

# *Colorado SECTORS Initiative: Get Into Water! Front Range Initiative*

MARCH 2013 CASE STUDY



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**Prepared for:**

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# COLORADO'S SECTOR INITIATIVE

In May 2009, the Colorado Department of Labor and Employment (CDLE) and the Colorado Workforce Development Council (CWDC) jointly awarded funding to super-regions throughout the state. Funding was provided to regional workforce partnerships to plan a sector strategy, and many of these grantees received additional funding for implementation activities. Since 2009, ten grants have been awarded to target industries such as aerospace, health care, manufacturing, renewable energy, and water/wastewater management. Sector initiatives are developed through local public-private partnerships, are driven by industry and include workforce development, economic development, education, and other stakeholders to address high priority workforce challenges within each sector.

## BACKGROUND

The Get Into Water! Front Range Sector Initiative (GIW!) involved four counties in the Denver Metro region—Arapahoe, Boulder, Denver, and Douglas. In 2011, these counties (some of the most populous in Colorado) accounted for 35% of Colorado's overall population.<sup>1,2</sup> As of October 2012, Denver County had the highest unemployment rate in the region at 7.9%.<sup>3</sup> Arapahoe County had unemployment of 7.3%<sup>4</sup>, while Douglas County had the smallest civilian labor force of the four counties and an unemployment rate of 6.1%.<sup>5</sup> Boulder had the lowest unemployment rate in the region at 5.7%.<sup>6</sup>

Although water and wastewater industries are not among the top three industries in the aforementioned counties, a study of the region's water utilities conducted by the Get Into Water! Project Industry Advisory Council (IAC) identified workforce challenges and opportunities in the region. The IAC was composed of Arapahoe/Douglas Works (ADW), City and County of Denver, Economic/Workforce Development, Rocky Mountain Water

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<sup>1</sup> US Census Bureau Estimates Annual Population Data in Multiple Counties for 2011, [http://www.colmigateway.com/analyzer/qspopulat.asp?cat=HST\\_DEMOG&session=POPULAT&origincsrc=&subsession=1&rollgeo=04&geo=0804000005:0804000013:0804000031:0804000035&time=20110100&areaname=Multiple+Counties&incsource=&cboIncTypes=&tableused=POPULATN&popsouce=1&cboCharts=GeosolChart1&cboChartTypes=Column&showgrid=True&showgraph=False&showmap=False&output=P&Orderby=](http://www.colmigateway.com/analyzer/qspopulat.asp?cat=HST_DEMOG&session=POPULAT&origincsrc=&subsession=1&rollgeo=04&geo=0804000005:0804000013:0804000031:0804000035&time=20110100&areaname=Multiple+Counties&incsource=&cboIncTypes=&tableused=POPULATN&popsouce=1&cboCharts=GeosolChart1&cboChartTypes=Column&showgrid=True&showgraph=False&showmap=False&output=P&Orderby=)

<sup>2</sup> *Ibid.*

<sup>3</sup> Monthly Not Seasonally Adjusted Labor Force, Employment and Unemployment data in Multiple Counties for October 2012,

[http://www.colmigateway.com/analyzer/qsabforcedata.asp?geo=0804000005:0804000013:0804000031:0804000035&session=LABFORCE&subsession=99&cat=HST\\_EMP\\_WAGE\\_LAB\\_FORCE&areaname=Multiple+Counties&rollgeo=04&sgltime=0&tableused=LABFORCE&adjusted=0&rndtotal=1&cboCharts=GeosolChart1&cboChartTypes=Column&showgrid=True&showgraph=False&showmap=False&selectall=&orderby=1A&maptime=&mapitem=Unemprate&output=P](http://www.colmigateway.com/analyzer/qsabforcedata.asp?geo=0804000005:0804000013:0804000031:0804000035&session=LABFORCE&subsession=99&cat=HST_EMP_WAGE_LAB_FORCE&areaname=Multiple+Counties&rollgeo=04&sgltime=0&tableused=LABFORCE&adjusted=0&rndtotal=1&cboCharts=GeosolChart1&cboChartTypes=Column&showgrid=True&showgraph=False&showmap=False&selectall=&orderby=1A&maptime=&mapitem=Unemprate&output=P)

<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid.*

<sup>6</sup> US Bureau of Labor Statistics, <http://www.bls.gov/oco/ocos229.htm#outlook>.

Environment Association (RMWEA), and the Rocky Mountain Section of the American Water Works Association (RMAWWA). The IAC was created during the planning grant of the sector initiative and included representatives from many municipalities.

A total of 78 water and wastewater utilities operate within Arapahoe, Boulder, Denver, and Douglas counties, serving more than 42% of Colorado's total population. The utilities employ 11,100 individuals in the areas of water treatment, water distribution, wastewater collection, wastewater treatment, and plant operations. An estimated 3,600 of these employees are certified operators. The remaining 7,500 are non-certified employees including managers, engineers, and personnel in customer service, finance, public affairs, and human resources.

In 2009, the U.S. Bureau of Labor Statistics projected that water and wastewater treatment plant and system operators' employment would grow 12% between 2010 and 2020.<sup>7</sup> During this same period, IAC research estimated that more than 25% of regional water sector employees would be eligible to retire. This would leave the industry with significant shortages of qualified, water sector employees with technical skills. How would utility companies replace retirees, especially experienced operators from the limited pool of senior and newly trained operators? Training could be provided for new hires, but advanced operator positions require both experience and training. Historically, career opportunities in the water industry have not been widely available. As a consequence, the industry has experienced low numbers of qualified applicants for open positions.

Beyond these significant challenges, IAC identified other challenges facing regional water utilities, including the current labor pool lacks basic math, science, and mechanical skills; the absence of cohesive training programs in the region; and insufficient wage compensation in the industry to attract and retain workers.

## GOALS AND OBJECTIVES

In February 2010, subsequent to an earlier sector planning grant, IAC received an implementation grant from CDLE to address the urgent personnel issues facing the four county regional water utilities. The principal foci were outreach and recruitment, training, knowledge retention, and human resource and operations' staff collaboration. The Get Into Water! Initiative identified four goals for the sector initiative:

1. Conduct and promote training programs to ensure mission critical positions are filled with qualified, trained, and technically skilled personnel,
2. Conduct adequate outreach and recruitment efforts to ensure interest in, and attraction to, mission-critical positions,

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<sup>7</sup> *Ibid.*

3. Enhance collaboration, education, and communication between operations staff and human resource professionals to create a positive culture for workforce development, and
4. Conduct knowledge management and employee retention efforts to ensure mission-critical personnel have the knowledge and skills to operate effectively.

It was expected that all water and wastewater utility positions be addressed by the project, but the training initiatives remained specific to the four-county region's 3,600 operations positions (water treatment, water distribution, wastewater treatment, wastewater collection, and supervisory control and data acquisition (SCADA)/instrument control). A decision was made not to address utility funding issues identified by the GIW!-IAC survey (e.g., employee compensation and rewards). These were perceived to be long-term issues that individual utilities need to address as part of their overall management plan.

## PARTNERSHIPS

To successfully implement the aforementioned goals, the project required the active engagement of stakeholders representing industry employers, regulators, education and training organizations, and workforce centers (WFCs). Some relationships already existed (as evidenced by the IAC collaboration which developed the grant proposal). However, the industry and WFCs had little prior interaction, so bringing the WFCs to the table was a significant change.

The newly funded Get Into Water! initiative built on and expanded the IAC partnership, exemplifying the synergy of the sector model—a sum “greater” than its parts (See Appendix A for sector partners).

The IAC's primary functions were making recommendations and supporting the project through in-kind and leveraged funding (see Appendix B for IAC members). IAC met quarterly to review project goals, objectives, and strategies. A Project Team was established, along with four work teams, to focus on specific goals and objectives. The Project Team met monthly to track progress and monitor benchmarks against the goals. The team worked with school districts to create a pipeline of interest in the field (e.g., developing competitions and other opportunities to engage students).

While grant funding was awarded to Arapahoe/Douglas Works (ADW), a subcontract was made with the RMSAWWA, which served as a co-convenor. RMSAWWA implemented the project's four goals and associated objectives and strategies. A project manager with extensive industry experience in the field of water management was retained to coordinate and oversee all project activities.

ADW served as the fiscal agent for GIW!, handling tuition vouchers, reimbursement for the contractor to convene project through the RMSAWWA, processing of Workforce Investment

Act (WIA) applications, and identification of other funding streams for both new and incumbent worker training. Staff from the Denver WFC and ADW helped develop an electronic manual detailing program operations, policies, and procedures. WFCs also made use of WIA partnerships to promote Get Into Water! and extend the project reach by getting the word out about water and waste management occupations.

One goal of GIW! was the improvement of communication between workforce centers, human resource professionals, and operations staff at utilities. Historically, utilities hire their workforce through the county or municipal Human Resource department, often using for-profit employment agencies. As a result, utilities lost the opportunity to benefit from the multiple services WFCs provide to businesses and job seekers, including training assistance for incumbent workers and job-seeker training. The GIW! partnership and the communication mechanisms established between the utilities and WFCs enhanced bi-directional flow of information about industry needs and the available resources to address those needs (e.g., literacy classes for employees, job fairs). Increased communication contributed to better coordination in recruitment, assessment, and hiring. For example, by working closely with utilities, the GIW! Project Team developed standardized job descriptions that could be customized to match specific openings.

A weekly update was prepared by the project director and distributed via e-mail to members of the Project Team. A website (<http://www.getintowaterco.org>) was created and continues to be maintained. The website contains a rich array of links to career and training opportunities and information relevant to employers and job seekers. Certification requirements, study guide materials, and applications are available on the website in addition to literature and videos about the industry. An online calendar informs stakeholders and project volunteers about upcoming meetings and activities. Members of the Project Team determined that the website contributed to higher-than-anticipated attendance at planning meetings and active participation in project events. GIW!'s website contains contact information for youth and adults who completed training programs to increase the utilities' access to available workforce pools.

In addition, the Project Team published a quarterly newsletter and monthly e-Rumbles publication to promote upcoming activities.

GIW! partnered with utilities on succession planning tools (e.g. Knowledge Management workshops and other training). Collaborative activities focused on developing career path opportunities for the next generation of employees and strategies to foster internal promotions.

# IMPLEMENTATION ACTIVITIES

Project activities can be classified into overlapping areas that include recruitment, training, retention and/or preserving institutional memory, and outreach and education of youth about careers in water quality management. An additional and critical activity was development of a multi-layered communication system to keep current and potential stakeholders informed.

## *Outreach and Recruitment*

To access youth and encourage interest in becoming utility operators, the project lead and/or members of the GIW!-IAC met or talked with a variety of organizations, such as high school personnel, teacher associations, and county youth councils. Outcomes of these conversations included water-related science projects and career fairs at the schools.

The Project Team and volunteers developed a variety of presentations and exhibits that were mounted in schools. For example, representatives from the project met with over 100 students at the St. Vrain School District Career Fair in Longmont. A total of six school-based activities occurred during the project's three years.

The project hosted a very successful Model Water Tower Competition for high school students which promoted participation in the annual World Water Monitoring Day. Participating students worked alone or in teams to construct model towers. Six students built four model water towers. RMSAWWA and RMWEA provided cash prizes (from private funds) to three students.

To help recruit for job openings and training opportunities, job fairs (in person and virtual) were run collaboratively with WFCs and local utilities with thousands individuals attending throughout the grant period.

## *Training*

The development of entry-level training courses to introduce high school students and adults to career opportunities in the water and wastewater industry was a major focus of the project. Using content from national industry certifications, GIW! established the Water Utility Science Program (WUSP) and the Water Quality Management (WQM) program. The course curricula for these programs were reviewed by teams of industry experts and approved by the State of Colorado. Participants earned 7.5 training units (TUs) per course. On completion of two courses in either program, students were eligible to sit for industry exams: Level 1 Water Distribution, Level 1 Wastewater Collection, Level D Water Treatment, and Level D Wastewater Treatment.

The WUSP and WQM programs are part of the training initiative and offer introductory water and wastewater courses to both youth and adults. The WUSP was offered through Boulder

Valley School District (BVSD). High school seniors there took the courses for science elective credit. Adults can take the non-credit version of the courses in the Boulder Lifelong Learning program. The same courses are offered for high school seniors and adults in the WQM at Emily Griffith Technical College (EGTC). Courses are taken for science elective credits or community college credit. During all courses, field trips to utilities occur at least once per week. Each program class provides students with 7.5 training units toward certification. Courses prepare students for licensure in Level 1 Water Distribution, Level 1 Wastewater Collection, Level D Water Treatment, or Level D Wastewater Treatment. Sixty-seventy students completed the entry-level courses. Approximately 20% passed their certification exams, and 10% of these were hired by local utilities.

A three-month on-the-job-training (OJT) program was implemented in the spring of 2012. Participants were temporary employees of utilities and their employers were reimbursed by local workforce centers for up to 50% of the employees' pay.

A RMSAWWA/RMWEA Supervisory Certificate Program was also developed. The response to this inaugural program exceeded project expectations. Nineteen applicants from the following utilities participated in the program held in August 2012: Aurora Water, Cherokee Metro District, City of Boulder, City of Fort Collins, City of Pueblo, Colorado Springs Utilities, Parker Water Service District (WSD), South Adams County WSD, and the Town of Castle Rock.

The loss of institutional memory and the advanced technical knowledge of incumbent workers close to retirement emerged as issues of concern in the water industry. Anticipating widespread departure of retirement-age employees in the next few years, the industry considered different strategies and tools to collect, disseminate to incoming workers, and store this knowledge for future reference. Two workshops were held addressing this issue. The second workshop, Knowledge Management: Leveraging Intellectual Assets, was sponsored by the project in April 2012 and addressed integrating a variety of strategies. Discussion points included case studies from numerous utilities, knowledge capture, and documenting core business processes. All handouts and materials are available for download at <http://www.getintowaterco.org/for-employers/resource-sharing/>. The attendees were very appreciative of receiving practical advice on collecting and capturing critical knowledge from long-term employees. In fact, one attendee wrote on his workshop evaluation survey: "I feel like I'm not standing out there alone in this subject any longer and I came away with tools in my toolbox that I can leverage."

## ACHIEVEMENTS

Perhaps GIW!'s biggest achievement is that the program is now being replicated in Northern Colorado Larimer and Weld counties. This reflects the success of the sector model itself, as well as the partners' ability to respond to the real needs of local utilities. GIW! has achieved legitimacy in creating new pathways into the field. In addition, "most of the project deliverables

are considered state-of-the-art nationally and have been, or will be presented at national conferences.”<sup>8</sup>

## ***Partnerships***

In the final quarterly report, the Project Team wrote “the partnerships between industry, workforce centers and school districts surfaced as the most important legacy of this initiative.” This project was truly sector-led by the IAC, which continued to be fully engaged in making recommendations and supporting the project through in-kind and leveraged funding. The report goes on to say that “our industry partners speak positively about the opportunity to participate and learn from workforce partners.” Given the competition of the water industry with the energy, gas, and oil industries for highly skilled workers, the Project Team viewed the cultivation of these partnerships as critical to the future success and sustainability of the water profession. IAC members anticipate partnerships will continue after the funded grant project ends.

## ***Communication***

The GIW! website continues to provide a resource for the industry, job seekers, and those who wish to be trained for water management positions. The successes of GIW! in the greater Denver region, lessons learned, and best practices have been shared with Aspen Institute’s Sector Skills Academy, the Green Jobs Conference in Washington, D.C., and the Economic Development Council of Colorado conference in Durango, CO. Further, the RMSAWWA plans to share the experiences and successes of GIW! with three other state regions.

## ***Outreach and Recruitment***

In three years, GIW!’s activities resulted in significantly higher number of adults and youth participating in water management courses and/or pursuing careers in the industry. The Project Team believes a big part of GIW!’s success rests on the participation and commitment of industry volunteers in promoting careers in water management.

## ***Training / Certification***

GIW! established a number of introductory training programs that may lead to state certificates at the entry level. In addition, students in the high school had the opportunity to participate in field trips to Boulder’s water facilities. As one instructor commented, “they really had more hands on (experience). I think that was a good thing showing schools that this is a valuable piece of the education process.” The developed program curricula are now public documents and can be obtained by contacting [mel@mjfconsult.com](mailto:mel@mjfconsult.com). Parts of the curriculum have been shared nationally at industry meetings and with secondary school science teachers.

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<sup>8</sup> GIW! Staff member.

The training programs included both course work developed by the sector project and on-the-job training for related projects in water with organizations such as Mile High Youth Corps and Douglas County Water Resource Authority Water Conservation Project. Subsequent to their training, 53 adults were successful in earning one or more industry certificates.

As a result of the efforts of GIW!, the Colorado Water and Wastewater Facility Operators Certification Board has approved a new policy allowing students to apply for a time to take the certification exam before they receive their high school diploma. This reduces the wait time from application to actually sitting for the certification exam. Previously, high school students were required to wait until after graduation to apply for the certification. This policy will give graduating students a head start, accelerating the career pathway.

Because GIW! recognized the importance of incumbent career advancement, including supervisory training, the first Supervisory Certificate Program was held in August 2012. This program exceeded expectations with 19 students from 9 municipalities/counties participating.<sup>9</sup>

## ***Employment***

Nine jobs were posted in *Connecting Colorado*. A total of 32 adults from GIW found employment and project staff reported that 51 youth were employed in the water industry during the grant.<sup>10</sup>

## ***Knowledge Management***

Through the activities of the knowledge management work group, utilities in Colorado such as Denver Water and the Littleton/Englewood Wastewater Treatment plant, have attained an appreciation for the potential impact and have implemented strategies and tools to capture the knowledge of retiring employees for the benefit of incoming employees.

## ***Human Resources and Operations' Staff Collaboration***

As a result of the project, high-level managers and executives within the industry are having conversations about workforce issues and industry sustainability. Get Into Water! project volunteers and staff are regarded as experts and "flag bearers." Although difficult to quantify, this outcome demonstrates the impact of the project and suggests longer-term effects on the horizon.

# **IMPACT / RETURN ON INVESTMENT (ROI)**

Although the Project Team tracked the number of workers trained, employer partners did not use a calculus to assess ROI.

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<sup>9</sup> Students under the age of 18 cannot be tracked in *Connecting Colorado*.

<sup>10</sup> As reported by project staff.

Although some employers hired entry-level training graduates, most employers hire applicants with at least one year of experience. The Project Team believes as graduates gain experience through on-the-job training and networking, more employers will hire them. At the end of the grant period, employers were beginning to see a significant number of retirements as a result of the improving economy. The Project Team believes internal shifts will result in more entry-level openings in coming months as the economy continues to improve and more employees enter retirement.

## CHALLENGES

GIW! faced several difficulties over the course of the project in the areas of training, employment, internships, funding, and certifications for incumbent workers.

**Training:** The biggest challenge the project team faced was the development and implementation of new training activities.

Prior to GIW!, training programs were traditionally two-year Associate of Applied Science degrees obtained at the community college level. Community colleges and other training vendors in Colorado resisted the new training activities as they were perceived as competition to existing programs. One traditional training provider described the GIW! training programs as feeder programs leading to enrollment in the two-year program at Red Rocks Community College (RRCC).

During the grant period, 14 students were co-enrolled in WIA and the GIW! program for the Water Quality Management at RRCC.<sup>11</sup> RRCC received over \$16,000 in GIW! scholarship funding for students. WIA provided an additional \$38,126 in tuition and \$8,310 in supportive services to students in the RRCC Water Quality Management program. RRCC received over \$62,000 to support students attending the Water Quality Management program. The WFCs continue to support students interested in water industry occupations.

GIW! underestimated the time it would take to market and develop water industry programs within regional and local school districts. The shorter academic work year affected planning and training schedules. Identifying the most appropriate school venues—vocational and/or science programs—was problematic. Most programs were categorized as career tech education or vocational schools. A major challenge to success was locating faculty with experience in the field who were able to teach the material, and assigning that faculty member to a school. The GIW! Project Team showed flexibility and adaptability by implementing a change to the timeline and adding courses to accommodate students interested in training at all locations.

**Employment:** Despite successes in developing and implementing entry-level training programs, employment of recent graduates did not reach expected levels.

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<sup>11</sup> As reported by GIW project staff.

The industry predicted a large number of retirements, but the recession caused considerable concern and many eligible workers continued to work. As a consequence, the number of available jobs was lower than expected, resulting in fewer placements for the graduates of GIW! training.

An additional challenge for job seekers was the lack of experience. GIW! found that even after a student had completed training and received certification, they had difficulty finding employment. During the evaluators' site visit, a member of the Project Team commented:

*The piece that's missing for our graduates [is] to gain hands-on experience so that they can meet the employer requirements to start applying for positions once they have obtained certification. We are trying to figure out ways our partners can communicate with the utilities to make that transition or process a little bit smoother so when they are done or nearing the end of their training they have some tangible hands on experience that can be put on resumes and make them more appealing to utilities when they are applying for these positions.*

Salary was an issue. GIW! originally thought knowledge about the industry and training for work was the principal obstacle. After extensive data collection, they discovered that water industry salaries, especially in regard to SCADA knowledge and skills, were not competitive with those in the oil, gas, and aerospace industries. Therefore, in addition to prospective workers' hesitation about careers in waste management, the industry pay scale was a deterrent. In fact, seasoned employees sometimes move into the oil and gas industries and are sometimes able to double their earnings in that way.

Unlike the private sector, salaries at public utilities are legislated by municipalities. GIW! has little direct impact in this area. The issue needs to be addressed by the municipalities who want to have skilled personnel managing their water and waste.

**Internships:** Internships can involve risk liability and equipment damage for the employer. GIW! did not realize the industry's preference for on-the-job training over internships. Time was lost as GIW! tried to cultivate interest in providing internships. There was a 'disconnect' between project volunteers and their operations supervisors and human resource staff, which impacted the project timeline.

**Funding streams:** Given the delay in completing agreements between workforce partners CDLE and the RMSAWWA, a six-month gap between the planning grant and the implementation grant was experienced. Delays were caused by various issues including CDLE giving the project a start date in February, but not executing the expenditure authorization contract until months later. ADW then began the process of generating agreements with the RMSAWWA and workforce partners, but these agreements were not completed until July. Fortunately, RMSAWWA funded the project which led to continue momentum, but many project activities were delayed. This affected the timetable for deliverables. Delays in developing and launching training programs also affected GIW!'s ability to completely use the tuition assistance that had been allocated for the grant year. Restructuring the timeline to include a start-up period for

contract development (especially regarding tuition assistance that should occur later in the project) is a lesson learned.

**Certification exams for incumbent workers:** In the past, many water plants had a single trained and certified engineer and hired workers to work under that engineer. Over time, the industry has become more technical, requiring higher levels of knowledge and skill. Municipalities and the State of Colorado are requiring the workforce to pass certification exams. Unfortunately, incumbent workers often have difficulty passing the exams. Frequently, despite their good service, employees have poor math and literacy skills. Larger organizations such as Denver Water Works have responded by providing remedial training for employees. This is not easy for smaller municipalities. Providing training and/or time off for the training creates additional strain on limited resources.

## LESSONS LEARNED

The Project Team learned several lessons from the project's challenges and successes.

- **Partnerships:** It is important to detail in writing the “defined” role and related expectation(s) the project has for each partner. The team also recognizes the importance of building a good relationship with the Community College System. This ensures they are aware of industry needs and concerns and can integrate recommendations into programs of study. In like manner, the industry will understand what graduates know and can do.
- **Contracts and Project Administration:** The industry needs to have a solid understanding of the purpose, services, and procedures of the workforce centers. Written commitments, including financial and hiring expectations, need to be secured prior to project commencement.
- **Leadership:** GIW! found having the leadership of water industry associations such as the Rocky Mountain Section of AWWA and the Rocky Mountain Water Department Association involved from the beginning made a tremendous difference. The early presence of these individuals at the table helped identify contacts and facilitated outreach to stakeholders both locally and statewide. It also provided legitimacy for the project. Using a similar committee structure as that of the industry association helped define the project and provided a structure for GIW! related activities post grant.
- **Project Management:** GIW! understood the importance of hiring a strong project manager with industry experience, contacts at the national level, and a deep understanding of the data and issues.
- **Volunteer leadership:** The project benefitted from active participation of industry volunteers who shared their expertise and did project legwork. Harnessing the commitment of industry workers adds legitimacy to outreach and recruitment activities

and enables grant funding to be utilized in other areas. Of course, the common vision and concern about the future of the industry are critical ingredients of engagement for industry workers.

- **Sustainability:** GIW! encourages creating a sustainability plan at the beginning of a project to ensure feasibility beyond the grant period.

## BEST PRACTICES

As a result of the project, workforce partners will also continue to list Water/Waste Water Industry jobs on *Connecting Colorado*. The Project Team also plans to continue working with Larimer, Weld, and industry partners to refer people to their On-the-Job Training (OJT) opportunities that the industry has set up. They are looking forward to sharing this “best practice” on e-Colorado.

- **Administration:** Sector projects need a paid staff person to provide overall leadership and take care of daily operations. As one member of IAC observed: “If we didn't have a paid staff coordinator leading the charge, pushing us forward, I don't think this would have gone (sic). It would have been dead on arrival.”
- **Communication:** For a project to ensure and sustain its visibility, multiple strategies need to be used including websites, newsletters, and community events. It also needs to fully utilize the network and services of each work force region and partner with it to get the word out.

## FINANCIAL AND LEVERAGED RESOURCES

In 2009, the City and County of Denver and the American Water Works Association (AWWA) received a \$71,000 planning grant from CDLE for the period of June 2009 to November 2009. The grant was to be used to design a response to the acute need for new skilled water sector workers within the context of a broader super-regional plan.

In February 2010, CDLE awarded a \$428,000 Implementation Grant for the GIW! Project to ADW. In turn, ADW implemented an agreement with RMSAWWA to lead the project. ADW also developed agreements with the Boulder and Denver WFCs to assist in enrolling adults into the training programs.

GIW!'s project partners contributed an additional \$147,943.95 for a total project value of \$576,812.25. Additional funding (\$40,304) to fund training scholarships for adults was received from the Colorado Department of Public Health and Environment. The Rocky Mountain Water Environment Federation (RMWEA), GIW! Industry Advisory Council, and volunteers provided in-kind resources.

<b>Partner</b>	<b>Planned Contribution(s)</b>	<b>Actual Contributions</b>	<b>Type of Contribution</b>
RMSAWWA/RMWEA	\$62,000	\$62,000	Cash
Workforce Partners	\$3,943.95	\$ 3,943.95	In-Kind
Volunteer Hours	\$ 11,000.00	\$11,000.00	In-Kind
Colorado Department of Public Health and Environment	\$40,304	\$40,304	Cash Scholarships
Total	\$147,943.95	\$147,943.95	

## SUSTAINABILITY

GIW! worked with the RMSAWWA to develop a sustainability plan that includes dollars to continue the Get Into Water! project beyond December 31, 2012. This plan identifies 164 hours of administrative, human resources and training tasks that would cost \$10,000 per year.

During the last year of the funded project, GIW! began transitioning existing project work groups to RMSAWWA/RMWEA subcommittees which ensured that the work groups remained intact and functioning once the grant expired.

The self-sustained adult training program in Boulder will continue. Emily Griffith Technical College used grant funds to build the program, but will now sustain itself with career tech education funds and tuition fees. In addition, individuals who are WIA eligible will be able to use workforce dollars to pay their tuition at both Emily Griffith Tech College, Boulder and RRCC.

High schools in Boulder will continue to run introductory training programs using career tech education funds.

RMSAWWA is a membership organization and their member dues will continue to provide funds for GIW! related activities.

## RECOMMENDATIONS

To remain competitive and be able to hire workers with the knowledge and skills needed to sustain the water and waste management systems under their jurisdiction, municipalities need to raise the salaries of their employees. The first step is to review salary levels for comparable skills, e.g. SCADA. The second step is to work with their legislators to develop a revenue plan (e.g. water and/or power rates).

# ABOUT

Rutgers University's School of Management and Labor Relations (SMLR) is the leading source of expertise on the world of work, building effective and sustainable organizations, and the changing employment relationship. The school is comprised of two departments — one focused on all aspects of strategic human resource management and the other dedicated to the social science specialties related to labor studies and employment relations. In addition, SMLR provides many continuing education and certificate programs taught by world-class researchers and expert practitioners. For more information, visit [www.smlr.rutgers.edu](http://www.smlr.rutgers.edu)

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# APPENDIX A

## *List of Sector Partners*

- Rocky Mountain Section of the American Water Works Association (RMSAWWA)
- City of Boulder
- Rocky Mountain Water Environment Association (RMWEA)
- Littleton/Englewood Wastewater Treatment Plant
- Boulder Valley School District
- Association of Boards of Certification
- American Water Works Association
- Workforce Boulder County
- City and County of Denver-Economic Development-Workforce Development
- Arapahoe/Douglas Works!
- Denver Water
- City of Aurora
- MJF Consulting, LLC
- Parker Water and Sanitation
- ~~City of Boulder~~
- City of Littleton, Englewood, Centennial, Highlands Ranch
- Rural Community Assistance Corporation
- Metro Waste Water Reclamation District
- Southgate Water District
- City of Lafayette

## APPENDIX B

### *Industry Advisory Council Members:*

- Kathy Balu, Denver Water
- Joe Cowan, Rocky Mountain Section American Water Works Association ([RMSAWWA](#))
- Deborah Dewey, City of Aurora
- Jamie Eichenberger, Rocky Mountain Water Environment Association
- Joy Ellis, Parker Water and Sanitation District
- Mike Emarine, City of Boulder
- Melanie Fahrenbruch, MJF Consulting, LLC
- Dawn Gardner, Arapahoe/Douglas Works!
- Cindy Goodburn, Littleton/Englewood
- Ralph Haight, City of Aurora
- William Hogrewe, Rural Community Assistance Corporation
- Georgia Howard, City and County of Denver, Economic/Workforce Development
- Leanna Salas, City and County of Denver, Economic/Workforce Development
- Erin Jones, Workforce Boulder County
- Steve Rogowski, Metro Waste Water Reclamation District
- Duane Tinsely, Southgate Water District
- Adam Walter, City of Lafayette
- Tom Miller, Workforce Boulder County
- ShaJuana Williams, Arapahoe/Douglas Works!
- Sara Miller, Workforce Boulder County
- Dave Pier, Metro Wastewater Reclamation District

## APPENDIX C

<b>ACTIVITY</b>	<b>TOTAL PLANNED*</b>	<b>TOTAL ACTUAL*</b>	<b>% OF GOAL</b>
<b>Entered training</b>	15	61	406%
<b>Completed training</b>	15	59	393%
<b>Earned certificate or industry credential</b>	10	53	530%

\*Numbers only reflect adult participants. Youth were also served by the grant.