



SACRAMENTO  
STATE

# Annual Report

2013-2014



WATER PROGRAMS  
SACRAMENTO STATE

# Who We Are

For over 40 years, the Office of Water Programs (OWP) has consistently delivered on its mission to provide cost-effective solutions for protecting and enhancing water resources, public health, and the environment through training, scientific research, and public education. OWP is a self-supporting unit of University Enterprises, Inc., a nonprofit auxiliary of Sacramento State.

As an internationally recognized training leader for the drinking water and wastewater industry, our continually evolving library of training materials meets the changing needs of individuals seeking professional development. Our distance learning courses provide accredited opportunities for certification preparation, academic credit, continuing education units, and contact hours.

Our uniquely qualified team of innovative and resourceful professionals—with a diverse combination of research and real-world application experience—has delivered technical expertise and applied research management services for over 15 years. Our expertise includes stormwater program management consulting, watershed planning, water and wastewater treatment, soil and groundwater investigations, and field/pilot studies for various stormwater source control practices and treatment technologies.

## The organizational values that shape our commitment to providing sought-after training and research services include:



**People First**—We believe the potential of our organization has no limit and is driven by our employees, our respect for each other, and our commitment to providing the best service and products in the industry.



**Ethical Approach to Business**—We believe in the values of honesty and integrity and apply these values to all of our business practices.



**Quality**—We take pride in everything we do. From our products and services to our relationships with customers, clients, and employees—quality is our signature.



**Education**—We believe in and support life-long learning for our employees, our clients, our students, and our community.



**Public Health and the Environment**—We believe that our practices should always focus on protecting public health and the environment.

# Training Services

With a customer base spanning the United States and Canada as well as numerous other countries, our distance learning courses offer water and wastewater industry professionals the flexibility to take courses in print correspondence, video, and online formats. In 2013-2014, we revised two of our best-selling manuals and introduced a well-received online exam tool in response to the changing ways people access educational resources.

## Community Outreach and Involvement

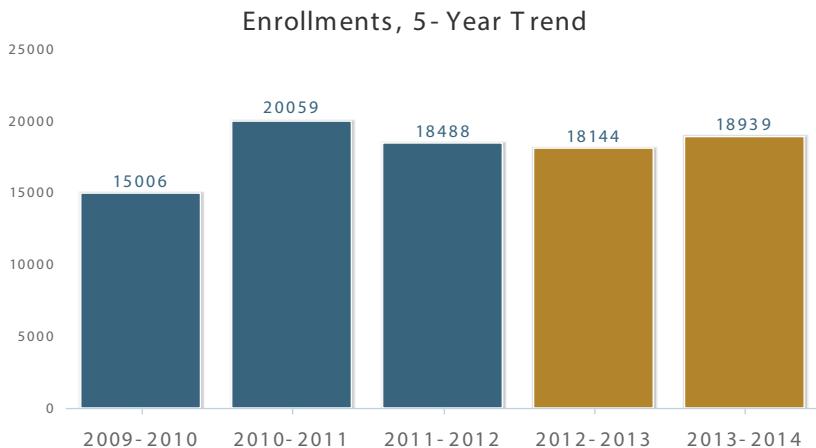
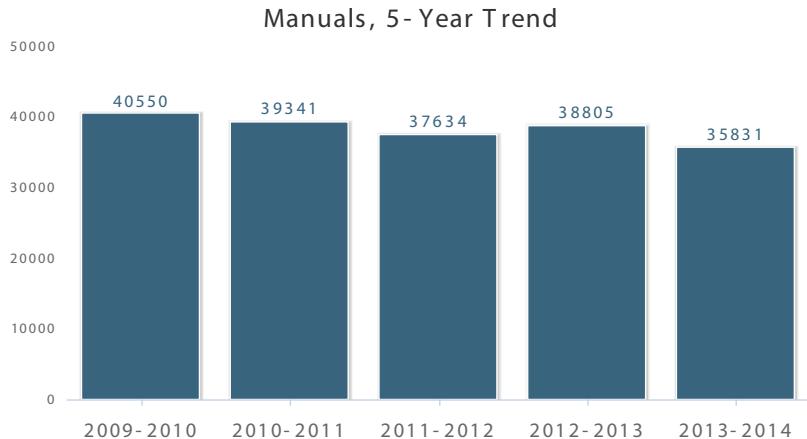
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Serving a dynamic industry in which technologies, processes, and regulations change significantly, we are committed to community outreach and involvement. OWP actively participates in inter-agency groups, including the Small Systems Inter-Agency Outreach Committee (SSIOC) with the Rural Community Assistance Corporation (RCAC). Participation in such groups helps OWP build solid working relationships with other organizations and agencies focused on water and wastewater.



In August 2014, the Water Environment Federation (WEF) recognized 12 members in the WEF Fellow Recognition Program, which “recognizes members’ achievements, stature, and contributions in the water profession.” Among those honored in the category of Education/Research was our chief project consultant and founder, Dr. Kenneth Kerri.

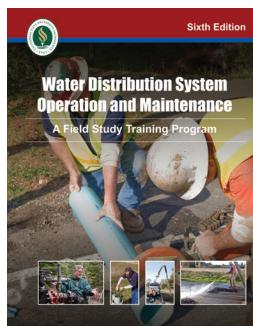
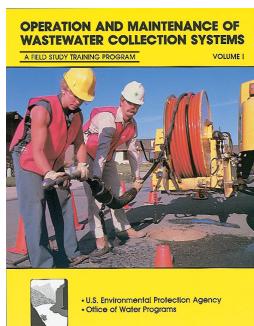
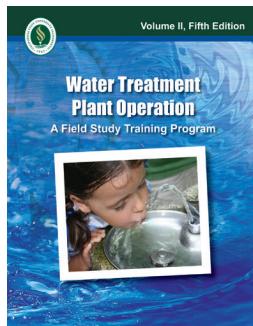
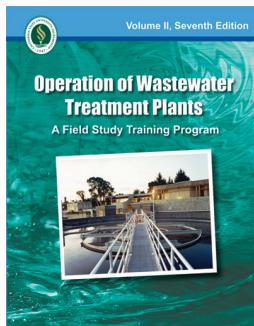
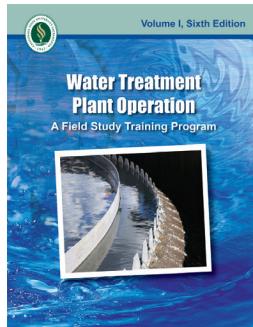
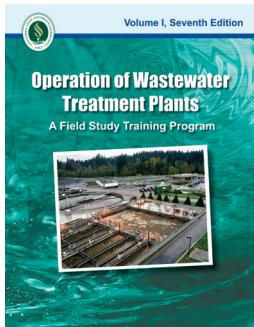
*Total manual sales for the year reached 35,831  
and total enrollment sales reached 18,939.*



■ Enrollment extensions included

# Titles & Products

## Best-Selling Titles



## Selected Titles & Products

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*Advanced Waste Treatment* (print, course enrollment)

*Basic Small Water System Operations* (print)

*Collection Systems: Methods for Evaluating and Improving Performance*  
(print, course enrollment)

*Industrial Waste Treatment*, 2 volumes (print, course enrollment)

*Manage for Success* (print, course enrollment)

*Membrane Bioreactors* (print, course enrollment)

*Operation and Maintenance of Wastewater Collection Systems*, 2 volumes  
(print, DVD, course enrollment)

*Operation of Wastewater Treatment Plants*, 2 volumes  
(print, CD, course enrollment, five online courses)

*Pretreatment Facility Inspection* (print, DVD, course enrollment)

*Small Wastewater System Operation and Maintenance*, 2 volumes (print, course enrollment)

*Small Water System Operation and Maintenance*  
(print, DVD, course enrollment, 5 online courses)

*Treatment of Metal Wastestreams* (print, course enrollment)

*Utility Management* (print, course enrollment)

*Water Distribution System Operation and Maintenance*  
(print, course enrollment, five online courses)

*Water Systems Operation and Maintenance Video Training Series*  
(print, DVD, course enrollment)

*Water Treatment Plant Operation*, 2 volumes (print, course enrollment)

# Training Spotlight

## Online Exam Tool

Launched in May 2014, our online exam tool offers enrolled students a convenient way to take course exams using a computer, tablet, or smartphone from any location with internet access. Among the many popular features is that students receive test results instantly after completing an exam online.



“ Throughout the years you have successfully tweaked the system to where it is today—stick with it. ”

~OWP STUDENT

**“** I've taken several courses through the program and this has to be the best experience yet. The immediate results have to be the best part. **”**

~OWP STUDENT

## Online Exams Completed, May-August 2014



# Technical Services

Our team of technical experts assist government agencies with software innovation and project delivery. Ranging from numerical modeling to the latest in online course delivery, our expertise gives agencies the power to achieve their missions in a cost-effective manner. Examples of the specialized tools and services developed by OWP include:

California General Permit QSD/QSP Exam Administration—Working with the California Stormwater Quality Association (CASQA), OWP developed and continues to administer an online testing service for the certification of Stormwater Pollution Prevention Plan (SWPPP) developers and practitioners (QSD/QSP) involved in new construction projects throughout the state. Candidates can purchase, test, and receive grades/certificates from this single source online system. The tool also provides potential employers with free, public access to current lists of qualified practitioners.



**LID Sizing Tool**—This web-based tool assists stormwater practitioners in selecting and sizing low impact development (LID) Best Management Practices (BMPs) that meet the sizing requirements set forth in California’s National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from small municipal separate storm sewer systems (MS4s).

The screenshot shows a map of California with various rainfall stations marked. A callout box provides specific details about a rain gauge at CHICO Univ Field, including its name, start date (1950-1970), end date (1970-2005), elevation (ft 115), precipitation (inches 17.1), and stream flow (cfs 0.8). The interface includes three main steps: Step 1 (Select a Climate Station), Step 2 (Input impervious area), and Step 3 (Input saturated hydraulic conductivity). Step 1 also includes options for 'Other Layers' like contours and 'Step 1 - Create a climate station'. Step 2 includes a note about using 15 rainfall stations statewide. Step 3 includes a note about CA Phase II NPDES requirements for dividing the project site into discrete areas.

**Basin Sizer**—This software program was designed to assist users in accurately sizing stormwater basins anywhere in California. Basin Sizer calculates water quality volumes (WQVs) and water quality flows (WQFs) using a variety of methods and data from rainfall stations throughout the state.

**Water Quality Planning Tool**—This tool gives planners access to an easy-to-use website that has watershed information needed to create and comply with stormwater permits.



**Struvite Precipitation Potential Calculation Tool**—This must-have tool for struvite control planning lets users model various scenarios by changing parameters that control struvite precipitation.

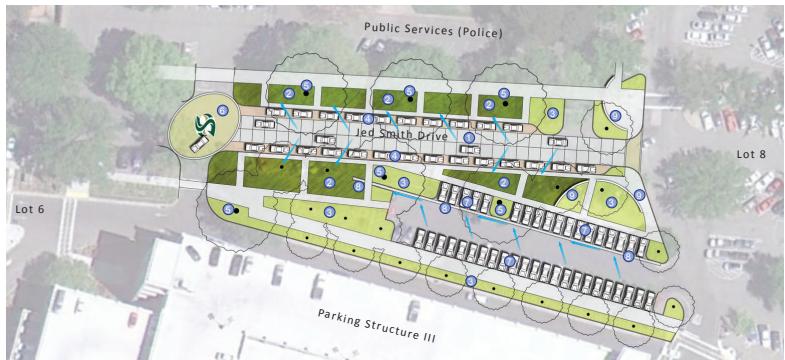
# Applied Research Services

The variety and quantity of our applied research services contracts demonstrates the well-earned reputation of OWP to consistently deliver technical knowledge and apply our specialized, hands-on skillset to the missions and goals of agencies and organizations focused on water in California.

## New Contracts

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**Implementation of Low Impact Development Devices on Sacramento State Campus**—In collaboration with the City of Sacramento and Sacramento State Facilities Management, OWP was awarded a \$3,453,782 grant (administered by the State Water Resources Control Board) to design and build up to 25 low impact development stormwater treatment devices on campus. The devices will be used to evaluate LID treatment performance and to educate the public.



**Phase II Stormwater Permit Compliance (Technical Assistance)**—The California Department of Parks and Recreation (DPR) contracted \$110,314 with OWP (10/01/13-06/30/14) to provide technical assistance with the DPR Stormwater Program, with a focus on Phase II Permit compliance.

**Environmental Impact of Cured-In-Place Pipe (CIPP) Repairs**—The California Department of Transportation (Caltrans) Research, Innovation and System Information Unit contracted \$273,383 with OWP (05/29/14-12/31/15) to implement field studies to determine the environmental impact of CIPP repairs.

## Continuing Contracts

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**Stormwater Technical Assistance**—The California Department of Transportation (Caltrans), Division of Environmental Analysis (DEA) contracted \$6,000,000 with OWP (06/01/13-06/30/16) to provide technical assistance with stormwater research focusing on discharge characterization, source identification and control, and treatment control studies.

**Development of Low Impact Development Design Tool**—The State Water Resources Control Board (SWRCB) contracted \$278,948 with OWP (04/01/13-04/01/16) to develop and implement a user-friendly tool to assist designers with low impact development design.

**Development of Engineered Soils to Promote Low Impact Development Implementation**—The State Water Resources Control Board (SWRCB) contracted \$339,084 with OWP (06/01/13-01/01/15) to test the treatment performance and conductivity of different engineered soils.

# Applied Research Services

## ➔ Continuing Contracts

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**Division of Safety of Dams Mapping Project**—The California Department of Water Resources (DWR) contracted \$500,000 with OWP (01/01/13-06/30/17) to assist with dam break flood analysis and emergency action plan development.

**Clean Watersheds for a Clean Bay (CW4CB) Project BMP Pilot Studies**—Two contracts were awarded with prime contractors working in collaboration with Bay Area Stormwater Management Agencies Association (BASMAA) and eight Bay Area cities/counties. Contract #1: EOA, Inc. contracted \$27,000 with OWP (executed on 07/27/12). Contract #2: Geosyntec contracted \$20,000 with OWP (executed on 11/08/12) to assist with stormwater best management practice pilot study design, coordination, and oversight.

**Wastewater Technical Expertise**—The Sacramento Regional County Sanitation District contracted \$300,000 with OWP (06/11/03-06/30/16) to provide technical expertise, with a focus on wastewater characterization and treatment.

**California Stormwater Quality Association (CASQA) Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP) Testing and Certification—**  
CASQA contracted with OWP (executed on 01/21/11) to develop and implement an online system to administer/grade tests and issue/renew certifications.

The screenshot shows a web application titled "CASQA QSD and QSP Lookup" under the "WATER PROGRAMS SACRAMENTO STATE" banner. The interface includes search fields for "Certificate", "Last Name", "Certificate Number", and "Zip Code", with a "Submit Query" button. A message at the top right indicates that email and mailing addresses are not available for distribution. Below the search area is a table showing search results:

Name	Address	GMD GSP	Certificate Number	Expiry Date	Underlying Certificate	Status
ANDREW FREDERIC LANDSCAPE SERVICES 3000 10TH ST. CARMEN PARK CA 95834 1000		QSP	00001	Aug 03, 2012	QSP0001 registered Person: Andrew Landscaping LLC 0584	Expired

At the bottom of the page, there are links for "Privacy Policy" and "Return Policy".

**Development of LID Standards, Stormwater Quality Design Manual Updates & BMP Sizing Tool Enhancement—Contracting with the Sacramento Stormwater Quality Partnership, RBF Consulting subcontracted \$45,000 with OWP (executed on 09/15/11) to develop and provide the Partnership (including local cities and Sacramento County) with low impact development standards and best management practices design tools.**

**Educational Support Services to State Water Resources Control Board—**  
The California State Water Resources Control Board (SWRCB) contracted \$115,000 with OWP (04/16/12-03/31/14) to assist the Water Board Academy with the development and delivery of educational events and materials.



[www.owp.csus.edu](http://www.owp.csus.edu)