

# On the Water Front

Rocky Mountain Water Quality Analysts Association

Third Quarter 2011

## Outstanding Water Laboratory Parker Water and Sanitation District

In a competition between laboratories in Colorado, Wyoming, and New Mexico, Parker Water & Sanitation District (PWSD) received an award for “Outstanding Water Laboratory” from the Rocky Mountain Section of the American Water Works Association (RMSAWWA).

Laboratories competed using criteria showing exceptional performance, dedication and teamwork in providing safe drinking water to customers. PWSD’s water quality lab was recognized for going above and beyond to exceed EPA and State Health requirements both for its customers and neighboring communities.

The six member staff has over 60 years of combined work experience for PWSD. They process over 17,000 samples through the in-house laboratory each year. District Manager Frank Jaeger said “There is a great feeling of pride for what our Water Quality Laboratory continues to accomplish as they are central to the District’s mission to provide safe drinking water 365 days a



*The award winning lab team: Ed Grove, Eric Amorena, Jim Lunden, Terri Garnett, Lisa Dillow, & Nancy Lairamore*

year.” He added, “The laboratory also plays an important role in the treatment of wastewater through analysis of discharges and processes associated with the advanced wastewater treatment process.”

In addition to receiving highest marks in a broad spectrum of water quality tests and analysis processes, the award was also given to PWSD for their fieldwork performed above and beyond its own service area of about 16,000 customers, five water storage tanks, 45 wells, and two wastewater treatment plants. There are 18 entry points in the system and PWSD lab staff will be adding new sampling and analysis methods soon year when Reuter-Hess, a 72,000 acre-foot reservoir, begins operation. Interestingly, PWSD is not a part of the Town of Parker and serves water and wastewater in and beyond the Town’s

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RMWQAA 1

## Analyst of the Year Kathy Wagner



President Stephen Ellis (lt) and VP, Adele Rucker (rt) presented Kathy Wagner with the 2011 Analyst of the Year Award and Kelly Cline with Honorable Mention Award (below).

The nominees for 2011 Analyst of the Year were all exceptionally strong candidates. After much discussion, Kathy Wagner was voted Analyst of the Year, and Kelly Cline received the first ever Honorable Mention award.

With over 13 years experience, Kathy Wagner is extremely adept in the lab. For the past three years, she has been an Analyst at Colorado Analytical Laboratories. She was hired primarily to develop the methods necessary to build a fully functioning drinking water lab. Kathy has fully lived up to the task. In just six months, she helped develop seven EPA state-certified methods.

Wow! In addition to her lab work, Kathy represents Colorado Analytical in professional organizations and at events.

Kelly Cline has been a Chemist for the City of Westminster for almost 10 years. Kelly has taken on the



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**The 2010 RMWQAA  
Certification Exams**  
Levels I, II, and III will be held  
**Friday, October 14, 2011** at

Griswold WTP  
14201 E. Hampden Ave  
Aurora, CO 80014  
8:30-10:30 AM

Applications should be mailed to:  
Adele Rucker  
Wemlinger WTP  
18301 E. Quincy Avenue  
Aurora, CO 80015

Applications must be received by  
**Friday, September 30, 2011.**

Exam Topics and Study Materials can be found at  
our temporary website [www.RMWQAA.camp8.org](http://www.RMWQAA.camp8.org)

task of learning to use a Flow Cam instrument to count and speciate phytoplankton and zooplankton. This technique which is usually employed primarily by limnologists, is a great tool to employ at wastewater treatment plants. Kelly has also used this technique to analyze other district's water and help them interpret results. The RMWQAA congratulates both of these outstanding analysts. ♦

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**Mark Orr 303-973-8184 [mark@summitsci.com](mailto:mark@summitsci.com)**

# Analyst Updates & Accomplishments

## Stephen Ellis Rides the Rockies & Natalie Love Welcomes Daughter

Stephen Ellis of South Adams County Water and Sanitation District and current RMWQAA President participated in Ride The Rockies (RTR) this year. After training hard from late February to early June, he took his first really long ride. Over 2000 participants rode from Crested Butte to Georgetown for a total distance of 409 miles. Cyclists crossed both Cottonwood Pass(12126 ft.) and Berthoud Pass (11307 ft.). The training really paid off because now Stephen plans to participate in the Buffalo Classic Century Ride in September where he will attempt to ride 100 miles in only one day! He hopes to continue taking part in endurance rides like RTR each spring. Fantastic job Stephen! You just might have other analysts join you next Spring. 💧



*Stephen rides from Stagecoach reservoir to Steamboat.*

*Natalie Love from GEI Consultants welcomed her second daughter, Caroline Louise Love on June 30th.*



*Caroline spends time with her new big sister, Helen*

Continued from page 1  
boundaries.

*Parker wins award Continued from page 1*

Due to under-trained personnel or inadequate on-site lab capabilities, PWSD's certified lab technicians have also assisted their neighbors in Arapahoe, Elbert, and Douglas Counties with analysis and other water-quality testing.

PWSD Water Quality Laboratory will be recognized at the Joint Annual Conference September 18-21 in Loveland.💧

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# Compliance Toolkit

## Hope Dalton

### Tri-County Health Department

In 2010, Tri-County Health Department (TCHD) contracted with CDPHE and began conducting inspections of non-community water systems. These systems are typically located in rural areas and may be in operation infrequently throughout the year, with many of them only operating during the summer months. They include campgrounds, restaurants on wells, schools, small businesses, etc.

As part of program preparation, TCHD reviewed CDPHE data and determined that paperwork deficiencies were the most common violation. Records at many of these small systems were kept offsite by contract operators. The owners of the water system typically called the operator if issues arose.

Having proper written plans and record-keeping techniques encourages water system operators and owners to follow consistent, proper techniques and can quickly identify concerns before they become public health emergencies.

To assist owners and operators of small drinking water systems, TCHD developed a toolkit to address the need for consistent

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written plans that meet regulatory requirements, an easy way to organize records and locate all documents, and to assist the system during a sanitary survey. The toolkit contains templates and dividers for needed information like lab results and is placed in a 3-ring binder with the system's well permit, monitoring schedule, and previous sanitary survey. The toolkits are placed in a hot pink binder which is easily recognizable to on-site staff and operators. During inspections, TCHD inspectors assist operators with completing the templates and ask them to submit their newly-completed plans to CDPHE to achieve compliance. As additional needs are identified in the field, supplemental information is included.

The response to the toolkit has been positive. Operators managing more than one system began to use the templates for their other water systems. At this time, all systems have submitted plans or have agreed upon a date to do so. TCHD plans to share this tool with other local health agencies.

Although the toolkit was designed for non-community water systems, community water systems may find benefit from the toolkit also. For more information contact Hope Dalton at [hdalton@tchd.org](mailto:hdalton@tchd.org) or 720-200-1583.💧

Email: [Info@ColoradoLab.com](mailto:Info@ColoradoLab.com) Call: 303-659-2313  
[www.coloradolab.com](http://www.coloradolab.com)

**Colorado Analytical Laboratories, Inc.**

<u>Drinking Water Certified</u>	<u>Wastewater</u>
Organics (SOC/VOC)	BOD, TSS, Ammonia-N
DBP (THM/HAA, TOC/Aik)	NO <sub>2</sub> -N, NO <sub>3</sub> -N, & TKN
Nitrate/Nitrite Nitrogen	Coliform-Total, Fecal, E. coli
Copper and Lead	Metals by ICP-MS & AA
Fluoride	Biosolids- Soils Analysis, 503
Total Coliform	Regs, Fecal Coliform
Metals by ICP-MS & AA	DMRQA Participant





## Analyst or Artist? Kim Cowan

Kim Cowan went to college initially for chemistry, which is how she ended up working in the lab at Metro Wastewater (Metro). With many competing interests, she changed her major to art and finally graduated with a major in Japanese.

Although, she has always had artistic talent, she admits painting is not actually her strong suit. When the lab supervisors learned of her talent, they asked her to paint something in the lab.

Her first “analytical” piece was “Lab Rats” depicting the daily duties of laboratory analysts portrayed by rats. The painting is about 2x4 feet and located on a wall in the glassware washing room at Metro. She worked on it here and there when she had free time over a period of several months.



Kim’s current endeavor is a marine scene with a wide variety of fish, each chosen by one of the laboratory staff as a representation of themselves. She laughs as she points out that all the choices in aquatic life would never live in the same environment, but it is also a metaphor for the wide variety of personalities who come together to co-exist in the lab. The analysts seem to have put great thought into their chosen aquatic life.



*Kim put the finishing touches on a peppermint angelfish*

Besides the lab, Kim has done a couple murals in other places and hopes to do more in the future. She also carves (with a hammer and chisel) wooden sculptures by hand, sketches constantly, and is an avid photographer. “My husband and I go out on photography-seeking excursions almost every weekend.”

At some point Kim plans to create a portfolio website to show off her work. Her lab artwork may slow down now that she has recently been promoted to Analyst II. If you find yourself at Metro’s lab, ask to take a look at the amazing talent of one of your fellow analysts! 💧

Analyst Exams will be held **October 14th, 2011**  
**Griswold Water Treatment Plant**  
14201 E. Hampden Avenue, Aurora, CO 80014

**ROCKY MOUNTAIN WATER QUALITY ANALYSTS ASSOCIATION**

**APPLICATION FOR LABORATORY ANALYST CERTIFICATION**

**PERSONAL INFORMATION**

**Date:** \_\_\_\_\_

**Level Requested:** \_\_\_\_\_ **Current Level:** \_\_\_\_\_

**Certificate #:** \_\_\_\_\_

**Full Name:** \_\_\_\_\_

*Print name as you wish it to appear on the certificate.*

**Address:** \_\_\_\_\_

*Number*

*Street*

\_\_\_\_\_

*City*

*State*

*Zip Code*

**Telephone:** \_\_\_\_\_

*Home*

*Work*

**Email Address:** \_\_\_\_\_

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Exam Results \_\_\_\_\_

Exam Score \_\_\_\_\_

Cert. # \_\_\_\_\_

Expires: \_\_\_\_\_

Mailed: \_\_\_\_\_

Filed: \_\_\_\_\_

**PRESENT EMPLOYMENT**

**Employer:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Job Title:** \_\_\_\_\_ **Length of Service:** \_\_\_\_\_ years

**Laboratory Type:** **Utility** **Commercial** **Potable Water** **Wastewater** **Other**

**Describe laboratory testing procedures and equipment:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Briefly state your usual duties:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# PREVIOUS LABORATORY OR RELATED EXPERIENCE

*List previous employment below*

DATES of SERVICE			NAME AND ADDRESS OF EMPLOYER	POSITION HELD
From	To	Total years		

EDUCATION				
List the name and location of the School		Years Attended	Date Graduated	Subjects studied or degrees obtained
A: High School				
B: College				
C: Graduate				
D: Other				
EXAM LEVEL	MINIMUM EDUCATION	MINIMUM EXPERIENCE		NECESSARY PRIOR CERTIFICATION
LEVEL I	High School or GED	6 Months		None
LEVEL II	High School or GED or AA Degree or Bachelors Degree	4 Years 3 Years 2 Years		Level I
LEVEL III	High School or GED or AA Degree or Bachelors Degree	5 Years 4 Years 3 Years		Level II

*List other educational courses completed that relate to laboratory work* \_\_\_\_\_

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Application and fee must be received by **September 30, 2011**  
 Mail to: Adele Rucker  
 Wemlinger WTP  
 18301 E. Quincy Avenue  
 Aurora, CO 80015

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