The last decade of the 20th century was a period of staffing reductions. Association of Metropolitan Sewerage Agencies surveys of the wastewater industry show that these utilities reduced personnel by 30 percent between 1990 and 1999. Anecdotal evidence indicates that water utilities had similar reductions during this same time period.

However, there is a coming demographic wave that will substantially change the nature of the utility workforce. Management’s challenge will be to deal with the departure of the baby boomers and facilitate the training of their replacements who will need a different set of skills to succeed in the higher-tech utility of the future.

The following statistics help to define this challenge:

- The Government Accountability Office (GAO) estimates that 30 percent of the federal workforce (a reasonable proxy for utility workers) will retire in the next five years.
- AFSCME [the American Federation of State, County, and Municipal Employees] expects one-fourth of its members to retire by 2010.
- Gen X (the group following the baby boomers) is some 34 million people smaller than the baby boom generation; employment growth during this generational change will come from immigrants and those over age 55 reentering the workforce.
- Although the National Science and Technology Council and the Department of Labor Statistics expect demand for engineers to grow by more than 60 percent from 1996 to 2008, the number of engineering graduates has been declining since 1995.
- Women now substantially outnumber men at the undergraduate level in college.

There will be significant workforce turnover, and the new employees will be different and require different training than those being replaced. Management’s challenge will be to:

- capture the operational knowledge of retirees (“knowledge management”);
- modify the training of the replacement workforce for the new (higher-tech) utility;
- implement true leadership succession planning;
- improve the retention of desired workers; and
- partner with local community colleges and other learning institutions to improve the preparedness of the new worker pool.
What is succession planning?

Succession planning is the process of ensuring that the right people, appropriately trained, are in the right place at the right time to accomplish the utility’s mission and objectives. Succession planning is a systematic process for identifying and addressing the gaps between people and organizations of today and the personnel needs of the future. As defined by the American Water Works Association Research Foundation/Water Environment Research Foundation project, succession planning encompasses the cycle of recruitment, training, retention, leadership training and planning, and knowledge management.

Four generations in today’s workforce are at the core of the need for succession planning. In the book *When Generations Collide*, Lynne Lancaster and David Stillman describe these generations as:

- **Traditionalists**—the 75 million people born between 1900 and 1945.
- **Baby boomers**—the 80 million people born between 1946 and 1964.
- **Generation Xers**—the 46 million people born between 1965 and 1980.
- **Millenials**—the 76 million people born between 1981 and 1999.

The differences in size between these generations, as well as the significant cultural differences, have numerous implications for utility managers. The most important initial implication is that, because so many senior executives, managers, and supervisors are either traditionalists or baby boomers, there will be a large wave of retirements from these levels. Many utilities staffed up in the late 1960s and early 1970s and will now see these employees retire in the next five to 10 years.

There are some upsides to this phenomenon:

- Utilities that are changing workforce configurations and seeking appropriate staffing levels can make the retirement wave work for them.

However, there are some potential downsides:

- A high percentage of undocumented knowledge is involved in running a utility. When people retire, much of the important or critical operational knowledge goes with them.
- The hiring pool available to utilities to replace these retirees is thin. There are 34 million fewer gen Xers than baby boomers. There is an increasingly wide disparity between demand and supply in the technical sector. As the demand for engineers is growing rapidly, our universities are graduating fewer engineers every year.
- There are significant differences between the retiring generations and the generations in the labor pool from which their replacements will come. Utilities that reflect traditionalist values may have a difficult time appealing to the more diverse millenials looking for a collaborative workplace that values training and interaction.

Elaborating on the last point (and with apologies for dealing with a complex matter in only a
few sentences), one way to view the generational
differences is in how they react to “command”:
• Traditionalists learned at an early age that
if they put aside individual needs and
worked together toward a common goal,
they could do great things, such as win-
ning world wars or putting a man on the
moon. They believe in chain of command.
• Baby boomers entered a rapidly expanding
economy, but they were in a large crowd. In
everything they did they were competing
with 80 million peers—they needed to be
competitive. In order to succeed, they need-
ed to change things.
• Millenials were raised to have a voice in
family affairs and went to schools that
stressed working in teams.

The simple idea, then (as Lancaster and
Stillman detail in When Generations Collide) is:
• Traditionalist—chain of command.
• Gen Xer—change of command.
• Millenial—don’t command, collaborate.

However, transforming the organization to
appeal to millenials (or gen Xers) is not neces-
sarily the right response to all of this. Remember
the earlier statistic on the decline in U.S.-born
workers? If that’s the case, where are the new
workers coming from? The growth in the work-
force is coming from immigrants and those over
age 55 reentering the workforce. It’s important
to analyze your utility’s available workforce
before making major decisions that affect the
workplace. In the more automated, information-
driven, and leanly-staffed utility of the future,
strategic workforce management will become
essential to the development of a high perform-
ance organization.

Steps in Succession Planning
There are four important steps involved with
succession planning:
1. Assess the current workforce.
2. Analyze the future workforce.
3. Identify required transitions and existing gaps.
4. Develop strategies to fill the gaps and
make the transition to a high performing
organization.

Assessing the current workforce begins with
information from your human resources depart-
ment. Looking back, evaluate your experience to
identify the sources of attrition (workers leaving
your organization for various reasons). Then, proj-
ect the statistics (age and status under retirement
rules) of your existing workforce. The combina-
tion of attrition and projected retirements will give
you an idea of possible personnel replacement
needs. While there are likely to be some employ-
ees that stay beyond their retirement date, the
odds are that many will not.

Analyzing the future workforce involves tak-
ing a look at the organization and specific posi-
tions within the organization. Are all of the
existing positions needed? What is the right number and
type of employees needed? Finally, what is the
makeup of the existing available labor pool? Utilities with stringent residency requirements
(i.e., ones that can only offer positions to exist-
ing residents) may need to get involved in edu-
cating their labor pool. Given the likely makeup
of the available labor pool, how can the utility
position itself to hire from the top of the pool
rather than the bottom?

Comparison of the existing and future work-
force needs to be done within the context of the
utility’s strategic plan to identify gaps and neces-
sary transitions. Once these have been identi-
fied, strategies must be developed to address
those needs, including:
• restructuring the organization;
• implementing knowledge management to
bridge gaps from attrition and retirement;
• training for new staff and retraining
existing staff;
• recruiting strategies;
• assessing competency;
• creating strategies to make sure that the utility keeps desired personnel;
• developing leadership;
• planning succession;
• enhancing technology; and
• partnering and public-private initiatives.

Performance measures need to be developed and monitored to determine the success of these strategies as they are implemented.

Effective succession planning will:
• identify future workforce needs;
• allow the utility to compete effectively in the labor market;
• identify training, recruiting, and restructuring needs;
• bridge knowledge gaps due to attrition and retirement;
• develop future leaders for the organization; and
• improve managerial effectiveness.

When the final report is submitted and published, it will discuss the four components of succession planning: workforce planning, knowledge management, training, and leadership succession.

What about small utilities?

Small utilities face problems that many larger utilities do not face as frequently due to their levels of funding and the size of their applicant pools. Many small utility personnel already find their time constrained just keeping their systems running, let alone staying up to date on all of the issues and technologies relevant to their positions. The knowledge capture process is especially promising for small utilities where employees have developed intimate knowledge of their system’s operations without documenting the details that make all of the difference in system performance.

Small utilities were under-represented in the first AwwaRF/WERF survey. The authors are conducting a separate statistical survey. If you are interested in participating or have questions, please contact Jason Jennings jenningsjd@bv.com. The survey may also be completed online at https://secure.bv.com/awwarf. The results of the survey will be provided to respondents and to On Tap for future publication.

Myron Olstein (left), director of organizational strengthening, David Marden (center), director of training, and Jason Jennings (right), AwwaRF project coordinator, all work for the Black and Veatch Corporation, an international engineering, construction, and consulting company.