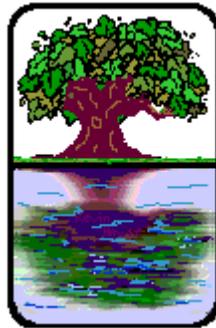


# Office of Water Programs CSUS Foundation



**CALIFORNIA STATE UNIVERSITY,  
SACRAMENTO**

**ANNUAL REPORT  
1998-1999**

**July 1, 1999**



**Office of Water Programs**  
**California State University, Sacramento Foundation**

**MISSION STATEMENT**

To provide the best possible operator training programs  
and operation and maintenance training manuals  
at the lowest possible cost

The Office of Water Programs, part of the California State University, Sacramento College of Engineering and Computer Science, Department of Civil Engineering, and the CSUS Foundation, is financially self-sustaining and provides resource training materials and operator training programs for operators, supervisors and administrators of drinking water distribution and treatment facilities and wastewater collection and treatment facilities. We continually reprint and/or revise existing operation and maintenance training materials, develop new training materials such as videos to complement the manuals, and provide customers with excellent service. Our staff are investigating and studying the on-line delivery of training opportunities, the creation CD-ROMs for each of the manuals, and other training methods and procedures.

Highlights of the 1998-1999 fiscal year include:

- ↪ The Office of Water Programs' website (<http://www.owp.csus.edu>) – Our website came on line February 25, 1999, and provides information about available training opportunities, how to take advantage of the many services provided, and how to order. An average of 20 orders per week have been received from the website since its inauguration (approximately 4 orders per day). Our web has been very popular with an estimated 150 users per day.
- ↪ EPA designation as a *SMALL PUBLIC WATER SYSTEM TECHNOLOGY ASSISTANCE CENTER* – Kenneth D. Kerri and William Greenelsh are developing ten training videos for operators of small public drinking water facilities. They have already produced and submitted to reviewers the main outline for the series and drafts for seven of the videos.
- ↪ Recognition as a PAHO/WHO Collaborating Center – In October 1998 Ramzi J. Mahmood attended a World Health Organization meeting in Washington, DC, and reports that the Office of Water Programs will be visited sometime in the near future as part of the evaluation for becoming a collaborating center.
- ↪ Storm Water Projects – Working with Caltrans and the CSUS Foundation, Ramzi J. Mahmood has developed project teams to prepare materials on storm water runoff which will result in an additional publication to be made available through the Office of Water Programs.
- ↪ Activity – It is interesting to note that during this fiscal year, more than 15,000 orders were received and processed. Over 14,000 of these packages were shipped UPS or Federal Express with the remainder going US Postal Service (with a few DHL and Airborne).



## TRAINING MATERIALS AVAILABLE FROM THE OFFICE OF WATER PROGRAMS



**OPERATION OF WASTEWATER TREATMENT PLANTS, Volumes I and II**  
**ADVANCED WASTE TREATMENT**

**INDUSTRIAL WASTE TREATMENT, Volumes I and II**  
**TREATMENT OF METAL WASTESTREAMS**  
**PRETREATMENT FACILITY INSPECTION**

**VIDEO SET: PRETREATMENT FACILITY INSPECTION TRAINING VIDEOS**  
**SMALL WASTEWATER SYSTEM OPERATION AND MAINTENANCE, Volume I**  
**OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS,**  
**Volumes I and II**

**COLLECTION SYSTEMS: METHODS FOR EVALUATING AND IMPROVING**  
**PERFORMANCE**

**VIDEO SET: OPERATION & MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS**  
**TRAINING VIDEOS**

**WATER TREATMENT PLANT OPERATION, Volumes I and II**  
**SMALL WATER SYSTEM OPERATION AND MAINTENANCE**  
**WATER DISTRIBUTION SYSTEM OPERATION AND MAINTENANCE**  
**UTILITY MANAGEMENT**

NOTE: All of the publications and videos listed in this annual report are current and available – and are somewhere between their first edition (example: **UTILITY MANAGEMENT**) and their fifth (**OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS**, Volumes I and II). Some of the manuals are “spin-offs” of earlier manuals, such as **SMALL WATER SYSTEM OPERATION AND MAINTENANCE**, and **WATER DISTRIBUTION SYSTEM OPERATION AND MAINTENANCE** which were developed when **WATER SUPPLY SYSTEM OPERATION AND MAINTENANCE** needed revision and expansion.

The following Appendix contains a number of charts. The first chart gives an overview of all activity from 1972 through 1999. It is followed by summaries and graphs depicting statistics for the years 1994 through June 1999 for each of the above-mentioned items. The information provided includes:

- ↵ *Manuals* – number of manuals sold
- ↵ *Enrollments* – number of enrollments
- ↵ *Completions* – number of people successfully completing one or more of our programs
- ↵ *Dropped* – number of students who enrolled and never completed the course work
- ↵ *Registered* – number of students registering for lower division university academic credits
- ↵ *Colleges and Universities* – number of educational institutions purchasing materials
- ↵ *Foreign Countries* – number of foreign countries from which orders were received
- ↵ *Videos* – number of video sets sold



## APPENDIX

### Figures

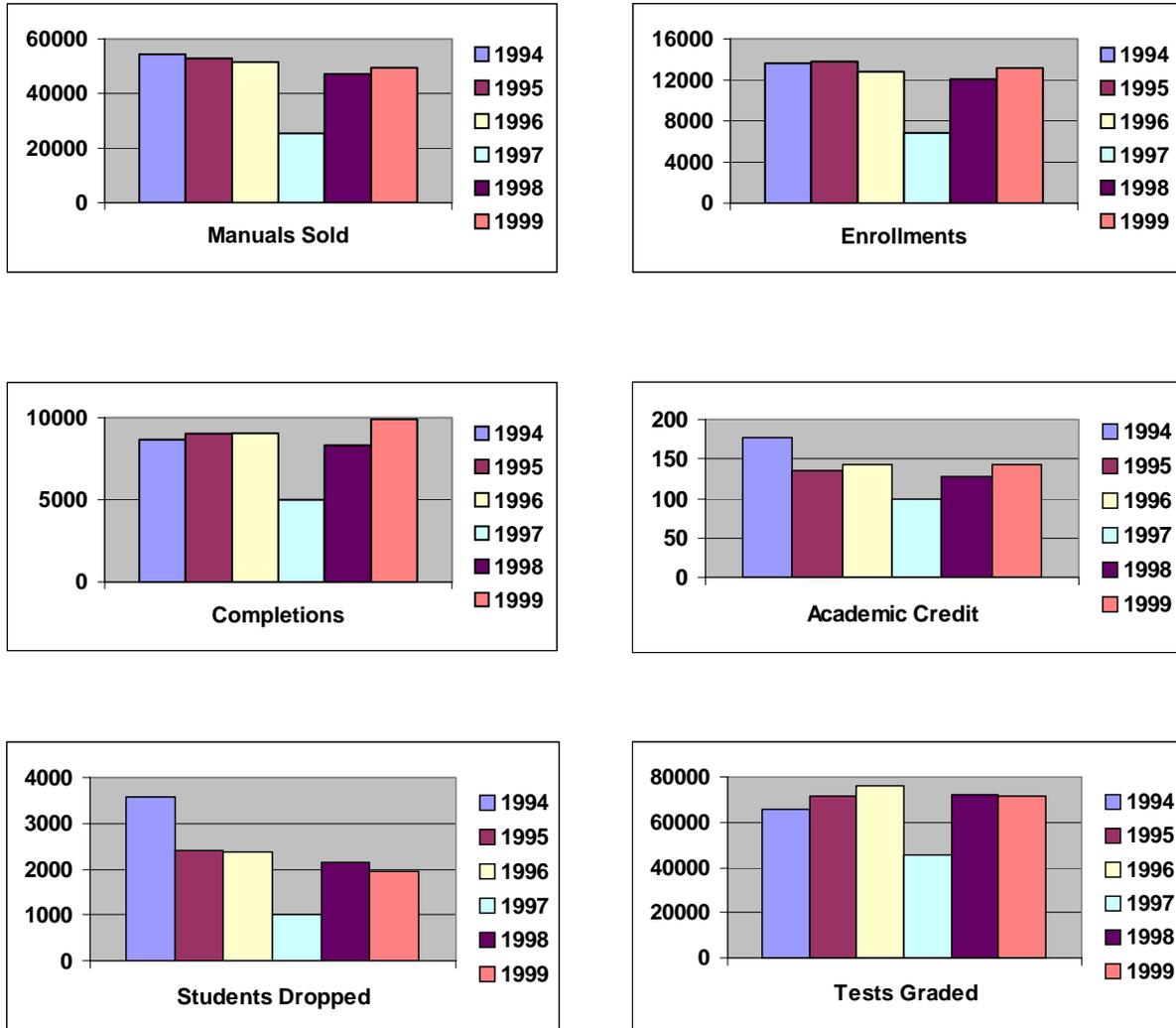
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# OVERVIEW

The Office of Water Programs (OWP) provides 16 different titles, 15 operator training programs, and two sets of operator training videos. Operating since 1972, we have sold more than 620,000 manuals and over 150,000 enrollments. The number of tests graded exceeds 600,000 and 88,720 people have successfully completed at least one of our programs. Figure 1 shows a summary of statistics for the period 1994 through June 1999.\*



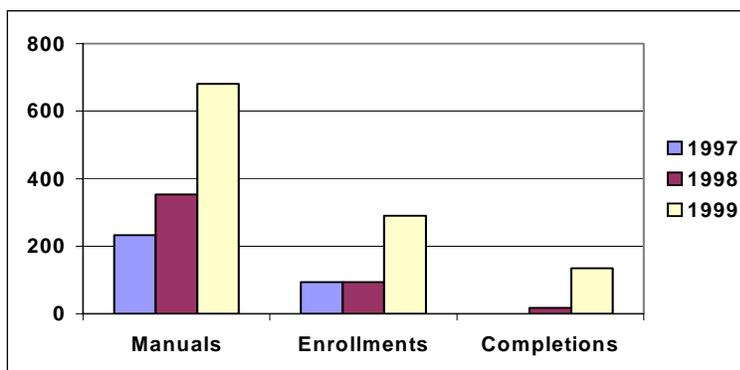
**Figure 1. Summary of Statistics for the Office of Water Programs**

\*1997 data are for January through June.



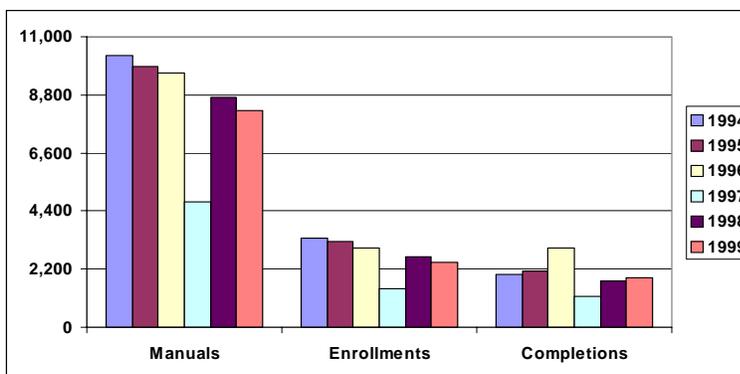
## SUMMARY BY TITLE

Since its release in 1997, 1,267 copies of ***SMALL WASTEWATER SYSTEM OPERATION AND MAINTENANCE***, Volume I, have been sold. Enrollments in this course total 478, with 153 successful completions. More than 22 colleges and universities use this manual as do individuals throughout the United States and Canada and 15 other countries. Figure 2 displays a summary of statistics through the end of fiscal year 1998-1999.



**Figure 2. SMALL WASTEWATER SYSTEM OPERATION & MAINTENANCE, Volume I**

Throughout the United States, Canada, and 58 foreign countries, ***OPERATION OF WASTEWATER TREATMENT PLANTS***, Volume I (1980), sales exceed 148,800 manuals and 45,800 enrollments. Successful course completions now total more than 25,000. About 360 colleges and universities are using this manual as a textbook. Figure 3 summarizes the statistics for this course for the period 1994 through June 1999.\*

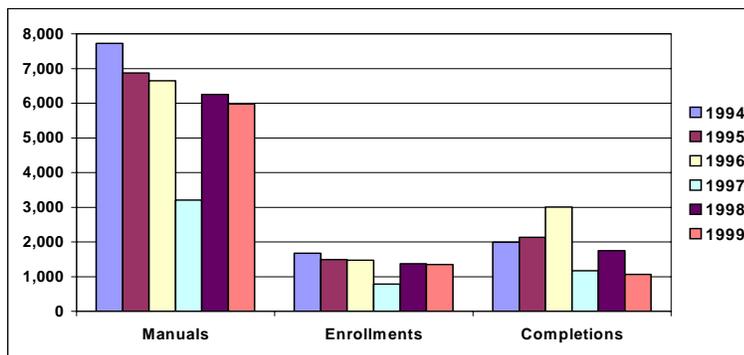


**Figure 3. OPERATION OF WASTEWATER TREATMENT PLANTS, Volume I**

\*1997 data are for January through June

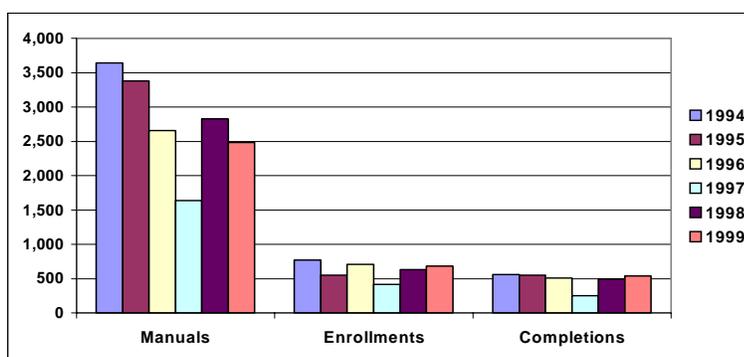


**OPERATION OF WASTEWATER TREATMENT PLANTS, Volume II (1980)**, sales are more than 108,000 manuals and 23,500 enrollments. Successful completions total 13,500 and 345 colleges and universities use this manual. People throughout the United States, Canada, and 54 foreign countries use Volume II. Figure 4 covers the period 1994 through June 1999.\*



**Figure 4. OPERATION OF WASTEWATER TREATMENT PLANTS, Volume II**

Statistics as of the end of this fiscal year show that throughout the United States, Canada, and 56 foreign countries, purchases of the manual, **ADVANCED WASTE TREATMENT (1987)**, exceed 41,000 copies, enrollments top 9,400, and more than 5,900 people have earned certificates of completion. This manual is available in 44 foreign countries and at 209 colleges and universities. The 1994 through June 1999 statistics are shown in Figure 5.\*



**Figure 5. ADVANCED WASTE TREATMENT**

\*1997 data are for January through June



**INDUSTRIAL WASTE TREATMENT**, Volume I (1994), sales total 16,900 books and 3,273 enrollments. Completions total 1,675. This manual is being used in 36 foreign countries, the United States, and Canada, and 140 colleges and universities use the manual. Figure 6 shows the statistics for the period of 1994 through June 1999.\*

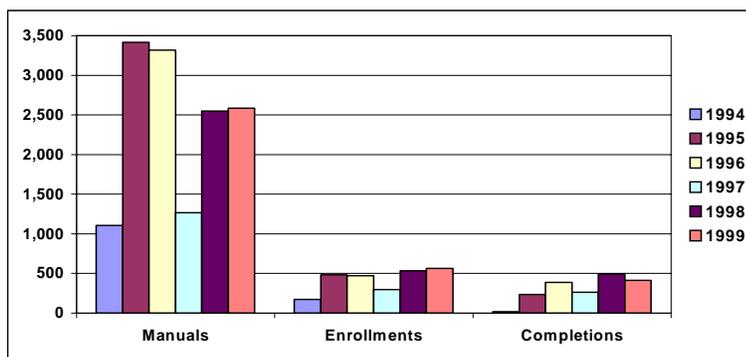


Figure 6. **INDUSTRIAL WASTE TREATMENT, Volume I**

Totals for **INDUSTRIAL WASTE TREATMENT**, Volume II (1995), are 8,687 manuals sold, 1,189 enrollments, and 606 course completions. More than 62 colleges and universities are using this book, and individuals in 32 foreign countries have purchased this manual. Figure 7 shows the statistics for the period 1994 through June 1999.\*

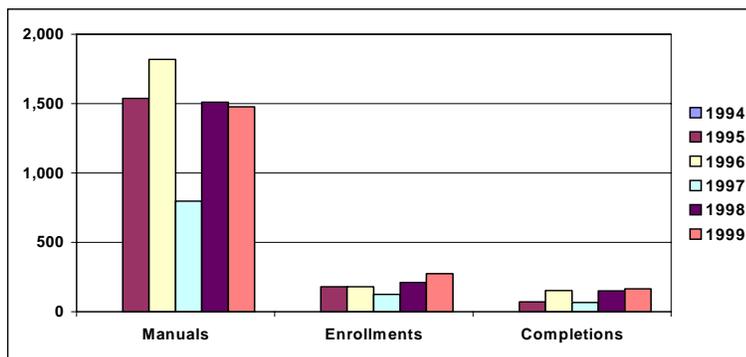
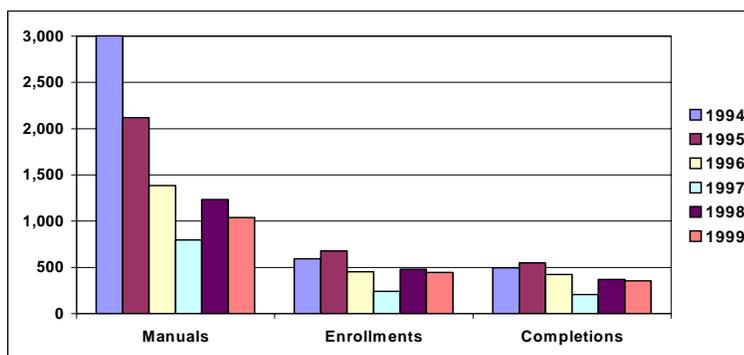


Figure 7. **INDUSTRIAL WASTE TREATMENT, Volume II**

\*1997 data are for January through June

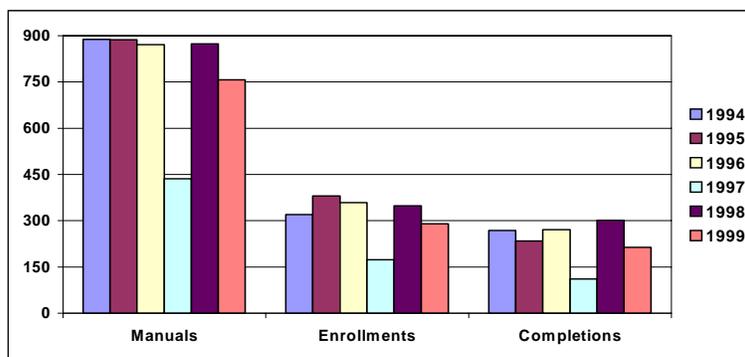


One of our more specialized textbooks, **TREATMENT OF METAL WASTESTREAMS** (1986), is being used in 34 foreign countries, the United States, and Canada. Enrollments total more than 6,000 and completions number more than 4,900. One hundred and nineteen colleges and universities use this manual. The charts in Figure 8 are for the period 1994 through June 1999.\*



**Figure 8. TREATMENT OF METAL WASTESTREAMS**

**PRETREATMENT FACILITY INSPECTION** (1988) training manual sales total over 12,700 to 95 colleges and universities and to individuals in the United States, Canada and 34 other countries. Total enrollments exceed 4,760 and more 3,036 people have been awarded certificates of completion. Figure 9 gives information for the period 1994 through June 1999.\*



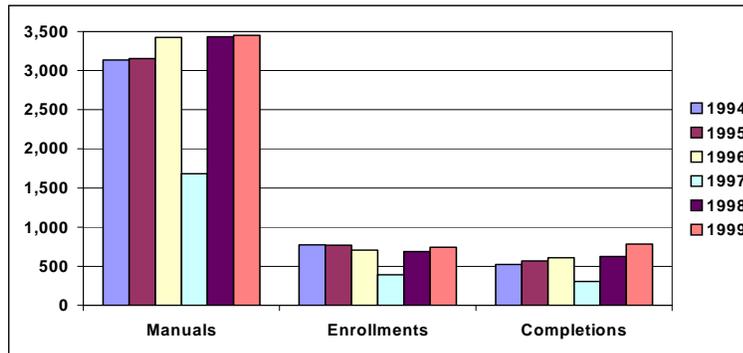
**Figure 9. PRETREATMENT FACILITY INSPECTION**

To complement and enhance the **PRETREATMENT FACILITY INSPECTION** course, a set of five operator training videos were developed. We began selling these videos in the summer of 1998 and 313 sets have been sold.

\*1997 data are for January through June

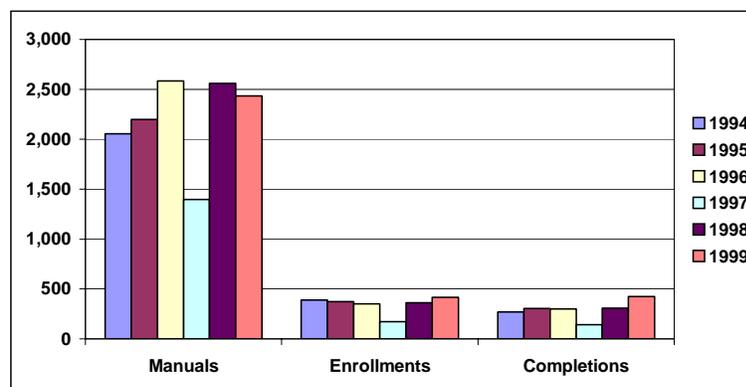


Volume I, **OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS** (1987), is used in 149 colleges and universities, in the United States, Canada, and 44 foreign countries. Cumulative statistics for all years show a total of over 39,000 manuals sold, more than 8,400 people enrolled and over 4,900 students successfully completing their course work. The information in Figure 10 is for the period 1994 through June 1999.\*



**Figure 10. OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS, VOLUME I**

Volume II, **OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS**, is used throughout the United States, Canada, and in 42 foreign countries. One hundred and forty-one colleges and universities purchase this text. The total number of manuals sold exceeds 28,800. Overall, figures for this manual show totals of more than 4,700 enrollments and over 3,000 completions. Figure 11 shows the activity for the period 1994 through June 1999.\*



**Figure 11. OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS, VOLUME II**

\*1997 data are for January through June



A six-video set of operator training videos for collection system operators is available to complement Volumes I and II of **OPERATION AND MAINTENANCE OF WASTEWATER COLLECTION SYSTEMS**. Over 580 video sets are now being used throughout the United States, Canada, and several foreign countries.

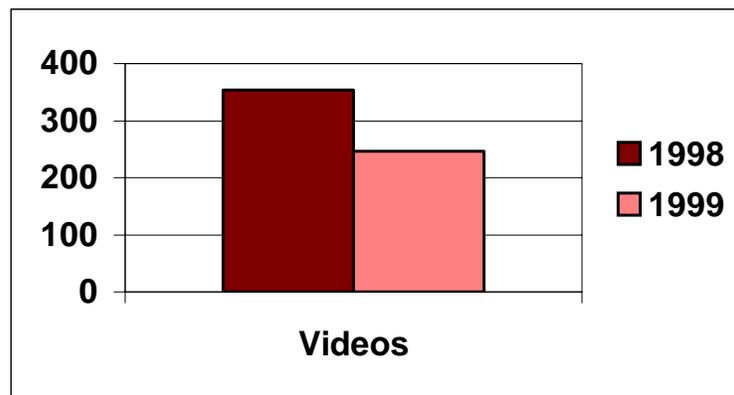


Figure 12. COLLECTION SYSTEM TRAINING VIDEOS

A total of 616 copies of **COLLECTION SYSTEMS: METHODS FOR EVALUATING AND IMPROVING PERFORMANCE** (1998), an additional resource for collection system operators, have been sold throughout the United States, Canada, 4 foreign countries, and in 11 colleges and universities.

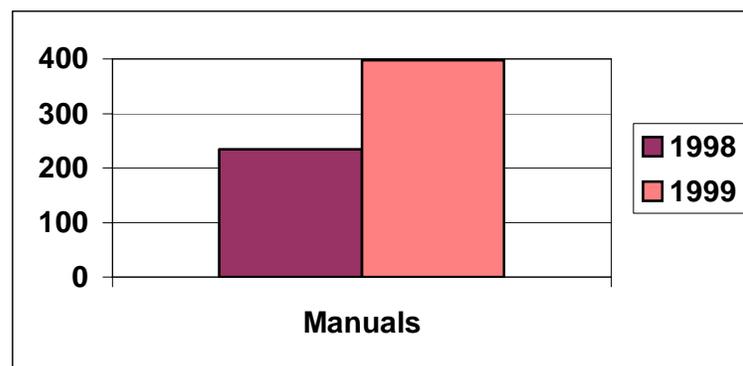


Figure 13. COLLECTION SYSTEMS: METHODS FOR EVALUATING AND IMPROVING PERFORMANCE



More than 87,800 copies of Volume I, **WATER TREATMENT PLANT OPERATION** (1983), are in circulation in the United States, Canada, and 51 foreign countries; and 274 colleges and universities provide this manual to students. Enrollments total more than 28,000 and course completions now number over 14,500. The 1994 through June 1999 numbers are depicted in Figure 14.\*

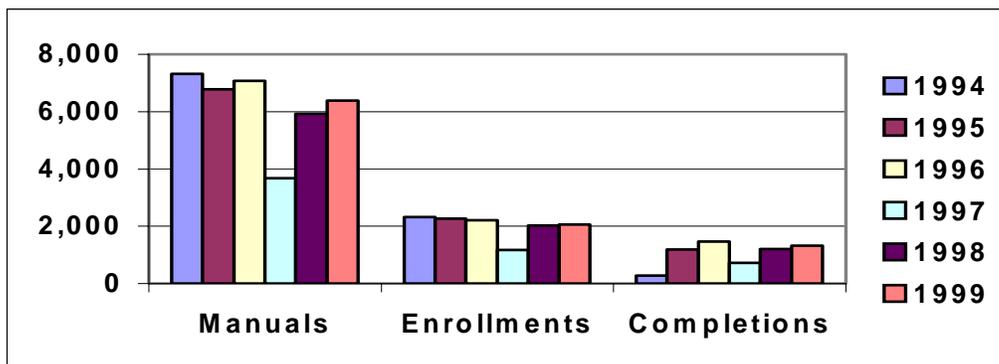


Figure 14. WATER TREATMENT PLANT OPERATION, Volume I

Volume II, **WATER TREATMENT PLANT OPERATION** (1983), selling to 237 colleges and universities, and 46 foreign countries, exceeds 54,500 in number sold. Enrollments total more than 12,900 with over 7,300 completions. The 1994 through June 1998 activity is shown in Figure 14.\*

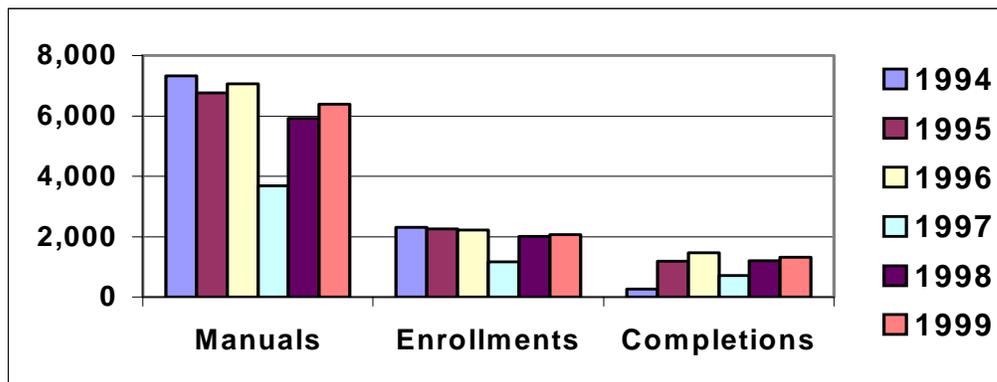
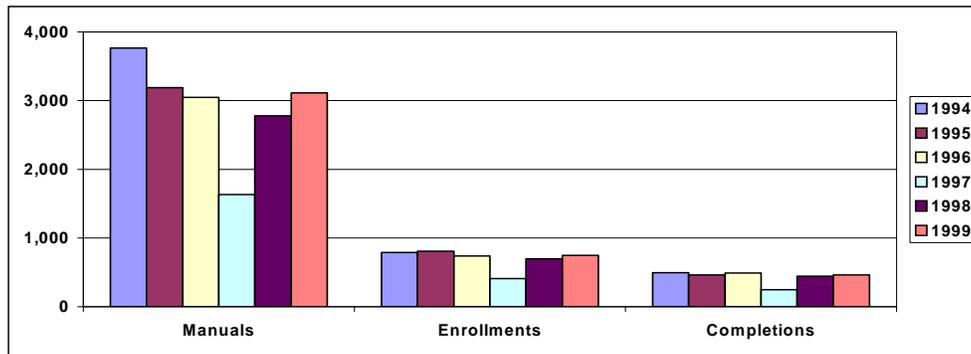


Figure 15. WATER TREATMENT PLANT OPERATION, Volume II

\*1997 data are for January through June

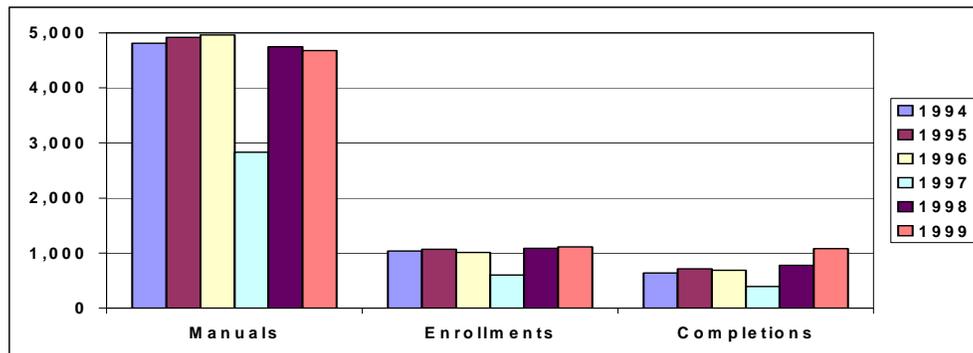


**SMALL WATER SYSTEM OPERATION AND MAINTENANCE** (1987) is sold to 177 colleges and universities in the United States and Canada; to 47 foreign countries; total sales worldwide exceed 39,900. Enrollments total over 8,400 and more than 4,300 people have completed their course work to date. Figure 16 indicates 1994 through June 1999 activity.\*



**Figure 16. SMALL WATER SYSTEM OPERATION AND MAINTENANCE**

**WATER DISTRIBUTION SYSTEM OPERATION AND MAINTENANCE** (1987) sales total more than 57,100, having been purchased by 168 colleges and universities and by people throughout the United States, Canada, and 47 foreign countries. Over 11,700 enrollments have been sold and more than 6,600 people have completed this course. Figure 17 displays the activity for the 1994 through June 1999 period.\*

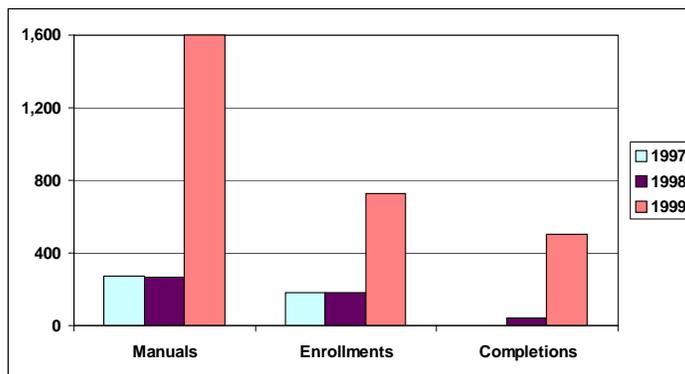


**Figure 17. WATER DISTRIBUTION SYSTEM OPERATION AND MAINTENANCE**

\*1997 data are for January through June



We have sold 2,139 copies of our newest manual, **UTILITY MANAGEMENT** (1998). Of the 1,088 enrollments, 545 people have successfully completed this course. More than 18 colleges and universities use this manual and we have received orders from 16 foreign countries. Figure 18 displays a summary of statistics for the period 1997 through 1999.



**Figure 18. UTILITY MANAGEMENT**

