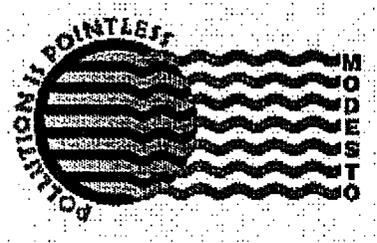


1995 / 1996

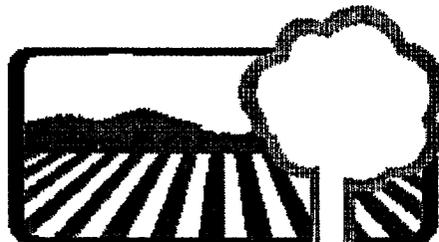
**ANNUAL STORMWATER
PROGRESS REPORT**



**NPDES
(National Pollutant Discharge Elimination System)
Municipal Stormwater Permit**

City of Modesto, California

Submitted July 1, 1996



City of Modesto

CITY OF MODESTO

1995/1996 ANNUAL STORMWATER PROGRESS REPORT

Report Prepared by:

City of Modesto

Garner R. Reynolds
Program Administrator
(209) 571-5120
1221 Sutter Ave.
Modesto, Ca. 95351

Assistance by:

Archibald and Wallberg Consultants
Jeanne S. Wallberg

Under the Direction of:

Michael B. Gilton
Senior Civil Engineer
City of Modesto



TABLE OF CONTENTS

PREFACE	1
ANNUAL REPORT FORMAT	3
PERMIT COMPLIANCE DATES FOR FY 1994/1995	5
MONITORING PROGRAM ACTIVITIES	6
1995/1996 MANAGEMENT PROGRAM ACTIVITIES:	
Program Administration And Comprehensive Planning	7
Public Education And Participation	8
Commercial And Residential Area Source Control Activities	13
Illicit Discharge Activities	15
Industrial Discharge Activities	16
Construction Site Activities	18
ASSESSMENT OF EFFECTIVENESS	19
MEASURE OF EFFECTIVENESS TABLE	20
WORK PLAN	23
WORK PLAN SCHEDULE	26
ESTIMATED PROGRAM HOURS	28
BUDGET TABLE	29

Attachments:

1. Proposed Storm Drain Ordinance
2. Household Hazardous Waste Brochure
3. Pollution is Pointless Brochure
4. Rockwell Display (sample of poster)
5. Used Oil Recycling Handout
6. Rockwell Drain Flyer
7. Oil Recycling Billboard Display
8. Resource Bins
9. EnviroScape Flyer
10. Storm Drain Line Pilot Study
11. Leaf Pick Up Pilot Study
12. Street Sweeping Study Technical Memorandum
13. 1995/1996 Illicit Discharges Field Screening Report
14. 1995/1996 Characterization of Dry Weather Urban Run Off
15. 1995/1996 Stormwater Monitoring Report
16. Used Oil Recycling Magnets
17. Used Oil Recycling Sports Water Bottle
18. Storm Drain System Map

PREFACE

The City of Modesto (City) received a National Pollutant Discharge Elimination System Permit, (NPDES) No. CA0083526, from the California Regional Water Quality Control Board, Central Valley Region (Regional Board) on June 24, 1994. This is the second year that the City has been under permit. This Annual Report provides a discussion of the City Stormwater Program implementation activities during the 1995/1996 fiscal year.

During the past year the City has had an aggressive ongoing Public Education and Participation campaign which included used motor oil recycling, pesticide and herbicide education, and household hazardous waste education (see section B). The Commercial and Residential Area Source Control Program has again seen an increase in curbside collection of used motor oil (see section C). The Illicit Discharge Program element completed stenciling, mapping, and inspection for evidence of illegal dumping for all storm drain inlets (see section D). The City has an approved program to Monitor and Control Pollutants From Industrial Facilities. The Construction and New Development programs are still moving at a very slow pace; however the City is working with the Building Industry Association and other interested parties to help finalize the Stormwater Ordinance, which requires compliance with the State General Construction Activity Stormwater Permit (see section F).

The City is continuing the program for pesticide and herbicide awareness through several channels. One is through public education: the City produced a point of purchase display for pesticides and herbicides (see section B). The City is continuing to test for organophosphate pesticides and evaluate the results (see the 1995/1996 Stormwater Monitoring Report). Also, the City is working with the U.S. Geological Survey in trying to get a grant to study dormant season spraying of pesticides.

The purpose of the Annual Report is to show that the City's implementation of its Stormwater Program is in substantial compliance with its NPDES Permit.

Due to some of the items in the 1994/1995 Annual Report Work Plan taking more staff time than anticipated, a few of the proposed activities are being completed on a more extended schedule than previously planned (the High School Ambassador Program, Poster Contest, and the Adopt-A-Rockwell/Creek Project). Also, the Poster Contest and the Adopt-A-Rockwell/Creek Project, (see section B Public Education and Participation for a complete discussion) were changed in order to provide some additional staff time to help concentrate on the Industrial Stormwater Inspection Program. It is anticipated that these activities will be completed in fiscal year 1996/1997. The Program Administrator

has requested additional staffing for fiscal year 1996/1997 in order to help the City meet its goal of complete permit compliance by June 1997.

There are no compliance dates listed in the City's permit specifically for fiscal year 1995/1996.

ANNUAL REPORT FORMAT

The format for this Annual Report is the same format as last years report, and is intended to be used for future reports as well. The format was designed to provide a place for discussion of all elements of the Stormwater Permit Program. The format is as follows:

1.) Preface:

Discussion of any regulatory developments and overall comments on permit compliance activities, general introductory or background material, and a list of any specific permit deadlines for the past fiscal year.

2.) Annual Report Format:

Discussion of the format and the content of the Annual Report.

3.) Permit Compliance Dates:

Discussion of the status of the City's compliance with permit deadlines.

4.) Monitoring Program Activities:

A presentation and evaluation of monitoring data collected during the preceding year. This section contains a brief summary with the detailed evaluations contained in separate attached reports.

5.) Management Program Activities:

This is a summary of the activities conducted during the preceding year. Any changes from what was proposed in the previous Annual Report will be described and explained. The introductory section will provide any contextual background on the Management Program as a whole, such as issues regarding the prioritization and/or inter-relation of different program elements. In addition to general administration and planning, this section will provide a discussion of any activities during the preceding year regarding legal authority issues such as ordinance development, response, enforcement, etc. The following items are included:

- A. Administration and Planning Activities
- B. Public Education and Participation
- C. Commercial and Residential Area Source Control Activities
- D. Illicit Discharge Activities
- E. Industrial Discharge Activities
- F. Construction Site Activities

6.) Assessment of Effectiveness:

This section is a discussion and quantification (where possible) of the effectiveness of the Management Program implementation with special respect to improving storm water quality. How to measure the Management Program's effectiveness is an issue the City considers particularly dynamic. This year, the City has developed a tabular presentation of several implementation activities to assist in the interpretation of effectiveness.

7.) 1996/1997 Work Plan:

This section is a description of the planned scope of work for the various Stormwater Program elements for the next year of permit implementation. Any changes from the proposed Part 2 Application activities will be discussed. Proposed legal authority activities will be described in the section on Administration and Planning Activities. Proposed measures of effectiveness will be described under each program element. A table will be included which will show the planned completion dates of specific activities, where applicable. Individual sections include:

- A. Administration and Planning Activities
- B. Public Education and Participation
- C. Commercial and Residential Area Source Control Activities
- D. Illicit Discharge Activities
- E. Industrial Discharge Activities
- F. Construction Site Activities
- G. Monitoring Program Activities

8.) Budget Table:

This section will consist primarily of a table showing, for each program element described in the Work Plan, estimated hours, labor dollars, costs for other expenses including equipment, consultants, etc., and total costs for the next year. The section will also describe the City's ability to fund the cost of the next year's activities.

1995/1996 PERMIT COMPLIANCE DATES

There were no compliance dates specified in the City's permit for fiscal year 1995/1996. However, there are two work items with past deadlines which the City is still working to achieve.

- 1) By July 1, 1994, the City was to amend its Storm Drain Ordinance such that it will require compliance with the State General Construction Activity Stormwater Permit. This ordinance has taken much longer than originally anticipated.
- 2) By July 1, 1995, the City was to submit an evaluation of whether erosion control for construction projects less than five acres is needed. This has been a difficult area to get a handle on. Also, staff time has been more than was anticipated to implement the industrial inspection program and so less time has been available for the construction program.

1995/1996 MONITORING PROGRAM ACTIVITIES

In 1995/1996, the City conducted three monitoring efforts: (1) the completion of the illicit discharges field screening work which was begun in 1991, (2) a comprehensive characterization of the City's dry weather urban runoff, and (3) a continued assessment of the impact of the City's stormwater urban runoff on Dry Creek. The results of these three monitoring efforts were reported in three separate documents which are attached to this Annual Report. These three efforts required a significant amount of the City's resources in 1995/1996 and contributed significantly to the advancement of the overall Stormwater Program.

The illicit discharges field screening work confirmed the City's earlier suspicion that elimination of illegal dumping is the only significant illicit discharge issue. The completion of the field screening monitoring will allow the City to concentrate its illicit discharge efforts in implementing the illegal dumping management measures proposed in its Part 2 Application.

The characterization of the City's dry weather urban runoff indicated that, with the possible exception of pesticides, which the City is already seeking to understand and manage, there are no other significant issues associated with the dry weather runoff. The types of dry weather flow consist of those allowed in the City's permit; the volume of dry weather urban runoff appears relatively small; the concentrations of suspended sediments, petroleum hydrocarbons, and metals are low; and there are no discernible impacts on Dry Creek. Some pesticides were detected in the runoff; none were detected in the creek.

The Dry Creek assessment conducted in 1995/1996 was the culmination of three years of receiving stream monitoring. Essentially, although the City's stormwater urban runoff does cause measurable short-duration elevations of several constituents in Dry Creek (and to a lesser degree in the Tuolumne River), only pesticides, and specifically diazinon, are likely associated with any actual use impairment. Further investigation of the City's relative contribution of pesticides to the receiving streams and urban pesticide source identification and control efforts are considered the most significant stormwater quality issues at this time.

1995/1996 MANAGEMENT PROGRAM ACTIVITIES

A. PROGRAM ADMINISTRATION AND COMPREHENSIVE PLANNING

In the City's Part 2 Application, three program elements were determined to be high priority. These are Public Education and Participation, elimination of Illegal Dumping in residential areas and from construction activities, and control of additional urban runoff from New Developments. These continue to be high priority elements. A fourth high priority element is now added based on monitoring conducted by the City as well as by the U.S. Geological Survey and the Regional Board. The fourth priority is to initiate urban pesticide use source identification and control efforts.

In 1995/1996 there has been a lot of work in the areas of Public Education and Participation and Illegal Dumping. Due to the continuing recession however, new development within the City has slowed tremendously. Therefore, the City has proceeded with the New Development Program element on a more extended schedule than previously stated.

Through out the 1995/1996 fiscal year, the Program Administrator has been in contact with various agencies (Alameda County, Bakersfield, Cal Trans, City of Ceres, City of Folsom, City of Sacramento, City of Stockton, County of Sacramento, Fresno Metropolitan Flood Control District, and San Joaquin County) regarding exchanging information on their Stormwater Programs. This continues to be a good way of establishing an open line of communications between Permittees.

City staff has been attending the State Stormwater Quality Task Force meetings. This has been helpful in staying current on stormwater issues. Also, it has enabled City staff to monitor other agencies' success on their programs for ideas for possible implementation in the City.

City staff has had contact with the Regional Board staff through out 1995/1996. City staff has been keeping the Regional Board staff current on the City's program through out the year.

In July 1995, the Program Administrator attended a work shop put on by the Environmental Protection Agency (EPA). The work shop was regarding Class V Injection Wells. Since Modesto has approximately 9,400 rockwells which are

considered class V injection wells, staff determined that it would be a good idea to attend. This was a very informative work shop, with very open communication. It was determined by the end of the work shop that the type of Class V Injection Wells (rockwells) that are in the City of Modesto are of no concern to EPA at this time. This is primarily due to the fact that the rockwells do not discharge directly into drinking water, act as a form of treatment process (see the University Of Arizona report "Development of Guidelines For Regulating Depths of Storm Water Wells To Minimize Ground Water Pollution"), and are for stormwater only. Since the work shop, EPA has been keeping the City current on all new proposed regulations concerning this issue.

In February and in April 1996, the City and Cal Trans held meetings in which the two agencies shared information regarding their programs and efforts regarding stormwater pollutant reduction in Modesto. The City and Cal Trans are currently working on a Memorandum Of Understanding. This is a mutual and ongoing effort.

In August 1995, December 1995, March 1996, and June 1996, the City hosted and participated in the Central Valley Stormwater Permittee's Committee quarterly meetings. This is a coordinated effort among the Central Valley Permittees to share information and to coordinate, when ever possible, special studies that might be of mutual benefit for all permittees. The attending agencies are the City of Bakersfield, Cal Trans District 6, Cal Trans District 10, City of Folsom, City of Modesto, City of Sacramento, City of Stockton, County of Sacramento, Fresno Metropolitan Flood Control District, and San Joaquin County.

The Program Administrator has been attending a newly formed group called the Communication Breakfast Club. This club includes any City staff interested in possibly combining efforts regarding brochures, fliers etc. through out the City. This group also works like a focus group discussing how to properly get the message to the right target audience. To date, they have met in March 1996, May 1996, and in June 1996.

B. PUBLIC EDUCATION AND PARTICIPATION

In the City's Part 2 Application, Public Education and Participation was determined to be the highest priority program element. Therefore, the City has been particularly aggressive in this area, and this will continue to be a priority in fiscal year 1996/1997. One area that has seen a large increase in public education and out reach is the Used Oil Recycling Program. By June 30, 1996 the City has either initiated or completed all of the public education measures proposed for fiscal year 1995/1996.

The 1994/1995 Annual Report stated that the marketing survey was put on hold until a new Public Information Officer was hired. A new Communications and Marketing Manager (title change) has been hired by the City and has in turn hired a marketing consultant to complete a Stormwater Market Survey. This survey will help set a baseline to determine how effective the City is with the Public Education and Participation Program. A selected group of 500 residents from a representative sample of Modesto will be polled on the stormwater issues within the City. The consultant proposes to have the survey completed by August 1996.

During fiscal year 1995/1996, the City printed 55,000 stormwater brochures entitled "Household Hazardous Waste" of which approximately 52,000 were mailed out as utility bill inserts. The rest are being distributed in lobby areas of city buildings, public meetings and conferences, and at special functions such as "The Home and Garden Show" and at "Earth Day in the Park" (see attachment # 2). The brochure informs people how to properly dispose of household hazardous waste. Originally this was to be a point of purchase display. However, City staff determined that a better saturation of residents could be done through a utility bill insert/handout.

Also, the City printed 55,000 stormwater brochures entitled "Pollution is Pointless" of which 52,000 were mailed out as utility bill inserts. The rest are being distributed in lobby areas of city buildings, public meetings and conferences, and at special functions such as "The Home and Garden Show" and at "Earth Day in the Park" (see attachment # 3). The brochure informs people about illegal dumping, what not to do, and how to report illegal dumping to the City.

In fiscal year 1994/1995, the City printed 10,000 magnets with information on where to take used motor oil for recycling. They are being distributed in City lobby areas, at "The Home And Garden Show", at "Earth Day in the Park", at all of the City Schools, and at auto supply stores within the City (enclosed are a few of the magnets). Approximately 4,500 were distributed in fiscal year 1994/1995, and the rest (5,500) were distributed in fiscal year 1995/1996.

The City developed and distributed a point of purchase display for herbicides and pesticides. The display focused on the proper use and disposal of herbicides and pesticides. The display was given to local stores that sell herbicides and pesticides. The display is also used as a poster at various locations. Approximately 100 were printed, and ten distributed in fiscal year 1995/1996. Pesticide and herbicide has become a priority issue with the City.

In fiscal year 1994/1995, a five minute video regarding stormwater pollution prevention was produced showing stormwater pollution, how much the City spends on average each year, how it affects everyone, and what people can do to help prevent it. In fiscal year 1995/1996 the video was given to all of the Modesto City Schools for the teachers to show. It was also shown at the "Home and Garden Show", at "Earth Day in the Park", and as part of the City's ongoing employee training.

From the five minute video, a thirty second public service announcement was made. The public service announcement aired on the local cable channels for approximately six months in fiscal year 1995/1996.

In the City of Modesto, three fourths of the drainage area consist of rockwells. City staff, through public contacts, determined that a majority of residents in Modesto do not know what a rockwell is or how it functions. Therefore, staff developed a poster size (2' x 3') colorized version of a rockwell along with 8 1/2" x 11" hand outs. This is being used to give a visual idea to people of a rockwell. Attachment # 4 is a copy of the hand out. The Solid Waste Recycling Division took it one step further and constructed a see through model of a rockwell which they then displayed at "Earth Day in the Park". City staff's goal is to educate people on how a rockwell works with the hopes that they will then be less inclined to dump pollutants into them.

City staff participated in an educational booth at the "Home and Garden Show" in March 1996, and at "Earth Day in the Park" in April 1996. In each of the booths, the City staff educated the public on stormwater pollution, its effects, how to prevent it, and where to report it. In both of the booths the poster size rockwell display was displayed, the five minute video was shown, the "Pollution is Pointless" and the "Household Hazardous Waste" brochures were handed out, and the used oil recycling magnets were given away. At the Earth Day booth the rockwell model was demonstrated along with a give-away of free oil changes for people who guessed how many marbles were in the rockwell model. City staff was on hand to answer any questions that arose. The booths were shared with the Neighborhood Preservation Unit, who educated people on stormwater pollution prevention and also on water conservation and graffiti abatement, and with the Solid Waste Division, who helped with stormwater education and also had information on all of the City's recycling programs. A good crowd of people visited each booth, and seemed very interested in the information that was being given away. Through good internal cooperation, the City is able to combine services, save money, and help spread the information on all subjects, including stormwater pollution prevention.

At the initiation of the new Communications and Marketing Manager, staff decided to combine efforts and produce a coloring book titled "On Line - How City Governments Works". The coloring book will illustrate all of the functions of a municipal government, with an area to include stormwater pollution prevention. The book will be distributed to all elementary schools in Modesto. This is being done in lieu of the Poster Contest and the Adopt-A-Rockwell/Creek Project. The coloring book is about 50 % complete, and will be included in next years' Annual Report. By combining efforts to produce the coloring book, staff was able to spend time in other areas, such as the Industrial Stormwater Inspection Program (see section E. Industries), and also reach more students.

The Used Oil Program has grown dynamically since last year. The Solid Waste Division, through a grant from the Integrated Waste Management Board, advertised for and filled a two year term position (Used Oil Coordinator) and hired a six month

temporary person to help increase the amount of recycling through out the City. This has proven to be a very aggressive team, and has accomplished quite a lot of work in the short time that they have been with the City. Their enthusiasm shows and is greatly appreciated. The following was either started, ongoing, or completed by the Used Oil Program staff:

Established the City's Used Oil Recycling Hot Line. This is a recorded message in English and in Spanish which instructs the caller to leave their name, address and phone number, so that a flier explaining the used oil recycling program can be mailed to them.

Developed the Used Oil Recycling Flier (see attachment # 5). As mentioned, this is the flier that is mailed in response to the hot line requests. The flyer lists all of the certified and non- certified collection centers in Modesto, informs people how to care for the used oil for recycling, and tells them about the curbside recycling program. Also included in the flier is information about work shops that the City sponsors called Nature's Way of Composting.

Developed a Rockwell Drain Flier (see attachment # 6). The flier explains about how a City crew maintained a rockwell in their neighborhood (in English and Spanish, and is currently in the process of being translated into Hmong, Laotian, and Cambodian), and also shows a picture of a rockwell on the back side. This is a new program that the Used Oil Program staff initiated. The program consists of handing out a flier in neighborhoods where City crews have found problem rockwells. The Used Oil Program staff walks door to door and talks with the people near the vicinity of the problem rockwell and explain what the City crews are doing, how much this is costing them, and how it affects everyone. To date, a total of 142 fliers were distributed. This effort is getting a favorable response from the citizens.

Designed and produced a clear acrylic rockwell model for use in their ongoing public education campaign regarding rockwells. The rockwell model has been a great way to educate people on how the rockwells work (nothing beats a visual aide). To date it has been used at "Earth Day in the Park" and in two school programs. It has been well received.

Leased forty bus benches throughout the City for a period of four months. The bus benches advertised the Certified Collection Centers and the Used Oil Recycling Hot Line phone number.

Produced sixty interior bus signs (thirty in English and thirty in Spanish), one set for each City bus. Their message advertises the Certified Collection Centers, a cash incentive, and the Used Oil Recycling Hot Line phone number. They will be on display through December 31, 1996.

Produced fifteen billboards with the same design as the interior bus signs (see attachment # 7). Eight billboards are in English and seven billboards are in Spanish. They will be displayed for a period of thirty days.

Produced 50,000 vinyl windshield stickers for the do-it-yourselfers to track their oil changes, which also reminds them to recycle their used oil. These are being handed out at the Certified Collection Centers, pasted on the Rockwell Drain Fliers, and given away at public functions. One is included with the Annual Report.

Purchased and distributed Used Oil Resource Bin Sets (see attachment # 8) to 48 local schools, including three school districts. The sets include all the materials necessary for science experiments listed in the curriculum. The curriculum was modified to highlight Modesto's unique rockwell system.

Purchased over 10,000 sports water bottles carrying the Used Oil Recycling message along with the Used Oil Recycling Hot Line phone number. They were sent to the City schools to be given as a remembrance of the lesson learned in the above curriculum. Five hundred of them are to be given away at public functions, such as the "Home and Garden Show" and "Earth Day in the Park". The sports bottles have been very popular, and go very quickly.

Purchased seven EnviroScape models (see attachment # 9) to be distributed among three school districts. They are large interactive models, that look like a small town with a river or creek running through it, which help to explain the hazards of contamination and careless handling of sensitive material and what effects it has on the environment. This is a hands on training for the kids, and it's fun too!

Purchased twenty halogen sniffers for distribution to the refuse haulers for the testing of used oil for contaminants.

Increased the number of Certified Collection Centers from thirteen to fifteen, with one more in the paper work process. Several other locations have indicated that they would like to become Certified Collection Centers, however, they have not completed the paper work to date.

Purchased and distributed 480 test kits to Modesto's Certified Collection Centers to be used for contamination testing.

Purchased sixteen 95 gallon containers to enable the Certified Collection Centers to safely store the used oil brought to them for recycling.

A total of 10,500 Recycling Containers are being purchased for distribution to Modesto's Certified Collection Centers. These are containers that are utilized when changing your oil, in order to capture the oil for recycling. They are to be given out to the do-it-yourselfers as an incentive to continue their recycling efforts.

In the process of purchasing storage sheds for the Certified Collection Centers. They are to be used to safely store all of the oil recycling materials supplied to them by the City.

Currently are in the process of enhancing the Curbside Recycling Program by purchasing 65,000 one gallon containers to be distributed to all of the single unit households within the City for the purpose of curbside used oil collection. Each time a full container is left out for curbside pick-up, a new container will be left in its place (negotiations are still being conducted with the refuse haulers). Also a vinyl windshield sticker mentioned above will be attached to each container.

Radio advertising through six local stations was completed by April 30, 1996. This program included several hundred 60-second radio spots over a period of forty five days. The message that was advertised was about the used oil recycling program within the City.

Produced TV Cable advertisements for a period of thirty days. This involved five different stations and included 250 advertisements of thirty seconds each. The message that was advertised was about the used oil recycling program within the City.

Produced an advertisement for the Que Onda News Letter for the Spanish speaking community. The advertisement highlighted the locations of the Certified Collection Centers.

In summary, the Solid Waste Division has been really busy educating people and trying to get the message out about recycling used motor oil! Their cooperation and enthusiasm has been a plus to the Stormwater Program.

The Neighborhood Preservation Unit (NPU) includes stormwater pollution prevention education in their presentations to the schools (third grade). Also, the NPU staff were present at a booth in two Health Fairs in which stormwater pollution prevention education was included.

Overall there has been a lot of work, combined services, progress, and enthusiasm in the area of Public Education and Participation for stormwater education in the City of Modesto!

C. COMMERCIAL AND RESIDENTIAL AREA SOURCE CONTROL ACTIVITIES

With the exception of the Leaf Pick Up Pilot Study and the Storm Drain Line Pilot Study, the City is implementing this program element as proposed. Although new

development is still slow in Modesto, City staff has done some work in this area. During fiscal year 1995/1996, City staff has been meeting with the Planning and Community Development Department in order to help develop stormwater standards for new development. The City is still planning to establish Planned Community Developments (The Village Developments) as economic conditions improve. As reported in last years Annual Report, the first Village (Village One) will utilize retention basins, which are designed to hold the stormwater runoff for a period of twenty-four to forty-eight hours before discharging. This, according to the City's Merle Basin Study (included in the 1993/1994 Annual Report) will help to reduce the metals load prior to discharge.

Heavily traveled streets, such as the down town area, are swept five times per week and other streets are swept twice a week. There were a total of approximately 46,300 miles of city streets swept in calendar year 1995. Approximately 7,872,000 pounds (3,936 tons) of street sweepings collected off of the city streets. This was an increase of 5.3 % over last year (7,462,000 pounds reported last year).

The City completed the Street Sweeping Study. The study indicated the City's street sweeping probably removes a significant amount of metals and hydrocarbons. A technical memorandum is attached detailing the findings and conclusions.

Street leaf debris is collected twice a month, in November and in December, and residential yard and garden refuse is collected once per month (except in December).

All detention basins, retention basins, and wet pits are cleaned annually.

The City street crews are spending approximately 30 % of their time cleaning and removing debris and other items, which are determined to be a potential hazard to the environment, from City alleys.

The City's Parks and Recreation Department is trying a new program called the Merit Program. The Merit Program consists of using direct soil amendments at the base of a tree to help it fight off insects and disease. This application method reduces the amount of product used and minimizes the chances of leaching. In addition to the Merit Program, the City will continue to utilize an established Integrated Pest Management (IPM) Program when ever the Merit Program is not working. The IPM Program consists of the use of different pest control methods for insect control on City street trees. It includes the application of biological control insecticide (*Bacillus Thuriogensis*), using insecticidal soap, mechanical insecticide control, and then as a last resort the application of chemicals. No chemicals were used by the City in the treatment for white fly infestation, which has plagued California in the last couple of years. Instead of spraying all trees, the Parks Department (when necessary) uses spot treatment, which is treatment as indicated by the individual condition of each tree. Water sensitive cards are used to monitor the trees and indicate when treatment is needed. Care is taken when spraying is used to minimize any over spraying.

The storage and handling of herbicides and pesticides is done in a way to eliminate the possibility of spilling or over spraying. The chemicals are stored in EPA approved double walled storage boxes with secondary containment and proper ventilation. All employees that use the chemicals are trained and certified in their use.

The Parks and Recreation Department has completed the retrofitting program, which is converting the conventional irrigation system to a more efficient central computerized irrigation system. This program includes the installation of water efficient sprinkler heads and valves, which results in less irrigation run off that could wash chemicals and fertilizers into the storm drain system.

The City golf courses are now run by a private company called Environmental Care Inc. Their program is very similar to that of the Parks And Recreation Departments for fertilizers, herbicides and pesticides. A slow release fertilizer is used, and applied directly at the base of the plant or tree. Care is used when it is necessary to use a herbicide or pesticide to minimize over spray. No overhead spraying is done. The IPM approach is used. The sprinklers are set so as to minimize the amount of runoff, and are routinely monitored. The vehicle wash area has a three chamber separator and the excess wash water flows into a rockwell. The parking lots are routinely cleaned with blowers, in which care is taken to blow the debris onto grassy areas.

In 1995 there was an increase of 11 % in the City curbside collection of used motor oil (from 19,218 gallons to 21,268 gallons). Also, the projection thus far for 1996 is a 14 % increase! The City expects to see another increase in used motor oil recycling due to the aggressive campaign for used motor oil.

The Storm Drain Line Pilot Study is being completed on a more extended schedule than previously thought necessary. However, a plan for the study has been developed (attachment number 10 is a copy of the proposed study), which is being planned for the 1996/1997 rain season.

Also, the Leaf Pick Up Pilot Study is being completed on a more extended schedule than previously thought necessary. However, a plan for the study has been developed (attachment number 11 is a copy of the proposed study), which is being planned for the fall of 1996.

D. ILLICIT DISCHARGE ACTIVITIES

In May 1995, a temporary employee was hired to stencil all of the storm drain inlets within the City, and to help with other miscellaneous stormwater activities. All of the storm drain inlets were stenciled by August 1996.

In April 1995, the City purchased a Trimble Global Positioning System (GPS) Pathfinder in order to map all of the storm drain inlets within the City. This instrument enables the operator to map the inlets and at the same time to conduct a visual inspection of all of the inlets. If there is evidence of illegal dumping in the inlet then that information is entered into the data base along with other information (condition, is it a positive inlet or a rockwell, style, etc.). In March 1996, the map was completed, included with this Annual Report is a copy of the map. A check of the data base revealed a total of 8,826 catch basin inlets, of the inlets 57 showed evidence of possible illegal dumping (this information was given to the maintenance crews). Of the 8,826 inlets 1,335 are positive catch basins (flow directly to a river, creek or canal), 7,490 inlets are rockwell inlets (French drain style inlets, see enclosed color picture of a rockwell) with a total of approximately 9,405 rockwells.

In 1995/1996 there were thirty six reported incidents of illegal dumping in the rockwells or catch basins. It is assumed that some of the reports of illegal dumping were part of the 57 discussed above, also the rockwell crew has implemented a work schedule that allows them to be in the field longer which relates to a larger number of reports. After each report, City crews inspected the site and cleaned the rockwell or catch basin as necessary. As part of the City's regular ongoing maintenance, the City storm drain crews cleaned approximately 4,200 drain inlets, rejuvenated approximately 130 rockwells, and cleaned approximately 29,568 lineal feet of positive storm drain lines.

E. INDUSTRIAL DISCHARGE ACTIVITIES

As stated previously, in November 1994 the City submitted and received approval for the Program to Monitor and Control Pollutants From Industrial Facilities. This program is ongoing and involves the inspection of the industrial facilities, with the goal of controlling the discharge of pollutants in stormwater runoff from significant industries. The Fire Prevention Bureau conducts the inspections for stormwater pollution prevention at the industries and businesses which generate or store hazardous materials at their facilities and all industries which fall under the EPA Stormwater Regulations.

In June 1996 the City held an Industrial Stormwater Work Shop. The purpose of the work shop was to:

- 1) Inform the industries which discharge into the City's storm drain facilities and/or are within the City's city limits, of the stormwater regulations that affect them.

2) To inform the industries of what they can expect from the City's inspection program, and

3) To leave the work shop with the necessary information and resources for compliance with the State General Industrial Stormwater Permit.

Approximately twenty people attended from the various industries. A binder was given to everyone that participated in the work shop, which contained a copy of the City's Program to Monitor and Control Pollutants From Industrial Facilities, a copy of the City's inspection check list, literature on Best Management Practices (BMP) for Industries, a sample Stormwater Pollution Prevention Plan (SWPPP), a copy of a Notice of Intent (NOI), and information on how to obtain an employee training video.

The responses to date from the work shop have been real positive. People responding thought that the information was good and also thought that it was good to meet the people involved in the City's program and to talk one-on-one with them.

The Program Administrator has met with one industry, who was unable to attend the work shop, and discussed what was needed from the industry and what the City would be inspecting for. This is a good way for the City to interact with the industries and to find out how the two can work together to achieve the same goal. The Program Administrator will be a speaker at one of their safety meetings to help educate their employees on stormwater pollution prevention.

The City has received four stormwater pollution prevention plans and one Notice of Termination (NOT), and has conducted informal inspections during fiscal year 1995/1996.

Fresno Metropolitan Flood Control District has produced a "Model Stormwater Pollution Prevention Plan For Industrial Activities" hand out which the City is utilizing to help the industries.

In August 1995, the Industrial Waste Pretreatment staff found two illicit discharges. One was occurring at a manhole on 7th street. It was found to be coming from a facility located nearby (Foster Farms). It appears as though the company had a small leak in one of their tanks. Contact was made with the facility manager, and the matter was resolved in an expeditious manner. The other incident was some soap suds found in a manhole on south 7th Street. After some investigation, it was found to be an employee washing off a parking lot at Mallards Catering Facility. Contact was made with the facility manager and now the company has an employee education program regarding stormwater pollution prevention.

E. CONSTRUCTION SITE ACTIVITIES

As discussed in the section on Program Administration and Comprehensive Planning, the City is currently in the final stages of amending the Storm Drain Ordinance. The City has been working with the Building Industry Association and other interested parties to help finalize the Storm Drain Ordinance, which requires compliance with the State General Construction Activity Stormwater Permit (see attachment # 1). Once the Stormwater Ordinance is adopted, the City will have complete legal authority to implement the Stormwater Program as proposed in the City's Part 2 Application.

The City has integrated compliance with the State General Construction Activity Stormwater Permit into the City procedures for projects greater than five acres. According to the Construction Administration Division, there were no new construction activities in this category for fiscal year 1995/1996. However, should there be any, City staff will be inspecting these sites to ensure that erosion is controlled and pollution activities are not occurring.

For projects less than five acres, City staff has done a little work on whether control of these smaller sites is needed and will continue until a decision is reached. This has been a difficult area to get a handle on, particularly with development the slowest it has been in a long time.

ASSESSMENT OF EFFECTIVENESS

The City carefully thought-through and developed, for its Part 2 Application, a Management Program designed to address the most significant local stormwater issues. The City considers its prioritization of the public education, illegal dumping, and new development elements is, in itself, a means of effectively focusing the City's resources properly. And, therefore, the City considers that implementation of its Management Program is one way of measuring effectiveness. (At this time, The City also is adding urban pesticide use source identification and control as a fourth priority.) Thus, many of the City's measures of effectiveness are designed to monitor implementation or build upon monitoring implementation. Determining better ways to measure effectiveness is an area the City continues to work on. For example, in the Industrial Program the City is currently counting the number of industries with pollution prevention plans. As the inspection of industries begins, the City will be able to add information both on the number of industries inspected and also on the number of industries that have clean outdoor areas, i.e. have implemented effective pollution prevention plans.

The City has also conducted studies which have examined the effectiveness of particular activities (the Street Sweeping Study) and, structures (the Merle Basin Study). These studies have, to date, provided the City with feedback as to whether existing control measures can be expected to improve general urban runoff water quality.

In regards to improving urban runoff discharge water quality for constituents that may contribute to use impairments in the receiving streams, diazinon is the constituent currently identified as a pollutant or potential pollutant. Diazinon source identification and the identification of practical control measures and their implementation are needed before it can be determined how any reductions can be shown.

Data on several measures of effectiveness were proposed in last years Annual Report and are discussed below. Some of the measures are shown in the accompanying table.

MEASURE OF EFFECTIVENESS TABLE

Measure of Effectiveness	Program Element	1994/1995		1995/1996			1996/1997		
				Date Started				Date to be Completed	
1. Public Education Marketing Survey	Public Education And Participation			March 1996				August 1996	
2. Amount of Street Sweepings Removed	Comm. & Res. Area Source Control	Amount Removed 7,462,000 lbs			Amount Removed 7,872,000 lbs	% Change +5		Amount Removed	% Change
3. Storm Drain Line Pilot Study	Comm. & Res. Area Source Control			Date Started May 1996				Date to be Completed February 1997	
4. Leaf Pick Up Pilot Study	Comm. & Res. Area Source Control			Date Started May 1996				Date to be Completed November 1996	
5. Number of Storm Drain Inlets Stenciled (8826 inlets total)	Illicit Discharge Activities	Number Stenciled 4000	% Completed +45		Number Stenciled 4826	% Completed +100		Number Stenciled	% Change
6. Reports of Illegal Dumping	Illicit Discharge Activities	Number Reported 12			Number Reported 36	% Change +300		Number Reported	% Change
7. No. of Pollution Prevention Plans Dev.	Industrial Discharge Activities	Number Received 0		Number of Industries 25	Number Received 4	% of Total +16	Number of Industries	Number Received	% of Total
8. No. of Erosion Control Work Plans Dev.	Construction Site Activities	Number Received 0		Number Observed 0	Number Received 0	% Difference 0	Number Observed	Number Received	% Difference
9. Amount of Used Oil Collected	Comm. & Res. Area Source Control	Amount Collected 19,218 gals.			Amount Collected 21,268 gals.	% Change +11		Amount Collected	% Change
10. Industrial Inspection reports	Industrial Discharge Activities	Number Received 0		Number of Industries 25	Number Received 0	% Change 0	Number of Industries	Number Received	% Change
11. Construction Inspection Reports	Construction Site Activities	Number Received 0		Number Observed 0	Number Received 0	% Change 0	Number Observed	Number Received	% Change

- (1) **Public Education Marketing Survey.** The Public Education Marketing Survey is currently ongoing, with the contract awarded to Godbe and Associates. The consultant's schedule shows the survey will be completed in August 1996.
- (2) **Street sweepings removed from City streets.** Approximately 7,872,000 pounds (3,936 tons) of street sweepings were collected from the City streets. This is an increase of 5.3 % over last year (7,462,000 pounds reported last year). There were a total of approximately 46,300 miles of City streets swept in calendar year 1995. The effectiveness of this activity is discussed in the attached technical memorandum titled "Street Sweeping Study".

The objective of the study was to evaluate the effectiveness of the street sweeping program in directly removing metals and hydrocarbons from the streets and, therefore, from entrainment in the City's stormwater runoff. A ballpark comparison indicates that the load of metals (and, by inference, of hydrocarbons) removed through street sweepings are significant compared to the total loads discharged in stormwater runoff. It appears that the street sweeping program is an effective and significant element of the overall stormwater management program.
- (3) **Storm Drain Line Pilot Study.** The study is being completed on a more extended schedule than previously thought necessary. Attachment number 10 is a copy of the proposed plan, which will be done in the 1996/1997 rain season.
- (4) **Leaf Pick up Pilot Study.** This study is also being completed on a more extended schedule than previously thought necessary. Attachment number 11 is a copy of the proposed plan, which will be conducted in the fall of 1996.
- (5) **Detention Basin Study.** The detention basin study is ongoing. City staff is currently working on plans for modification of the Merle Basin using the BMPs recommended in the State Stormwater Best Management Practices Handbook. Merle Basin was the focus of a synoptic monitoring study in which the City sampled the urban runoff entering the basin, then again after 48 hours as the stormwater was pumped out. This study showed a reduction in the metals of about 64% to 95%. After the City modifies the basin an assessment will be made on the effectiveness of the modifications.
- (6) **Field Screening Monitoring Study.** The 1995/1996 Illicit Discharges Field Screening Report describes past and current field screening monitoring conducted in the City's positive storm drain system. The purpose of the field screening is to identify illicit discharges and provide information and guidance to the City's Illicit Discharges Management Program. The field screening results provided no evidence of illicit connections or sanitary seepage. The City's current focus on illegal dumping and the implementation of the Industrial Inspection program were recommended as the appropriate management measures.

- (7) Number of Storm Drain Inlets Stenciled. In 1994/1995 it was reported that approximately 4,000 storm drain inlets out of approximately 9,000 had been stenciled. By August 1995 all of the inlets, (the inventory determined that there are 8,826 storm drain inlets) were stenciled with the same color and same stencil. Therefore, an additional 4,826 inlets were stenciled in 1995/1996.
- (8) Reports of Illegal Dumping. In 1994/1995 there were twelve reported incidents of illegal dumping, in 1995/1996 there were 36 reported incidents of illegal dumping. Some of the increase in reports is attributable to City field crews spending more time afield.
- (9) Number of Pollution Prevention Plans Developed.
The City received four stormwater pollution prevention plans and one Notice of Termination (NOT) from the NPDES industries. A letter has been sent to all of the industries in Modesto informing them that they are to send a copy of their stormwater pollution prevention plans to the City. The City will follow up on those industries which have not sent a copy.
- (10) Number of Erosion Control Work Plans. Due to the slow down in the construction industry, the City has not had any development occur in 1995/1996 which would need an erosion control work plan. Therefore, the City has not received any erosion control work plans.
- (11) Amount of Used Oil Collected. According to the City's Used Oil Coordinator, in 1995 there was an increase of 11 % in the City curbside collection of used motor oil (from 19,218 gallons to 21,268 gallons). Also, the projection thus far for 1996 is a 14 % increase! The City expects to see this increase due to the aggressive campaign for recycling used motor oil.
- (12) Industrial Inspection Reports. In June 1996, the City held an industrial workshop, with about twenty people in attendance from various industries. The work shop was to inform the industries about the industrial inspection program, and to inform them of what the City would be inspecting them for. Although no formal inspections have been done to date, the Fire Department Inspector has been doing informal stormwater inspections on all of the industries annually in order to assist the industries prior to start of the formal inspection program. It is anticipated that the formal inspections will begin in July 1996.
- (13) Construction Inspection Reports. As mentioned previously the City had no development which would need an erosion control work plan, therefore no inspections have been done.

1996/1997 WORK PLAN

STORMWATER MANAGEMENT PROGRAM ACTIVITIES

The Management Program activities described below represent the City's best proposal at this time. Considerations such as new information or any problems encountered during implementation may cause the City to modify the proposed activities, as appropriate. Most proposed activities are the same as described in the Part 2 Application (see the Part 2 Application for a more detailed description). Priorities include public education and participation, illegal dumping, new development, and urban pesticide use source identification and control. The attached 1995/1996 Stormwater Monitoring Report provides additional discussion of the activities to further the urban pesticide use priority issue.

The proposed program for next year is discussed below under each of the six program elements: (A) Program Administration and Comprehensive Planning, (B) Public Education and Participation, (C) Commercial and Residential Area Source Control Activities, (D) Illicit Discharges, (E) Industrial Discharge Activities, (F) Construction Activities, (G) Monitoring Program Activities.

The following stormwater management activities will be conducted during the 1996/1997 fiscal year:

- A. **Program Administration and Comprehensive Planning** will consist of: (1) Keeping current with the stormwater program at the State and National level, (2) Updating the Regional Board staff on the status of the City's program, (3) Coordinating planning group meetings to conduct scope and budget planning through out the year, (4) Discussing with CalTrans, the status of their pesticide management activities, and (5) Participating in the BASMAA pesticide control strategy effort.

- B. **Public Education and Participation** contains ten items to be completed in 1996/1997 (see Work Plan Schedule). The first is to distribute brochures, which will be done as utility bill inserts and as hand outs at City functions. Item number 2 is a public service announcement to air on the local cable channels. The third item is to develop a stormwater hotline (currently ongoing). Items four, five, and six are to provide point of purchase displays for Used Oil Recycling, Herbicides and Pesticides, and for Household

Hazardous Waste to the local stores which specialize in those respective product. Items number seven through ten are projects aimed at getting the schools more involved with pollution prevention. In addition to the ten items the City will continue to conduct business and community outreach, and out door advertising.

- C. Commercial and Residential Area Source Control Activities** will consist of three items. The first item is the Storm Drain Line Pilot Study, as mentioned before, which is being completed on a more extended schedule than previously thought necessary. The second item is the Leaf Pick Up Pilot Study, which also is being completed on a more extended schedule than previously thought necessary. The third item is to develop a procedure to respond to illegal discharges. This is currently ongoing along with the stormwater hotline. New development, although slow, is anticipated to see some activity. New development is now required to utilize detention basins, and are encouraged to utilize BMPs when ever possible.
- D. Illicit Discharge Activities** (stenciling and mapping) have been completed. Now the City will begin to track illicit discharge reports for ways to possibly target areas that may have a high number of incidents.
- E. Industrial Discharge Activities** will consist of three items. The first is to implement the formal Stormwater Inspection Program. The second item is to include the State Industrial Stormwater Best Management Practices Handbook in the proposed Stormwater Ordinance. The third item is to consider including commercial pesticide applicators in the industrial program. To explore this possibility, a survey will be conducted on the use of specific pesticides and seasonal application trends.
- F. Construction Activities** will consist of the Program Administrator, Building Inspectors and the Construction Inspectors organizing, training, and educating the inspectors to begin construction activity site inspections. This will also include the education of contractors and developers. For projects less than five acres, City staff will continue to work in this area until a decision is reached.
- G. Monitoring Program Activities**
The following monitoring activities will be conducted in fiscal year 1996/1997:
- 1) **Development of a 1996/1997 Sampling Plan.**
A sampling plan and supporting logistical field and coordinator materials will be developed to assist in the 1996/1997 sample collection effort.
 - 2) **Liaison with the Analytical Laboratory.**

Communication with laboratory staff will be important to ensure that, particularly for the pesticides, the laboratory will assay specific pesticides at specified detection levels.

3) Monitoring Program Work Shop.

A work shop will be held for the sample collection team to provide the team (1) perspective on the overall 1996/1997 monitoring goals, (2) logistical information on the sampling effort, (3) specific sample collection procedures and protocol, and (4) hands-on familiarity with sampling equipment.

4) Early rain season First-Flush Storm Sampling.

Urban runoff EMC samples will be collected from an early rain season first-flush storm at the City's long-term monitoring station and at a monitoring station in the Airport Area. Constituents on the City's Constituents of Concern (COC), Potential Constituents of Concern, and Constituents of Interest (COI) list will be analyzed.

5) Later Season Storm Sampling.

An urban runoff EMC sample will be collected from a monitoring station in the Airport Area during a later season storm. A storm closely following the dormant season agricultural application of pesticides is preferred. Constituents on the City's COC/COI list will be analyzed.

6) Tracking of Other Agencies' Monitoring Work.

The City will track and incorporate the results of the following studies into its understanding of its own urban runoff issues:

- The Regional Board final TIE Study Report
- The USGS Atmospheric Transport Study
- The Sacramento Source Identification Studies
- The BASMAA Pesticide Control Study
- The Stockton Dissolved Oxygen Study

7) Development of an Annual Monitoring Report.

The report will include (1) an evaluation of pesticide issues based on both the City's data and the results of others, (2) a characterization of runoff from the City's only industrial watershed (the Airport Area), and (3) the completion of seasonal urban runoff load calculations.

1996/1997 WORK PLAN SCHEDULE

<u>ACTIVITY</u>	<u>EST. COMPLETION DATE</u>
-----------------	-----------------------------

Program Administration & Comprehensive Planning

- | | |
|---------------------------------------------|---------------------------|
| 1. Comprehensive Planning
Group Meetings | January 1997 & April 1997 |
| 2. Annual Progress Report | July 1997 |

Public Education & Participation

- | | |
|-----------------------------------------------------------|----------------------------|
| 1. Brochures/Utility Bill Inserts | December 1996/January 1997 |
| 2. Public Service Announcement | March 1997 |
| 3. Stormwater Hotline | January 1997 |
| 4. Used Oil Point of Purchase Display | October 1996 |
| 5. Herbicide & Pesticide
Point of Purchase Display | February 1997 |
| 6. Household Hazardous Waste
Point of Purchase Display | April 1997 |
| 7. High School Ambassador Program | November 1996 |
| 8. Junior High Ambassador Program | February 1997 |
| 9. School Poster Contest | March 1997 |
| 10. Adopt-a-Rockwell/Creek Program | May 1997 |

Commercial & Residential Area Source Control Activities

- | | |
|-----------------------------------|---------------|
| 1. Storm Drain Line Pilot Project | October 1996 |
| 2. Leaf Pick Up Pilot Project | December 1996 |

New Development Planning

1. Revise Detention Basin Design December 1996

Illicit Discharge Activities

1. Dev. Procedure to Respond to Illegal Discharges September 1996

Industrial Activities

1. Industrial Program Ongoing

Construction Activities

1. Modify Storm Drain Ordinance September 1996
2. Identify Contractors/Projects Affected November 1996
3. Notify Contractors December 1996
4. Inspection and Enforcement January 1997

Monitoring Program

1. Monitoring Program Work Shop August 1996
2. Early Rain Season First Flush Sampling November to January 1996
3. Airport Late Season Sampling January to March 1996

1996/1997 ESTIMATED STORM WATER MANAGEMENT PROGRAM HOURS

Program Element	City Labor			Total Hours
	Hours			
	Professional	Technical	Clerical	
Program Administration and Comprehensive Planning	600	0	1,000	1,600
Subtotal	600	0	1,000	1,600
Public Education and Participation	600	0	200	800
Subtotal	600	0	200	800
Commercial and Residential Area Source Control				
1. Outfall Inspection	0	80	0	80
2. Storm Drain Line Pilot Program	0	200	0	200
3. Leaf Pick Up Pilot Program	0	200	0	200
Subtotal	0	480	0	480
Illicit Discharges				
1. Track Rockwell Maintenance Records	40	0	150	190
2. Develop and Implement Reporting Procedures	100	200	60	360
Subtotal	140	200	210	550
Industries				
1. Update Industrial Permittee Database	40	0	120	160
2. Implement Inspection Program	200	400	120	720
3. Consider/Dev./Implement Monitoring Audit Program	160	0	40	200
4. Consider Additional Industries	200	0	160	360
Subtotal	600	400	320	1,320
Construction				
Projects >5 Acres				
1. Implementation/Inspection	300	500	200	1,000
Projects <5 Acres				
1. Implementation/Inspection	300	1,000	300	1,600
Subtotal	600	1,500	500	2,600
Monitoring				
Airport Area Monitoring				
1. Two Events	100	400	50	550
Long Term Monitoring				
1. One Event	100	200	20	320
Subtotal	200	600	70	870
Program Total	2,603	3,180	2,300	8,083

1996/1997 BUDGET TABLE

ACTIVITY	EST. COSTS	EST. HOURS
Administration & Planning Activities	\$100,000	1,600
Public Education & Participation	\$30,000	800
Commercial & Residential Area Source Control Activities	\$30,000	480
Illicit Discharge Activities	\$38,500	1,550
Industrial Discharge Activities	\$15,000	1,320
Construction Site Activities	\$30,000	2,600
Monitoring Program Activities	\$20,000	870
Consultant Services	\$60,000	
Equipment Costs	<u>\$5,500</u>	

TOTAL BUDGET \$329,000

The City has a Storm Drain Enterprise Fund. Revenues for this fund are generated through the collection of Storm Drain Fees. Storm drain fees are assessed on each parcel in the City based on use. The storm drain fees are evaluated on an annual basis and rates are set in an amount sufficient to cover all expenses for the Storm Drain Program for fiscal year 1995/1996. The FY 95/96 budget of \$364,061 has been approved by City Council, 6/20/95.

ORDINANCE NO. _____-C.S.

AN ORDINANCE ADDING CHAPTER 10 ENTITLED "STORM WATER MANAGEMENT AND DISCHARGE CONTROLS" TO TITLE V OF THE MODESTO MUNICIPAL CODE, AND REPEALING SECTIONS 5-6.22, 5-6.23, 5-6.25, AND 5-6.26 OF THE MODESTO MUNICIPAL CODE.

The Council of the City of Modesto does ordain as follows:

SECTION 1. AMENDMENT OF CODE. Chapter 10 entitled "Storm Water Management and Discharge Controls" is hereby added to Title V of the Modesto Municipal Code to read as follows:

CHAPTER 10. STORM WATER MANAGEMENT AND DISCHARGE CONTROLS

ARTICLE 1. STORM DRAIN REGULATIONS

SEC. 5-10.101. TITLE.

This chapter shall be known as the City of Modesto Storm Water Management and Discharge Controls Ordinance and may be so cited.

SEC. 5-10.102. need title here

In 1987, the Clean Water Act was amended by passage of the Water Quality Act. Section 402(p) of the Clean Water Act gives the U.S. Environmental Protection Agency (EPA) authority over storm water discharge permit requirements under the National Pollutant Discharge Elimination System (NPDES) program. The EPA promulgated its storm water permit requirements on November 16, 1990, NPDES permit application regulations for storm water dischargers; Final Rule (Storm Water Regulations) -- 40 CFR Parts 122, 123, and 124. In addition to NPDES permit application regulations for storm water discharges, the Final Rule mandates the control of urban storm water quality.

SEC. 5-10.103. PURPOSE AND INTENT.

The purpose of this chapter is to ensure the future health, safety, and general welfare of City of Modesto citizens by:

- (a) Regulating non-storm water discharges to the municipal separate storm drain.
- (b) Controlling the discharge to municipal separate storm drains from spills, dumping or disposal of materials other than storm water.
- (c) Reducing pollutants in storm water discharges to the maximum extent practicable.

The intent of this chapter is to protect and enhance the water quality of City watercourses, water bodies, ground water, and wetlands in a manner pursuant to and consistent with the Federal Clean Water Act.

SEC. 5-10.104. DEFINITIONS.

The terms as used in this chapter shall have the following meanings:

- (a) Best Management Practice (BMPs) shall mean schedules of activities, prohibitions of practices, general good housekeeping practices, maintenance procedures, educational programs, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw materials storage. The California Storm Water Best Management Practice Handbooks for Municipal, Industrial/Commercial and Construction Activity provide a detailed discussion of BMPs.
- (b) City shall mean the City of Modesto.
- (c) Council shall mean the City Council of the City of Modesto.
- (d) Illicit Discharge shall mean any discharge to the storm drain system that is not composed entirely of storm water runoff except discharges made pursuant to a National Pollutant Discharge Elimination System (NPDES) permit.
- (e) Illicit Connection shall mean any physical connection to a storm drain system which has not been permitted by the City.
- (f) National Pollutant Discharge Elimination System (NPDES) Permit shall mean a storm water discharge permit issued by the State

Water Resources Control Board in compliance with the Federal Clean Water Act.

- (g) **Municipal NPDES Permit** shall mean an area-wide NPDES permit issued to a government agency or agencies for the discharge of storm water from a storm water system.
- (h) **Non-Storm Water Discharge** shall mean any discharge to the storm drain system that is not entirely composed of storm water.
- (i) **Person** shall mean any natural person, firm, association, club, organization, corporation, partnership, business trust, company or other entity which is recognized by law as the subject of rights or duties.
- (j) **Pollutant** shall mean anything which causes the deterioration of water quality such that it impairs subsequent and or competing uses of the water. Pollutants may include but are not limited to paints, oil and other automotive fluids, soil, rubbish, trash, garbage, debris, refuse, waste, fecal coliform, fecal streptococcus, enterococcus, heavy metals, hazardous waste, chemicals, fresh concrete, yard waste from commercial landscaping operations, animal waste, materials that result from the process of constructing a building or structure, nauseous or offensive matter of any kind.
- (k) **Premises** shall mean any building, lot, parcel of land, land or portion of land whether improved or unimproved.
- (l) **Storm Drain System** shall mean any facility by which storm water may be conveyed to waters of the United States. The storm drain system includes but is not limited to any roads with drainage systems, streets, curbs, gutters, catch basin, natural and artificial channels, ditches, aqueducts, storm drains, **rockwells**, inlets, conduit or other drainage structure, and any terminal, treatment or discharge facility.
- (m) **Storm Water Runoff** shall mean surface runoff and drainage associated with rain storm events and snow melt.
- (n) **Director** shall mean the Public Works and Transportation Director.

- (o) **Authorized Enforcement Officer** shall include the Director or his/her designee.

SEC. 5-10.105. RESPONSIBILITY FOR ADMINISTRATION.

This chapter shall be administered for the City by the Director.

SEC. 5-10.106. REGULATORY CONSISTENCY.

This chapter shall be construed to assure consistency with the requirements of the Federal Clean Water Act and acts amendatory thereof or supplementary thereto, applicable implementing regulations, and any existing or future municipal NPDES Permits and any amendments, revisions or reissuance thereof.

SEC. 5-10.107. SEVERABILITY.

If any provision, clause, sentence, or paragraph of this chapter or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this chapter which can be given effect without the invalid provision or application, and to this end, the provisions of this chapter are hereby declared to be severable.

SEC. 5-10.108. COMPLIANCE BY INDUSTRIAL USERS WITH FEDERAL AND STATE STANDARDS.

- (a) All Industrial activities shall comply with the strictest of any applicable Federal or State standards or regulations covering the discharge of storm water or surface water, including but not limited to those adopted pursuant to the Clean Water Act PL 95-217, as amended, and the National Pollutant Discharge Elimination System (NPDES).
- (b) Any industrial activity not complying with the standards or regulations as required by subsection (a) hereof may be required by the Director to develop and implement a compliance schedule for any measures or facilities as may be necessary to meet said standards and regulations.
- (c) The Director may require the submission of such notices of self-monitoring reports from the site of industrial activities as he may

consider necessary to assure compliance with said standards and regulations.

- (d) Holders of NPDES industrial storm water permits which discharge storm water or surface water to the City's storm drainage facilities shall comply with applicable requirements of the City's NPDES permit for its Municipal Separate Storm Sewer System. In addition, the Director ~~or his/her~~ designee may impose other, and/or stricter requirements in individual cases when the Director deems it beneficial to the general welfare of the City to do so.
- (e) Industrial activities required to obtain NPDES permits requiring the discharge of storm water and surface water to the City's storm drainage facilities shall notify the Director that they are subject to such permit. Notice shall be made in writing at least thirty (30) days before such activity commences. The NPDES permit holders shall notify the Director immediately by phone upon discovery of any discharge in violation of their permit.
- (f) The Director or his/her designee shall have access to the site of the industrial activity regulated by a NPDES industrial storm water permit, for purposes of inspection and monitoring, upon notice to the designated representative of the NPDES permit holder.
- (g) The Director may establish standards and guidelines implementing BMP's designed to control the rate and volume of storm water runoff from industrial activities as may be appropriate to minimize the discharge and transport of pollutants.

SEC. 5-10.109. STORM DRAINAGE USER CHARGE.

The City is implementing activities to improve the environmental quality of storm water by decreasing the amount of pollutants that enter the system. Each person owning property within the city limits shall pay a storm drainage user charge to the City in accordance with rates and charges as established by the Council from time to time by resolution and on file in the office of the City Clerk and the Director. The user charge is based on the size, type of, and use and intensity of use of property and shall go to pay the costs of ~~improving storm water associated with the property~~ ~~the City NPDES program~~. Property owners shall remain responsible for the cost of storm water management and

quality control on their property. The Council shall have the power to establish, by agreement or resolution, the rate or rates to be charged and the method of collecting the storm drainage user charge for properties outside the boundaries of the city limits for those properties which discharge into the City's storm drain system.

SEC. 5-10.110. INDUSTRIAL ACTIVITIES FEES.

Council shall, from time to time, establish by resolution a schedule of industrial activities fees. These fees shall apply to parcels which are required by Federal law to obtain a National Pollutant Discharge Elimination System (NPDES) permit regulating the discharge of storm water and surface water from the site of an industrial activity. The fees shall correspond to the costs expended by the City in monitoring the discharge from such a site of industrial activity for compliance with the conditions of its NPDES permit, as well as any costs associated with damage to or degradation of City's storm drain system.

SEC. 5-10.111. CONSTRUCTION ACTIVITIES FEES.

Council shall, from time to time, establish by resolution a schedule of construction activities fees. These fees shall apply to parcels which are required by federal law to obtain a National Pollutant Discharge Elimination System (NPDES) permit regulating the discharge of storm water and surface water from the site of construction activity. The fees shall correspond to the costs expended by the City in monitoring the discharge from such a site of construction activity for compliance with the conditions of its NPDES permit, as well as any costs associated with damage to or degradation of City's storm drain system.

SEC. 5-10.112 . ADMINISTRATIVE REVIEW.

Any parcel owner who disputes the amount of any sewer-storm drainage user charge or who requests a deferred payment schedule therefor must request a revision or modification of such charge in writing from the Director. The Director may notify any owner or occupier and take appropriate action in the event the Director considers the charge to be inadequate or improper.

ARTICLE 2. DISCHARGE REGULATIONS AND REQUIREMENTS

SEC. 5-10.201. DISCHARGE OF POLLUTANTS.

A non-storm water discharge to the storm drain system is a violation of this chapter except as specified below.

- (a) The prohibition of discharges shall not apply to any discharge regulated under a National Pollutant Discharge Elimination System (NPDES) permit or waiver issued to the discharger and administered by the State of California under the authority of the Environmental Protection Agency (EPA), provided that the discharger is in full compliance with all requirements of the permit or waiver and other applicable laws or regulations.
- (b) Discharges from the following activities will not be considered a source of pollutants to waters of the United States when properly managed: water line flushing and other discharges from potable water sources, landscape irrigation and lawn watering, irrigation water, diverted stream flows, rising ground waters, infiltration to separate storm drains, uncontaminated pumped ground water, foundation and footing drains, water from crawl space pumps, air-conditioning condensation, springs, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges or flows from fire fighting.

SEC. 5-10.202. DISCHARGE IN VIOLATION OF PERMIT.

Any discharge that would result in or contribute to a violation of the City's existing or future Municipal NPDES Permit and any amendment, revision or reissuance thereof, either separately considered or when combined with other discharges, is a violation of this chapter and is prohibited. Liability for any such discharge shall be the responsibility of the person(s) causing or responsible for the discharge, as well as the parcel owner on whose property the discharge occurs, who shall be strictly liable for its consequences, and such persons and/or owners shall defend, indemnify and hold harmless the City in any administrative or judicial enforcement action relating to such discharge.

SEC. 5-10.203. ILLICIT CONNECTIONS.

It is a violation of this chapter to establish, use, maintain, or continue illicit drainage connections to the City storm drain system, and to

commence or continue any illicit discharges to the City storm drain system. This prohibition against illicit connections is retroactive and applies to unpermitted connections made in the past, regardless of whether permissible under the law or practices applicable or prevailing at the time of the connection.

SEC. 5-10.204. REDUCTION OF POLLUTANTS IN STORM WATER.

It is a violation of this chapter to throw, deposit, leave, maintain, keep, or permit to be thrown, deposited, placed, left or maintained, garbage, abandoned vehicle or other discarded or abandoned objects, articles, and accumulations, in or upon any street, alley, sidewalk, storm drain, inlet, catch basin, conduit or other drainage structures, business place, or upon any public or private plot of land in the City. The only exception being where such pollutant is being temporarily placed in an appropriate container with a spill containment system for timely collection and removal. It is a violation of this chapter to cause or permit any dumpster, solid waste bin, or similar container to leak such that any pollutant is discharged into any street, alley, sidewalk, storm drain, inlet, catch basin, conduit, rockwell or other drainage structures, storm drain system component, business place, or upon any public or private plot of land in the City.

SEC. 5-10.205. OUTDOOR STORAGE AREAS - COMMERCIAL AND INDUSTRIAL FACILITIES.

In outdoor areas, no person shall improperly store grease, oil or other hazardous substances. In outdoor areas, no person shall improperly store motor vehicles, machine parts, or other objects in a manner that may leak grease, oil, or other hazardous substances. To prevent the discharge of hazardous substances from the property, the City may require the installation of a spill containment system. Spill containment systems may consist of a system of dikes, walls, barriers, berms, or other devices as required. No person shall operate a spill containment system such that it allows incompatible liquids to mix and thereby create a hazardous condition.

SEC. 5-10.206. CONSTRUCTION SITES.

Any person performing construction work in the City shall comply with the provisions of this chapter.

The Director may establish standards and guidelines implementing BMP's designed to control the rate and volume of storm water runoff from construction sites as may be appropriate to minimize the discharge and transport of pollutants. All construction sites shall comply with the State General Construction Activity Permit.

SEC. 5-10.207. NEW DEVELOPMENT AND REDEVELOPMENT.

To minimize the discharge and transport of pollutants, the City may require, in its discretion, a new development or redevelopment project, greater than five acres, to control the volume and rate of storm water runoff from the project so as to prevent any deterioration of water quality which would impair the subsequent or competing uses of the water. The Director may establish standards and guidelines implementing BMP's designed to control the rate and volume of storm water runoff from new developments and redevelopments as may be appropriate to minimize the discharge and transport of pollutants.

Acceptable methods and standards for controlling storm water runoff volumes, rates, and pollutant load may include but are not limited to the following:

- (a) **Increase Permeable Areas.** Avoid placing impervious surfaces in highly porous soil areas; incorporate landscaping and open space into the project design; use porous materials for or near driveways and walkways; incorporate detention ponds and infiltration pits into the project's design; avoid placing pavement and other impervious surfaces in low lying areas.
- (b) **Direct Runoff to Permeable Areas.** Direct storm water runoff away from impermeable areas to swales, berms, green strip filters, gravel beds, and french drains. Install rain gutters and orient them toward permeable areas. Modify the grade of the property to divert flow to permeable areas and minimize the amount of storm water runoff leaving the property. When designing curbs, berms or other structures, avoid designs which isolate permeable or landscaped areas.
- (c) **Maximize Storm Water Storage for Reuse.** Use retention structures, subsurface areas, cisterns, or other structures to store storm water runoff for reuse or slow release.

SEC. 5-10.208. STORM DRAINAGE RULES AND REGULATIONS.

The following rules and regulations shall apply to all persons using storm drainage facilities. Failure to comply with any provision, requirement, rule, or regulation under this chapter shall be unlawful and punishable as an infraction.

- (a) The willful or negligent disposal of petroleum products (oil and grease), pesticides, fertilizers, household or industrial chemicals, industrial process wastewater, domestic sewage, animal waste or other pollutants into storm drainage facilities is prohibited.
- (b) Domestic roof drain leaders may not be directly connected to sidewalks and gutters, but must discharge into landscaped areas.
- (c) Discharge of water from swimming pools into rockwells is prohibited. Discharge of water from swimming pools into positive storm drainage facilities is allowed only with the written permission of the ~~Public Works and Transportation~~ Director. Such discharge may not cause flooding of the street. Water from pumping out swimming pools may be discharged to the sanitary sewer.
- (d) Storm water or surface water which is causing flooding on private property served by an on-site storm drainage system may not be discharged to the City's storm drainage facilities.

SEC. 5-10.209. COMPLIANCE WITH GENERAL PERMITS.

Any industrial discharger, discharger associated with construction activity, or other discharger subject to any general NPDES permit issued by the United States Environmental Protection Agency, the State Water Resources Control Board, or the Regional Water Quality Control Board, shall comply with all requirements of such permit. Proof of compliance with said NPDES General Permits may be required in a form acceptable to the Director prior to issuance of any City grading, building, occupancy, or other permits.

ARTICLE 3. INSPECTION AND ENFORCEMENT

SEC. 5-10.301. AUTHORITY TO INSPECT.

Whenever necessary to make an inspection to enforce any of the provisions of this chapter, or whenever an authorized enforcement officer has reasonable cause to believe that there exists in any building or upon any premises any condition which constitutes a violation of the provisions of this chapter, the officer may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the officer by this chapter; provided that (i) if such building or premises be occupied, he or she shall first present proper credentials and request entry; and (ii) if such building or premises be unoccupied, he or she shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry.

Any such request for entry shall state that the property owner or occupant has the right to refuse entry and that in the event such entry is refused, inspection may be made only upon issuance of a search warrant by a duly authorized magistrate. In the event the owner and/or occupant refuses entry after such request has been made, the officer is hereby empowered to seek assistance from any court of competent jurisdiction in obtaining such entry.

Routine or area inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this chapter, including but not limited to random sampling and/or sampling in areas with evidence of storm water contamination, illicit discharges, discharge of non-storm water to the storm water system, or similar factors.

- (a) **Authority to Sample and Establish Sampling Devices.** With the consent of the owner or occupant or pursuant to a search warrant, any authorized enforcement officer may establish on any property such devices as are necessary to conduct sampling or metering operations. During all inspections as provided herein, the Officer may take any samples deemed necessary to aid in the pursuit of the inquiry or in the recordation of the activities on-site.
- (b) **Notification of Spills.** All persons in charge of a facility or responsible for emergency response for a facility have a personal responsibility to train facility personnel and maintain notification procedures to assure immediate notification is provided to the

City of any suspected, confirmed or unconfirmed release of material, pollutants or waste creating a risk of discharge into the City Storm drain system. As soon as any person in charge of a facility or responsible for emergency response for a facility has knowledge, such person shall take all necessary steps to ensure the discovery and containment and clean up of such release and shall notify the City of the occurrence by telephoning the illicit discharge hotline, (phone number to be established by resolution) and confirming the notification by correspondence to Director.

- (c) **Requirement to Test or Monitor.** Any authorized enforcement officer may request that any person engaged in any activity and/or owning or operating any facility which may cause or contribute to storm water pollution or contamination, illicit discharges, and/or discharge of non-storm water to the storm water system, undertake such monitoring activities and/or ~~analyses-analysis~~ and furnish such reports as the officer may specify. The burden, including costs, of these activities, ~~analyses-analysis~~ and reports shall bear a reasonable relationship to the need for the monitoring, ~~analyses-analysis~~ and reports and the benefits to be obtained. The recipient of such request shall undertake and provide the monitoring, analysis and/or reports requested. In the event the owner or operator of a facility subject to a monitoring and/or analysis order fails to conduct required monitoring and/or ~~analyses-analysis~~ and furnish the required reports in the form required, the authorized enforcement officer may cause such monitoring and/or ~~analyses-analysis~~ and the cost, therefore, including the reasonable additional administrative costs incurred by the City shall be borne by the owner of the property and the cost thereof shall be invoiced to the owner of the property. If the invoice is not paid within sixty (60) days of the issuance thereof, the costs shall be a lien upon and against the property and continue in existence until the same shall be paid. If the lien is not satisfied by the owner of the property within three (3) months after the completion by an authorized enforcement officer of the required monitoring and/or ~~analyses-analysis~~ and reports, the property may be sold in satisfaction thereof in a like manner as other real property is sold under execution.

SEC. 5-10.302. VIOLATIONS CONSTITUTING MISDEMEANORS.

Unless otherwise specified by this chapter, the violation of any provision of this chapter, or failure to comply with any of the mandatory requirements of this chapter shall constitute a misdemeanor; except that notwithstanding any other provisions of this chapter, any such violation constituting a misdemeanor under this chapter, at the discretion of the authorized enforcement officer may be charged and prosecuted as an infraction.

SEC. 5-10.303. PENALTIES.

It shall be unlawful for any person to violate any provision of this chapter. Any person violating any provision of this chapter shall be deemed guilty of an infraction or misdemeanor as hereinafter specified. Such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this chapter is committed, continued, or permitted.

Any person so convicted shall be: (1) guilty of an infraction offense and punished by a fine not exceeding one hundred dollars (\$100.00) for a first violation; (2) guilty of an infraction offense and punished by a fine not exceeding two hundred dollars (\$200.00) for a second violation. The third and any additional violations shall constitute a misdemeanor offense and shall be punishable by a fine not exceeding one thousand dollars (\$1,000.00) or six (6) months in jail, or both. Notwithstanding the above, a first offense may be charged and prosecuted as a misdemeanor. Payment of any penalty herein shall not relieve a person from the responsibility for correcting the violation.

At the option of the Director or an authorized enforcement officer, such officer may, instead of the foregoing criminal procedure, utilize the administrative enforcement powers granted in Section 5-10.309, below, to enforce any of the provisions of this chapter, and to ensure the correction of any violations of this chapter. These shall include the powers to lien granted in that section, and shall include as well the power to levy an administrative (civil) penalty against an offender in such dollar amount as the Council may, from time to time, specify by resolution adopted pursuant to this chapter. Appeal from the imposition of any such fine shall be first to the Director, and, ultimately, to Council.

SEC. 5-10.304. CONCEALMENT.

Causing, permitting, aiding, abetting or concealing a violation of any provision of this chapter shall constitute a violation of such provision.

SEC. 5-10.305. ACTS POTENTIALLY RESULTING IN VIOLATION OF FEDERAL CLEAN WATER ACT AND/OR PORTER-COLOGNE ACT.

Any person who violates any provision of this chapter, any provision of any permit issued pursuant to this chapter, or who discharges waste or wastewater which causes pollution, or who violates any cease and desist order, prohibition, or effluent limitation, also may be in violation of the Federal Clean Water Act and/or Porter-Cologne Act and may be subject to the sanctions of those Acts including civil and criminal penalty. In that event, any person who may be required to defend, indemnify and hold the City harmless pursuant to Section 5-10.202 above shall also be required to do so in connection with any claim, enforcement action, or other legal action taken against the City arising out of the discharge or violation. Any enforcement action authorized under this chapter should also include notice to the violator of such potential liability. This section shall be retroactive to the fullest extent permitted by law.

SEC. 5-10.306. VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the penalties hereinbefore provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to the public health, safety and welfare, and may be declared and deemed a nuisance, and may be summarily abated and/or restored by any authorized enforcement officer, and/or civil action to abate, enjoin or otherwise compel the cessation of such nuisance may be taken by Council.

The cost of such abatement and restoration shall be borne by the owner of any property affected thereby, and the cost thereof shall be a lien upon and against any such property and such lien shall continue in existence until the same shall be paid. If the lien is not satisfied by the owner of the property within three (3) months after the completion by the authorized enforcement officer of the removal of the nuisance and the restoration of the property to its original condition, the property may be sold in satisfaction thereof in a like manner as other real property is sold under execution.

In any administrative or civil proceeding under this chapter in which the City prevails, the City shall be awarded all costs of investigation, administrative overhead, out-of-pocket expenses, costs of administrative hearings, costs of suit and reasonable attorney fees.

SEC. 5-10.307. JUDICIAL REVIEW.

The provisions of Section 1094.6 of the California Code of Civil Procedure are applicable to judicial review of City decisions pursuant to this chapter.

SEC. 5-10.308. CIVIL ACTIONS.

In addition to any other remedies provided in this section, this chapter may be enforced by civil action brought by the City. In any such action, the court may grant, as appropriate, any or all of the following remedies:

- (a) A temporary and/or permanent injunction.
- (b) Assessment of the violator/parcel owner for the costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this subsection.
- (c) Costs incurred in removing, correcting, or terminating the adverse effects resulting from the violation.
- (d) Compensatory damages for loss or destruction to water quality, wildlife, fish and aquatic life. Assessments under this subsection shall be paid to the City to be used exclusively for costs associated with monitoring and establishing storm water discharge pollution control systems and/or implementing or enforcing the provisions of this chapter.

SEC. 5-10.309. ADMINISTRATIVE ENFORCEMENT POWERS.

In addition to the other enforcement powers and remedies established by this chapter, any authorized enforcement officer has the authority to utilize the following administrative remedies.

- (a) **Cease and Desist Orders.** When an authorized enforcement officer finds that a discharge has taken place or is likely to take

place in violation of this chapter, the officer may issue an order to cease and desist such discharge, or practice, or operation likely to cause such discharge and direct that those persons not complying shall: a) comply with the requirement, b) comply with a time schedule for compliance, and/or c) take appropriate remedial or preventive action to prevent the violation from recurring.

- (b) **Notice to Clean.** Whenever an authorized enforcement officer finds any oil, earth dirt, tin cans, rubbish, refuse, waste or any other material of any kind, in or upon the sidewalk abutting or adjoining any parcel of land, or upon any parcel of land or grounds, which may result in an increase in pollutants entering the City storm drain system or natural watercourse, he or she may give notice to remove such oil, earth, dirt, tin cans, rubbish, refuse, waste or other material, in any manner that he or she may reasonably provide. The recipient of such notice shall undertake the activities as described in the notice.

In the event the owner or operator of a facility fails to conduct the activities as described in the notice, the authorized enforcement officer may cause such required activities as described in the notice and the cost thereof shall be invoiced to the owner of the property. If the invoice is not paid within sixty (60) days, a lien shall be placed upon and against the property. If the lien is not satisfied by the owner of the property within three (3) months after the completion of the required activities by the authorized enforcement officer, the property may be sold in satisfaction thereof in a like manner as other real property is sold under execution.

SEC. 5-10.310. AUTHORITY TO ARREST OR ISSUE CITATIONS.

Authorized enforcement officers shall have and are hereby vested with the authority to arrest or cite any person who violates any Section of this chapter in the manner provided by the California Penal Code for the arrest or release on citation of misdemeanors or infractions as prescribed by Chapter 5, 5c, and 5d of Title 3, Part 2 of the Penal Code (or as the same may be hereinafter amended).

Such authorized enforcement officers or employees may issue a citation and notice to appear in the manner prescribed by chapter 5c of Title 3, Part 2 of the Penal Code, including Section 853.6 (or as the same may hereafter be amended). It is the intent of the Council that the

immunities prescribed in Section 836.5 of the Penal Code be applicable to public officers or employees or employees acting in the course and scope of employment pursuant to this chapter. (Bail for infractions shall be as set by resolution of the City Council.)

SEC. 5-10.311. NONEXCLUSIVITY OF REMEDIES.

Remedies under this chapter are in addition to and do not supersede or limit any and all other remedies, civil or criminal. The remedies provided for herein shall be cumulative and not exclusive.

SEC. 5-10.312. APPEAL.

Any person, firm, corporation or organization required to perform monitoring, ~~analyses,~~ ~~analysis,~~ reporting and/or corrective activities by an authorized enforcement officer who is aggrieved by the decision of the authorized enforcement officer may appeal such decision to the Director within ten (10) days following the effective date of the decision by writing to the Director. Upon receipt of such request, the Director shall request a report and recommendation from the authorized enforcement officer and shall set the matter for hearing at the earliest practical date. At said hearing, the Director may hear additional evidence, and may reject, affirm or modify the Authority Enforcement officer's decision. Such decision shall be final.

SEC. 5-10.313. DISCLAIMER OF LIABILITY.

The degree of protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific, engineering and other relevant technical considerations. The standards set forth herein are minimum standards and this chapter does not imply that compliance will ensure that there will be no unauthorized discharge of pollutants into the waters of the United States. This chapter shall not create liability on the part of the City, any officer or employee thereof for any damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

SECTION 2. AMENDMENT OF CODE. Sections 5-6.22, 5-6.23, 5-6.25, and 5-6.26 of Chapter 6 of Title V of the Modesto Municipal Code are hereby repealed.

SECTION 3. EFFECTIVE DATE. This ordinance shall go into effect and be in full force and operation from and after thirty (30) days after its final passage and adoption.

SECTION 4. PUBLICATION. At least two (2) days prior to its final adoption, copies of this ordinance shall be posted in at least three (3) prominent and distinct locations in the City; and a notice shall be published once in The Modesto Bee, the official newspaper of the City of Modesto, setting forth the title of this ordinance, the date of its introduction and the places where this ordinance is posted.

The foregoing ordinance was introduced at a regular meeting of the Council of the City of Modesto held on the _____ day of _____, 1996, by Councilmember _____, who moved its introduction and passage to print, which motion being duly seconded by Councilmember _____, was upon roll call carried and ordered printed and published by the following vote:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers:

APPROVED: _____
RICHARD A. LANG, Mayor

ATTEST:

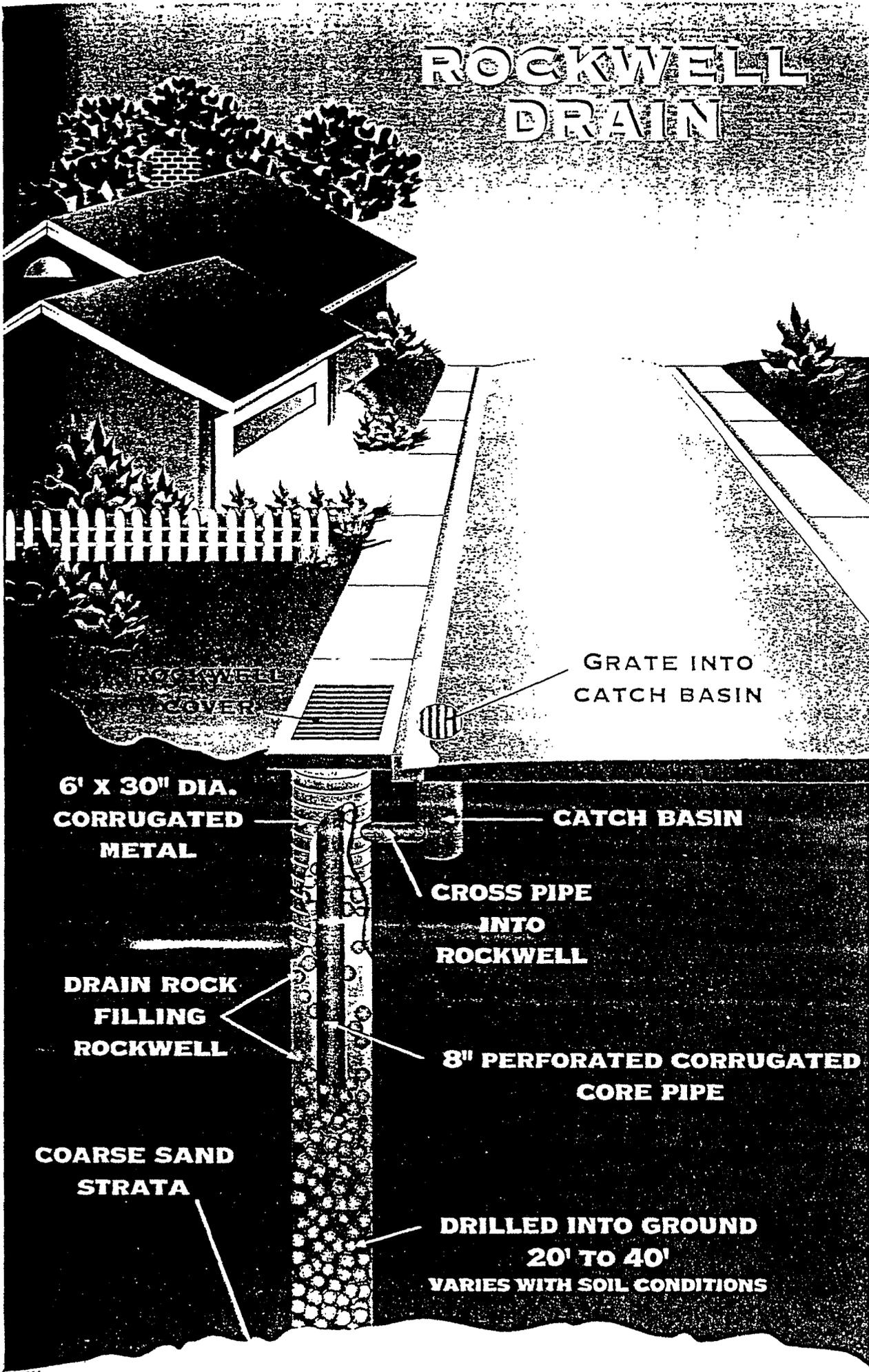
By _____
JEAN ADAMS, City Clerk

(SEAL)

APPROVED AS TO FORM:

By _____
MICHAEL D. MILICH, City Attorney

ROCKWELL DRAIN





CITY OF MODESTO USED OIL RECYCLING



Thank you for inquiring about Modesto's Used Oil Recycling Program. Recycling used oil protects the environment and preserves valuable resources. Modesto residents have a variety of ways to recycle used oil!

To safely transport your used motor oil, pour it into a plastic container with a screw top lid. The original container, some milk jugs or triple rinsed bleach bottles are good containers to use. **Do not use a container with a pop-off lid!** **Do not mix your oil with any other materials such as anti-freeze, brake fluid, transmission fluid or paint.**

CERTIFIED COLLECTION CENTERS

A Certified Collection Center is one that pays you for your used motor oil! The Certified Collection Center will pay you back the 4 cent per quart deposit when you drop off your used oil. You may recycle up to 5 gallons of oil per day at any Certified Collection Center. *Make sure your used oil isn't mixed with other materials or the Certified Center won't take it!* There are 16 Certified Collection Centers in the City of Modesto.

A & B Truck Repair, Inc.	959 S. 9th St.	527-6971
All Tune & Lube	141 E. Orangeburg Ave.	522-9677
Chevron	1403 McHenry Ave.	524-6108
Firestone Store #3579	3230 Dale Road	522-9311
Kragen Auto	3405 McHenry Ave.	527-1480
Kragen Auto	816 Oakdale Road	527-3660
Midas Muffler & Brake Shops	338 McHenry Ave.	527-0400
Midas Muffler & Brake Shops	3833 N. McHenry Ave.	523-4706
Minit Lube	3927 McHenry Ave.	578-5823
Minit Lube	1701 Yosemite Ave.	575-1701
Parnell Jones, Inc.	1120 N. Carpenter Road	523-9129
Precision Automotive	1203 Scenic Drive	521-1651
Pro-10 Minute Oil Change	3037 Sisk Road	544-3609
Pro-10 Minute Oil Change	1135 Tully Road	527-7691
Quick Lube	1455 Herndon Ave.	521-4400
Speedee Oil Change	1343 Coffee Road	521-1929

NON-CERTIFIED COLLECTION CENTERS

A Non-Certified Collection Center will also take your used oil but won't pay you for it. You may recycle up to 5 gallons of oil per day at any Non-Certified Collection Center. *Make sure your used oil isn't mixed with other materials or the Non-Certified Center won't take it!*

Chief Auto Parts	1464 Mitchell Road, Ceres	538-1311
Griffin's Shell Service	1400 Coffee Road	529-2521
Kragen Auto	1420 E. Hatch Road	537-4512
Modesto Disposal Service	2769 W. Hatch Road	538-2210
Pop Boys	1340 McHenry Ave.	529-3310
Stanislaus County-		
Hazardous Waste Facility	1716 Morgan Road	525-4150

CURBSIDE RECYCLING

Modesto residents can also recycle their used motor oil by leaving it out on the curb in a plastic, screw-top container on your regular garbage pick-up day. It's that easy!

RECYCLE USED OIL **IT MAKES CENTS!**

Call 577-5493 for details!



A City of Modesto crew recently cleaned out a contaminated "rockwell" in your neighborhood. Rockwells (see reverse), collect storm water runoff and filter it down into the ground. When a rockwell gets clogged with oil or debris, it doesn't drain properly and flooding can occur. Cleaning a rockwell costs about \$1,000. There are 9,400 rockwells in Modesto.

When rockwells get contaminated with used motor oil or other chemicals such as paint or antifreeze, it can affect the fragile environment. Just one quart of motor oil can contaminate 250,000 gallons of water! **RECYCLE** your used motor oil!

In Modesto, curbside used oil recycling is **FREE!** Put your used oil in a clean plastic container with a screw-on lid. Set it out at the curb on your regular garbage collection day. Oil is picked up along with other recyclables. Or **GET PAID** for it at a Certified Collection Center! For more information, call:

MODESTO'S USED OIL RECYCLING HOTLINE: 577-5493

Used oil can be cleaned and used over and over!

¡RECICLE SU ACEITE USADO
Y GANE DINERO!

¡Llame al 577-5493 para más detalles!

Una cuadrilla de la Ciudad de Modesto recientemente limpió un "pózo de piedra" o "rockwell" contaminado en su vecindad. Los pózos de piedra (vea el reverso) coleccionan el exceso de agua de las tormentas y lo filtran hacia adentro en la tierra. Cuando un pózo de piedra se tapa con aceite o basuras, no se escurre bien y pueden haber enundaciones. Limpiar un pózo de piedra cuesta como \$1,000. Hay 9,400 pózos de piedra en Modesto.

Cuando los pózos de piedra se contaminan con aceite de motor usado o con otras químicas como pintura o anticongelante, puede afectar al medio ambiente. ¡Solo un cuarto de aceite de motor puede contaminar 250,000 galones de agua! **¡RECICLE** su aceite de motor usado!

¡En Modesto, el reciclaje del aceite usado al bordo de su banqueta es **GRATIS!** Ponga su aceite usado en un contenedor limpio de plástico con una tapa de atornillar. Pongalo al bordo de su banqueta, para que se levante el mismo día que se levanta su basura. El aceite se levanta al mismo tiempo que los otros reciclables. **¡O RECIBA DINERO** por él en un Centro Certificado de Colección! Para más información, llame a la:

LINEA CALIENTE DE RECICLAJE DEL ACEITE
USADO DE MODESTO : 577-5493

!El aceite usado puede ser limpiado y usado una y otra vez!

3M Media

**Recycling Your
Used Oil
Makes More Cents**

PAID FOR BY THE CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

*Get Cash Back
At Any Certified
Collection Center*




577-5493

3M Media

**Recycle Su
Aceite Usado**

PAGADO POR EL CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

*Consiga Dinero En
Cualquier Centro De
Colección Certificado*




577-5493

040667

IS POINTLESS

NO

I

IN
MODESTO

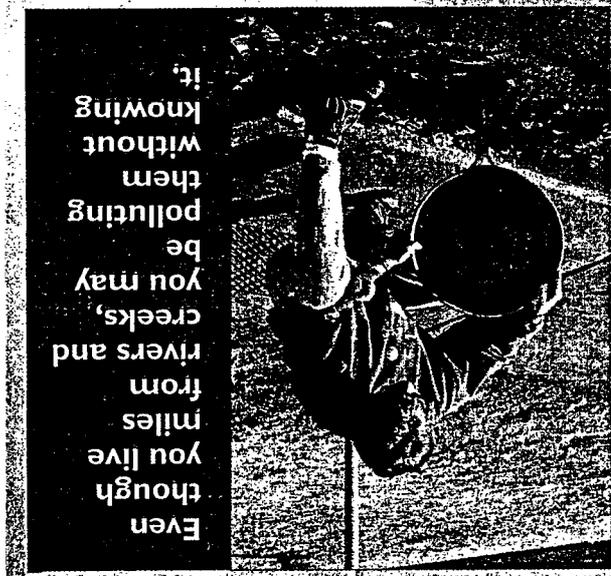
T

U

T

O

D



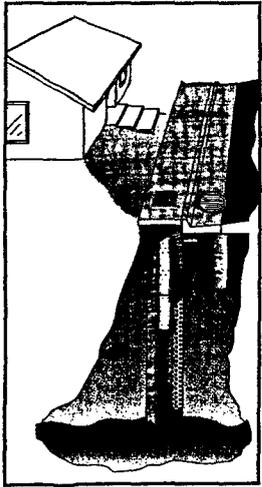
Even though you live miles from rivers and creeks, you may be polluting them without knowing it.

D-054527

D-054527

Where does polluted water come from?
 Polluted stormwater runoff does not come from just one point—it is washed into storm drains from many different sources. It begins in our garages, driveways, lawns, streets, farmlands, construction sites, gas stations and parking lots. "POINTLESS POLLUTION" can begin as a small oily slick on your driveway.

Where does it go?
 Because storm drains are separate from our household sewer systems, these polluted waters flow into our rockwells or into our streams and rivers.



- What's a Rockwell?**
- It is a storm drain, lined with rocks, extending 20–40 feet underground.
 - Rockwells send water straight into the ground, rather than to a stream.
 - There are approximately 7,000 Modesto rockwells.

• About 70% of the city's stormwater runoff is drained through this system.

- We need to keep Rockwells clean.**
- After a heavy rain, water tends to pond from 8 up to 36 hours due to the time it takes the water to soak into the soil.
 - Rockwells work best when oil, leaves, dirt, and construction debris are kept out of them.
 - Small amounts of debris can prevent the water from filtering properly, requiring specialized vacuuming to clear it.
 - Free of debris, rockwells absorb water quickly and ponding and maintenance costs can be kept to a minimum.

Keep our creeks clean.
 Some of our storm drains do not run into rockwells, rather, they flow through an underground system which dumps untreated water directly into our streams and creeks.

What are the most common types of pointless pollution and what can we do to stop this?
 The three most common types are automotive, household, and yard and garden—here are some things we can do for each:

1. Automotive

- **MOTOR OIL, ANTIFREEZE:** Recycle.
- **LEAKS:** Fix transmission, radiator and oil leaks.
- **CAR WASHING:** Take your car to a car wash or if washing at home, use small amounts of biodegradable soap.

2. Yard and Garden

- **PESTICIDES:** Apply Sparingly.
- **ANIMAL WASTES:** Clean up after your pet.
- **LEAVES, GRASS CLIPPINGS:** Rake and sweep regularly. Don't allow leaves, grass and soil to build up and get washed into the gutters by rain water.
- **RUNOFF WATER:** Water only your lawn, not the driveway and sidewalk.



Is our good life going down the drain?

CITY OF MODESTO



BULK MAIL
 PERMIT # 30
 MODESTO
 CALIFORNIA

D-054528

D-054528

What are HOUSEHOLD WASTES?

Some jobs around the home may require the use of products containing hazardous components. Such products may include certain paints, cleaners, stains and varnishes, car batteries, motor oil, and pesticides. The used leftover contents of such consumer products are known as "household hazardous waste."

Americans generate 1.6 million tons of household hazardous waste per year. The average home can accumulate as much as 100 pounds of household hazardous waste in the basement and garage and in storage closets. When improperly disposed of, household hazardous waste can create a potential risk to people and the environment.

This pamphlet describes steps that people can take to reduce the amount of household hazardous waste they generate. And, to ensure that those wastes are safely stored, handled, and disposed of.



CITY of MODESTO
Public Works & Transportation Department
1221 Sutter Avenue
Modesto, CA 95351

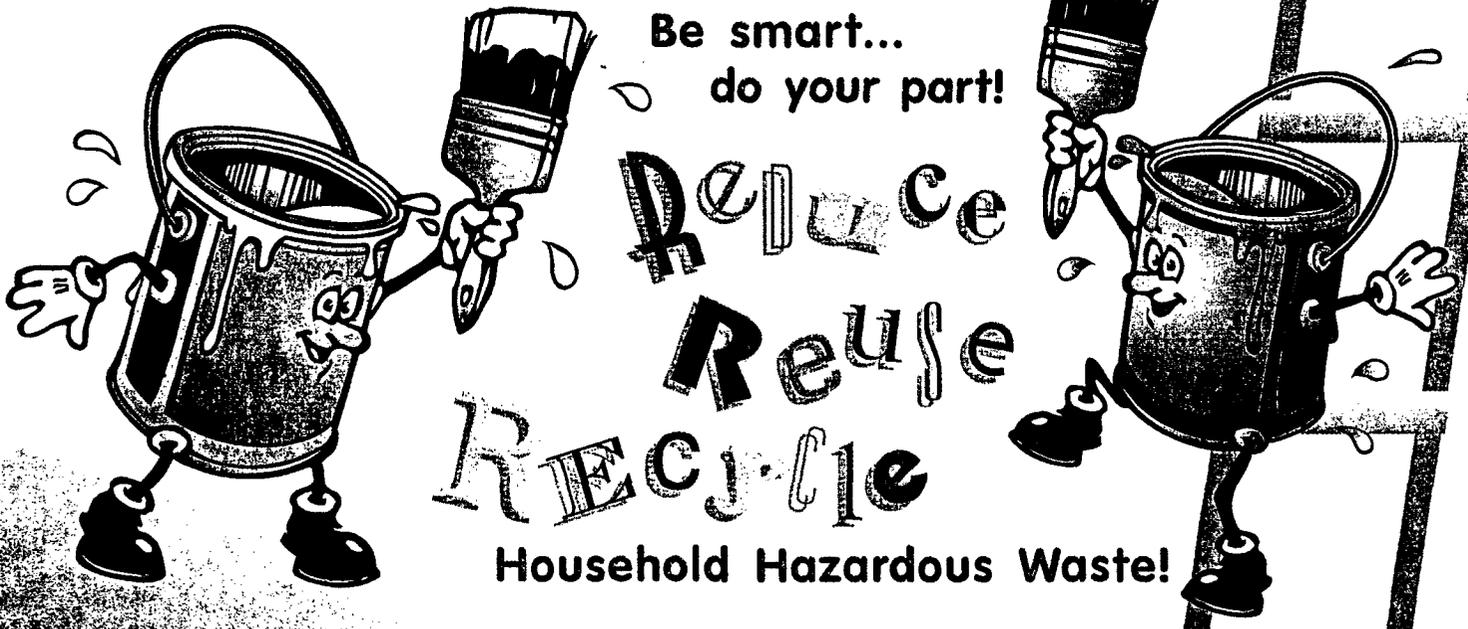
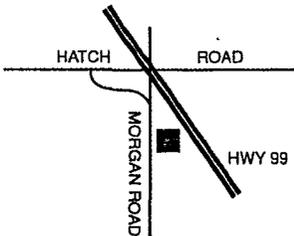
24 HOUR INFORMATION HOTLINE:

(209) 525-4123

DURING BUSINESS HOURS CALL:

(209) 525-4150

Modesto & Ceres
COUNTY COLLECTION CENTER IV
1716 MORGAN ROAD



D - 0 5 4 5 2 9

D-054529

DO's and DON'TS of Hazardous Hazardous Waste:

DO:

- ✓ Read product labels.
- ✓ Buy only the amount you need.
- ✓ Use products until gone.
- ✓ Donate unwanted products.

DON'T put household hazardous waste:

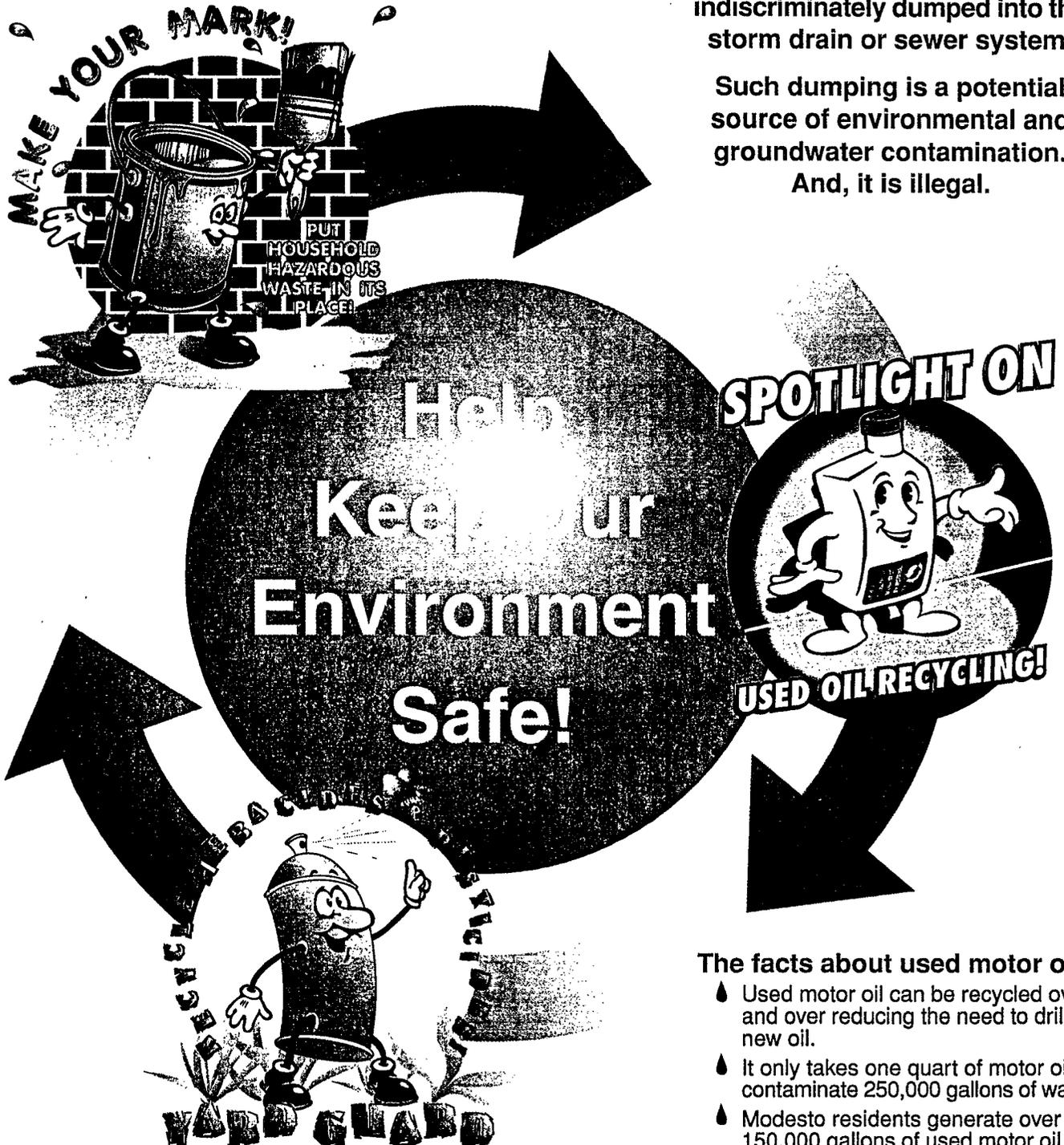
- X In the trash.
- X Down the drain or in the toilet.
- X On the ground or in the street.

**Be a smart citizen...
use chemicals the right
way and the safe way!**

Excess household hazardous wastes, used oil, herbicides and pesticides should never be indiscriminately dumped into the storm drain or sewer system.

Such dumping is a potential source of environmental and groundwater contamination.

And, it is illegal.



Safe use of Herbicides and Pesticides:

- Always read the label before application.
- Make sure the weather conditions are suitable for application.
- Do not apply pesticides in or near air conditioning or heating vents.
- Keep people and animals away from the area during application.
- Store pesticides in their original tightly closed containers.

The facts about used motor oil:

- Used motor oil can be recycled over and over reducing the need to drill for new oil.
- It only takes one quart of motor oil to contaminate 250,000 gallons of water.
- Modesto residents generate over 150,000 gallons of used motor oil per year.
- Approximately 60% of Americans change their own motor oil.
- Only 10% of motor oil is recycled properly.





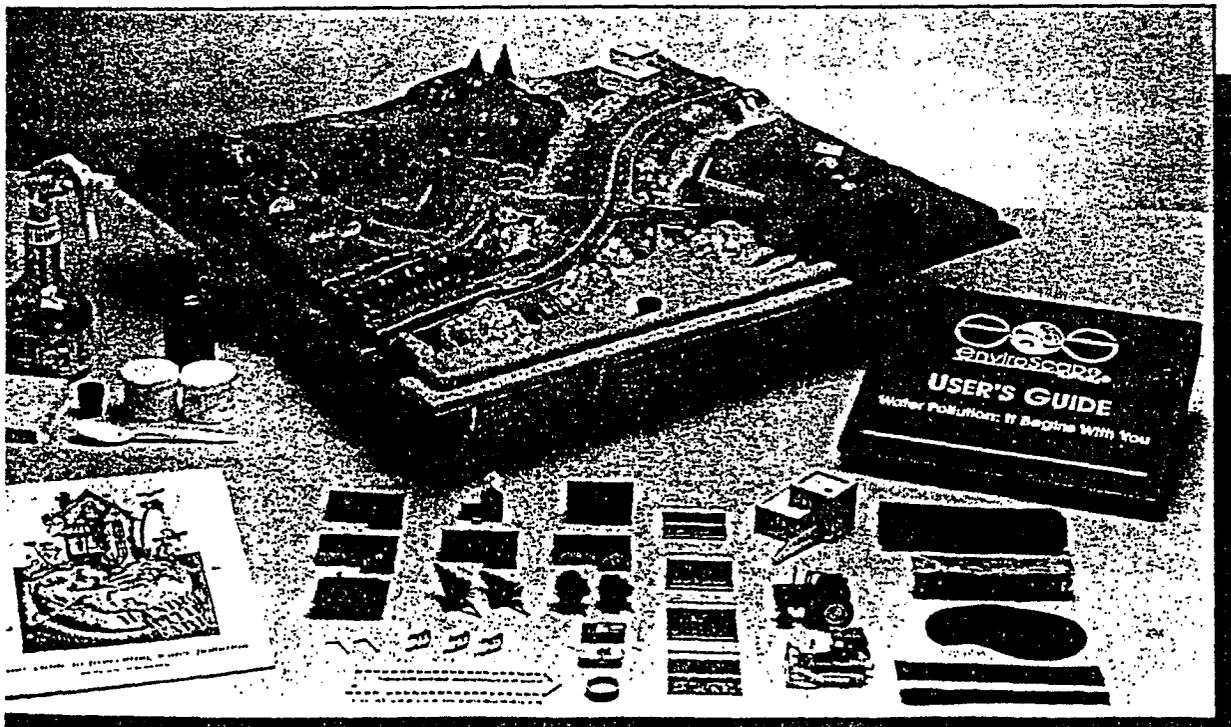
EnviroScape

Patent No. 5,427,530[®]

EnviroScape is an interactive, portable model of a watershed that dramatically demonstrates water pollution — and its prevention. It takes a hands-on approach that has proven highly effective in communicating to people of all ages that we all share the solution to water pollution.

What does EnviroScape contain?

EnviroScape II, the newest version of the EnviroScape model, is packed in a durable carrying case with wheels, ideal for transporting locally or shipping. The easy-to-use model (approximately 25" x 30" x 5"), comes complete with a kit containing everything you need to demonstrate the movement of water through a watershed and the pollution that runoff may cause: cocoa, cooking oil, and powdered drink mixes, felt vegetation swatches, clay berms, and props such as miniature vehicles, trees and cows.



PRODUCT INFORMATION

ATTACHMENT 10
STORM DRAIN LINE PILOT STUDY

A Storm Drain Line Pilot Study will be conducted as part of the Commercial and Residential Source Control activities.

The Storm Drainage Collection Division implements a routine preventive maintenance program on the 100 miles of storm drain pipeline. The maintenance procedure consists of flushing the pipeline with high pressure water, then vacuuming debris at the adjoining catch basins. The City owns and operates 8 combination Vacuum/Jet Router Trucks.

The Storm Drain Line Pilot Study will consist of comparing the water quality of simulated runoff from two similar sections of pipeline under different conditions. The pilot study is expected to be completed by October 1996. The 9th Street Area Watershed is the preferred location for the pilot study. The study will be conducted in the following manner:

- 1) Two sections of pipe will be selected (these sections will be identical in diameter, land use, age, etc....).
- 2) One section of pipe will be cleaned.
- 3) The amount of sediment will be quantified and sampled for copper, lead, zinc, and total petroleum hydrocarbons.
- 4) The two sections of pipe will be flushed under identical conditions and procedures to simulate runoff.
- 5) A sample of the simulated runoff will be collected from each section of pipe and analyzed for total suspended solids, copper, zinc, lead, and total petroleum hydrocarbons.
- 6) The results of the water quality samples will be compared.

The majority of the debris cleaned will be roots. However, some amount of sediment will also be removed and this may result in a measurable improvement in water quality. The pilot study will give an indication of how much sediment is removed and whether there is a resulting measurable water quality improvement.

ATTACHMENT 11
LEAF PICK-UP PILOT STUDY

A Leaf Pick-Up Pilot Study will be conducted as part of the Commercial and Residential Source Control activities.

The Streets Division of the Department of Public Works and Transportation has the responsibility for the fall leaf removal from November 1st to December 31st of each year. The yearly average amount of leaves removed is 6,000 tons. The amount of leaves removed during fiscal year 1995/1996 was 6,375 tons. The leaf removal program aids in the prevention of clogged pipelines, catch basins and rockwells; in addition, sediment and debris are removed from entrainment in stormwater runoff.

A Leaf Pick-Up Pilot Study, in conjunction with the Recycling and Source Reduction Element, will be conducted in the McHenry Avenue Corridor. The study will be completed by November 1996. The purpose of the study is to understand the benefits of the leaf removal program with respect to the types and amount of material which are removed from possible entrainment in stormwater runoff. The study will be conducted in the following manner:

- 1) The quantity of leaves collected during the leaf removal season will be determined.
- 2) The materials collected will be determined and cataloged.