

## What Your State's Recruiting Resources Can Do for You

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### Abstract

Public utilities and others in the wastewater treatment business are scrambling to find qualified employees. Often we come up short. Where to go for with this ever escalating employment challenge? Sometimes our best help is in our own backyard.

This presentation will provide a summary of recruiting resources available from state agencies around the country. Many states have gone high tech in the kinds of help they can provide employers. This presentation will consolidate these many tools into one comprehensive reference package. Participants will be provided with URL's and other online resources to their State's employment resources. This paper will also provide insights into some of the unique approaches various organizations have used to attract qualified applicants and an assessment of what works and what doesn't.

A reality check on current trends and programs will provide the attendee with ideas and concepts that might work in their community.

Some case studies of proven techniques will be discussed with examples of how to improve and organization's recruitment program at little or no cost.

### Key Words

Operator career recruitment, wastewater operator certification, mentoring, trends

### Introduction

Leaders in our field are rightly concerned about the projected loss of a significant number of the hard working people associated with operating water and wastewater treatment plants across the country. This paper addresses some ideas and options in developing a Recruiting Program. Any program will need a plan and layout the objectives, the reason for the study and program, and the goals. Career recruitment within the water and wastewater field is especially critical in regions that have experienced rapid growth. A beginning point is a survey of the work force population including job category, ages, and years of service. The statistics will identify the focus areas of anticipated retirement groups, either locally or statewide. As an example, national statistics estimates of the percentage of treatment plant operators over the age of 40 across the country are 60% to 70%. Many comparative studies and projects attempting to reverse the trend have been undertaken in recent years. These ideas are the subject of this presentation.

In the marketplace, we see an increase in technical schools and community colleges reaching out with loaned-approved tuitions for learning various trades. These students are obtaining a hands-on education and are able to apply these skills to advance themselves. The schools job placement sections are able to assist students with local job opportunities to obtain further on-the-job orientation. Naturally, trades with the greatest financial promise attract the majority of trainees, and

there may be over- abundance in certain fields with individuals facing a lower starting level, due to the oversupply. In advertisements, we see ads offering \$ 40,000 and more per year for licensed pipe fitters, plumbers, railroad technician, and electricians, to name a few. The Bureau of Labor Statistics and CareerBuilder.com, list the ten fastest-growing blue-collar jobs, the median wage, and how much each profession is expected to grow by 2014. Many of these technical and mechanical trades are getting involved in training reimbursement, whether by the private companies, unions, or progressive organizations. The other trades our field are in competition with for young workers is actually funding the technical training schools or providing the training university within their organizations. This benefit for today's high school student is in exchange for the student's commitment of employment of four to six years. *Wastewater Treatment Plant Operators* is number two on the "Fastest-Growing Blue-Collar Jobs through 2014". However, from the chart below, they are at the bottom of the pay scale. To get more people interested in the water/wastewater field – the field will have to pay more. Pay scales have improved during the past thirty years, but they need to go a long way to become competitive for the average high school student.

### Fastest-Growing Blue-Collar Jobs through 2014

**1. Construction and Building Inspectors**

\$ 43,596 a year, or \$ 20.96 an hour

increase of 18 - 26%

**2. Waste Treatment Plant Operators**

\$ 34,965 a year, or \$ 16.81 an hour

increase 9 - 17%

**3. Elevator Installer and Repairers**

\$ 58,718 a year, or \$ 28.23 an hour

increase 9 - 17%

**4. Subway and Streetcar Operator**

\$ 49,296 a year, or \$ 23.70 an hour

increase 9 - 17%

**5. Iron and Metal Works**

\$ 42,432 a year, or \$ 20.40 an hour

increase 9 - 17%

**6. Electricians**

\$ 42,286 a year, or \$ 20.33 an hour

increase 9 - 17%

**7. Brick Masons, Block Masons, Stone Masons**

\$ 41,746 a year, or \$ 20.07 an hour

increase 9 - 17%

**8. Plumbers, Pipefitters, and Steamfitters**

\$ 41,288 a year, or \$ 19.85 an hour

increase 9 - 17%

**9. Heating/AC/Refrigeration Mechanics**

\$ 36,254 a year, or \$ 17.43 an hour

increase of 18 - 26%

**10. Carpenters**

\$ 34,902 a year

increase 9 - 17%

In the above chart, operators' job growth is 9 % to 17%. Other job creation statistics are: 931,000 expected new construction and related jobs by 2014, 657,000 expected new installation, maintenance, and repair jobs by 2014, and finally 1.1 million expected new transportation and material-moving jobs will be created by 2014.

One of the key areas that better pay and awareness can develop is from the state agency – Operator Certification Program (OCP). In many states, the environmental regulatory agency has a division for operator certification that is involved with certification and licensing of plant operators, standards for the compliance, career recruitment, and compliance and enforcement of operator performance; each state has different rules and regulations, so it is difficult to generalize. In many cases there are great individuals within these divisions that are committed to the operators, but at this time operator recruitment is not their responsibility. The OCP could lobby within state government to align the State Education Board to introduce or re-introduce state programs for enhanced water quality; water conservation and wastewater treatment to water reuse training modules with the K-12 programs.

Programs that combine the water and wastewater resources of state agencies and educational institutions to inform K-12 children would increase awareness of the water profession, strengthen water conservation and reuse programs, create better informed individuals, and possibly recruit workers within the water/wastewater field.

In *Water's Journey*, an environmental documentary series shown on PBS, two scuba divers are shown in the aquifer tracing the water flow. The film was developed as an educational tool intended for broadcast in schools. The K-12 series provides teachers with a complete tutorial and presentation for instruction. Their link is: <http://www.floridasprings.org/resources/>

The involvement of the OCP could enhance the K-12 educational efforts by teaming with the state education boards to include technological improvements utilized in the water and wastewater field. It could be a means to educate the general public about the water issues of our country and states. Invitations to the public for facility tours would be included in this approach, possibly influencing a potentially career-oriented individual to think about Water as a Career.

I recently attempted to encourage a writer for my local newspaper to write a feature story during National Drinking Water Week. I hoped to stimulate a story about where our water comes from, is treated and distributed. Unfortunately, the news writer had a negative agenda and only wanted to focus on “water wars” a local topic involving counties fighting over water aquifer usage. Well, that killed that idea.

Another area to look at for career development is our professional association's Young Professional groups. Young Professionals could develop a mentoring program in the K-12 group explaining why they selected the field.

Mentoring has been a backbone of career advancements for many. Many operator trainees in the 1970s and 1980s were instructed by their plant manager, especially working math problems, before the certification exam. By working together and networking ideas, mentoring programs create and retain workers.

The dire projections of operator shortfalls have not come to pass yet, because in some cases, workers have not retired and left the expected void in the system as soon as they were eligible. The increased cost of health care, inadequate retirement finances, a desire to keep working, and additional financial rewards are keeping many of the baby boomers around. It is estimated the average baby boomer will postpone retirement for five to seven years, because of the economic perspective facing retirees today. Microsoft, Wal-Mart, Home Depot and other large corporations are tapping into this great pool of individuals to meet workforce requirements. The concept of "re-careering" is successful in Florida, the Sun Belt, and other growing areas. Retirees are delaying full retirement to have more than one retirement check, and in many cases enjoy the self-fulfillment of work. In our field, these older workers are true mentors who are able to assist entry level operators in learning the ropes. This area would be a great opportunity to expand, showcasing the achievements of these experienced mentors.

We can all become involved promoting the water treatment field and career recruitment of it. Talk with your human resources group about how to improve the communications between young professionals and the experienced staff. Get out into the field. Join and get involved in the professional organizations. Arrange for troops of Boy Scouts, Girl Scouts, and their families to tour a treatment plant to better understand reuse. Challenge the young professionals to reach out to the school groups to mentor them about better awareness and understanding of water issues

Another idea is to donate old text books, manuals and educational materials to the Department of Corrections. I recently was able to share surplus training materials with three state prisons that have operator training for inmates. I called the Florida Department of Corrections and found a professional who wanted to help. Normally, each state will have a Vocations Program Administrator. Find out which state prison facilities have an ongoing training program or are interested in developing a training program for inmates. It is a great way to reuse treatment plant manuals, textbooks, or current magazines. In Florida, we are setting up a section in each facility library for donated water and wastewater books for inmates to utilize to learn more about the field of water and wastewater treatment. Since many correctional facilities are isolated, and have a treatment facility rather than being connected to a regional facility, it has been a practice in Florida for many years to train interested inmates in taking care of the treatment facility at the correctional facility, under the supervision of a licensed operator. Another aspect of this program is job placement when the inmate is released.

There has been much talk about the retiring baby boomers, but what are we doing about it? As we have learned many people are delaying retirement for five to seven years, so if we have been given an opportunity to act, then now is the time to start!

In summarizing these ideas, I would like to provide the following checklist to assist in asking questions about your current recruitment program:

- Is your organization experiencing an operator problem, today?
- Does a study of your organization project an operator deficit in the future? When?
- What is the organization's proportion of young professionals?
- Who is my State OCP Administrator?
- Who is my State Education Administrator?
- What type of training that is related to water and wastewater does our State Education Board utilize? Who are the contact people?
- Do our State OCP and Education Boards work together?
- Who is the local contact in the school system for water issues?
- How involved is my State OCP in career recruitment?
- What types of benefit packages and plans are being offered to our operators?
- Where are the closest training centers for water and wastewater?
- Who is the local school system contact to offer facility tours, or to discuss water conversation and reuse programs in the school system?
- How can my organization coordinate with the state penal system to aid in the training of prison inmates or hire trained workers when they are released from institutions?

I thank you for your time to consider my ideas for improvements within the career recruitment and educational aspects of water and wastewater treatment. The LIVE EARTH concerts July 7, 2007, focused on the small things each individual can do to conserve energy and forestall global warming. Let's work to create ideas in our community to build a better water program, enhance the operator career recruitment objectives, and further educate the public of the importance of our water quality and pollution prevention field.