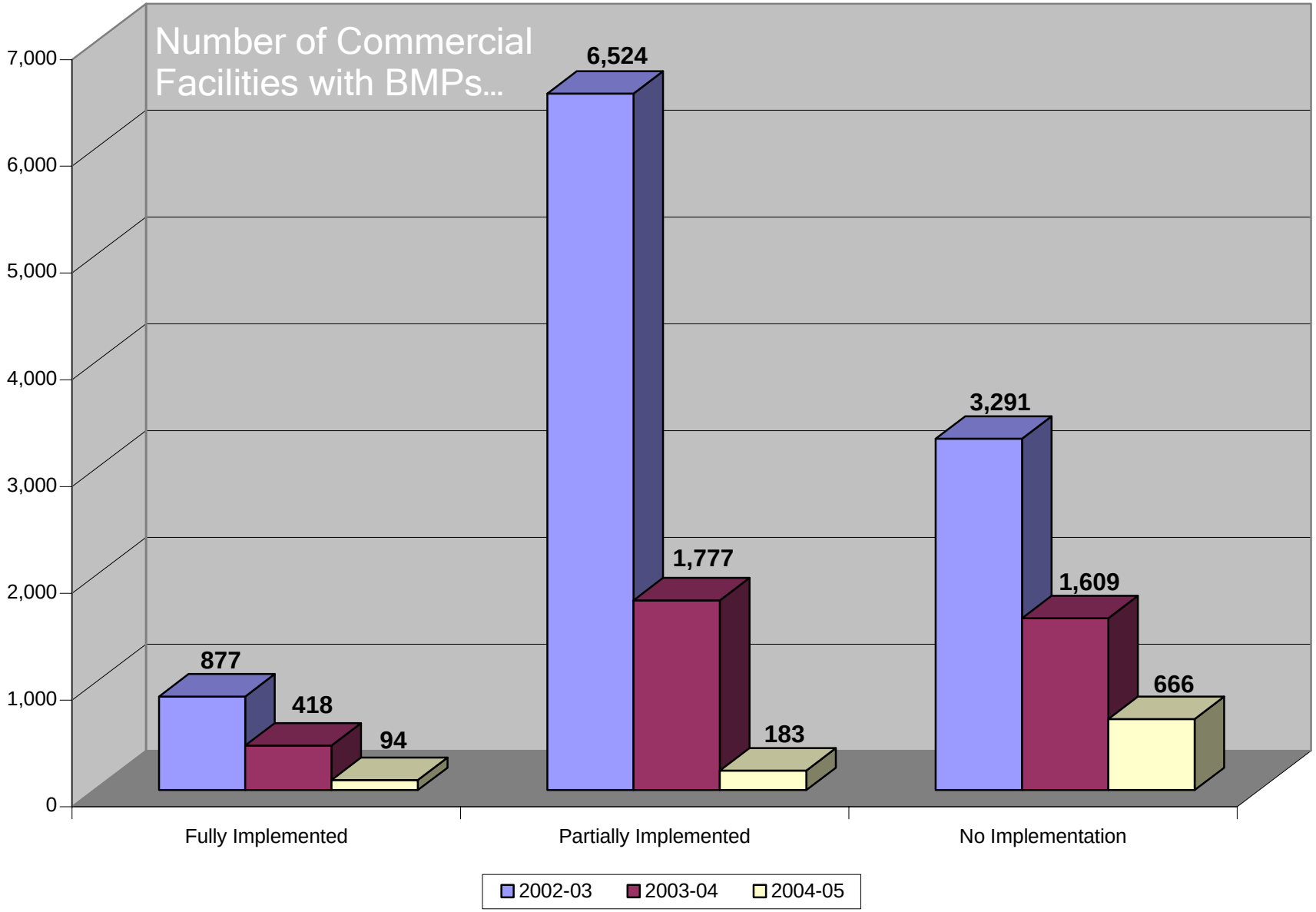
Figure 9.4: Commercial Inventory and BMP Implementation, Comparison of 2002-03, 2003-04 and 2004-05