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## Strategic management for utilities:

## **Experience of the Birmingham Water Works Board**

PAST COMMITTEE CONNECTION ARTICLES HAVE DISCUSSED THE AWWA MANAGEMENT DIVISION, ITS EIGHT COMMITTEES, AND THE MANY MANAGEMENT ISSUES BEING FACED BY WATER UTILITIES AND BEING ADDRESSED BY THE DIVISION.

trategic management is a tool used by many organizations to cope with the complexity of the myriad issues facing the typical utility. Recent experience of the Birmingham Water Works Board (BWWB) demonstrates how strategic management concepts have been applied in a complex utility organization. Founded in 1951, BWWB is the largest water system in the state of Alabama, serving more than 750,000 customers in the city of Birmingham and five surrounding counties and delivering more than 99 mgd (375 ML/d) of water. The system now boasts four water sources and nearly 3,700 mi (5,957 km) of transmission lines. Efficiency remains the watchword because only about 450 employees operate

this expansive system. BWWB has been ranked as one of the top five water systems in the United States, earned an "A" in an exclusive evaluation by *Men's Health* magazine for water quality, and achieved director's level in the Partnership for Safe Water. BWWB is now planning for its region's next wave of growth. With shifts in population across the region and growth in the suburban areas, the organization is seeking out new sources and upgrading the system to handle these changes.

Although proud of its accomplishments, BWWB faces many challenges in its quest to improve its performance and enhance the quality of water and service provided to customers. One of the key tools in this

Event	Participants	Result	When
Initial strategic planning retreat	Board of directors Senior management	High level enterprisewide strategic plan	• February 2004
Division planning sessions	Respective assistant general managers Department managers	Division strategic plans for three divisions	• March 2004
Departmental/functional unit planning sessions	Department managers and employees	Departmental strategic plans for 30 departments and functional units	April–July 2004
Initial plan-completion retreat	Board of directors Senior management Department management Key advisors	Adoption of strategic plan Broad commitment to implementation	• August 2004
Progress review	Board of directors Senior management	<ul><li>Accomplishments</li><li>Key issues</li><li>Initiatives for next 12 months</li></ul>	• May 2005
One-year update	Board of directors Senior management Department management Key advisors	Departmental accomplishments, issues, and plans	• August 2005

quest is implementation of a comprehensive strategic management process.

### THE STRATEGIC MANAGEMENT PROCESS

Why strategic management? In the multifaceted world in which utilities must operate, only one constant really exists—accelerating change. This dynamic environment has been caused by many factors, including

- changing customer needs,
- new technology,
- environmental concerns,
- political pressures,
- cost pressures,
- human resource issues and a changing employee base, and
  - supply issues.

Like most utilities, the Birmingham Water Works (BWW) faces these and numerous other issues that make utility management increasingly complex. Despite these issues and the difficulty of anticipating the future in a changing environment, BWWB has the obligation and commitment to

- supply quality water to its customers in both the short and long term,
  - invest in infrastructure.
  - protect the environment,
  - charge affordable rates, and
  - maintain fiscal stability.

To operate successfully in this environment, BWWB developed and implemented an ongoing strategic planning process as a management tool integral to operations.

**Process overview.** The BWW management team believes that to truly achieve strategic success, it must

- Create a shared vision of its ultimate goals. Organizations driven by clear purposes and shared values have a greater capacity to succeed than other organizations.
- Develop a common understanding. A universal understanding of the available resources, the business environment, and the principles on which strategies are based is key. It is important that all key stakeholders under-

stand the water supply, environmental, and operational issues facing the utility and the scope and impact of capital and operating programs developed to address these issues.

• Create a commitment to implement. Obtain acceptance of the direction and urgency of the strategic and operating plans, which must be integrated into the day-to-day operating practices to maximize the value that the utility brings to its key stakeholders. To achieve strategic success, the plans must be effectively implemented.

These requirements dictate that senior management, with the active participation of the board of directors, lead the strategic planning process and that the detailed departmental strategies be developed by teams of employees because BWW employees operate the utility and are responsible for strategy implementation.

Therefore, in early 2004, the BWWB initiated a five-year strategic planning process (Figure 1) that reflects the following underlying principles:

- The board of directors and senior management should develop the overall enterprise vision and direction.
- Each division and its respective departments should have a plan that is supportive of the overall enterprise plan.
- The process should be inclusive and involve virtually every BWW employee.

The BWW team believes that its strategic planning process can be a model of a comprehensive water utility approach that maximizes involvement and commitment at all levels of the organization.

**Process description.** Work on the BWW strategic plan began in February 2004 with a board of directors and senior management retreat during which the group articulated a shared vision, core values, an overall mission, key goals, and enterprisewide strategies.

The retreat was followed by strategic planning sessions for each of BWW's three divisions (Operations

# Birmingham Water Works Board:

# Strategies for addressing the goal of water quality

Goal: To provide the best water in the United States recognized for its excellent taste.

Objective: To provide water better than required by the US Environmental Protection Agency (USEPA) and other recognized standards.

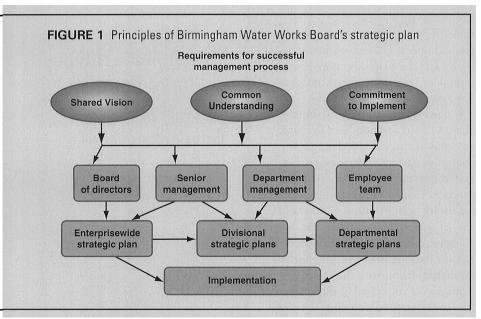
### Strategies:

- Keep abreast of and comply with all regulations and deadlines in the laboratory, plants, and distribution system and consider improving taste and aesthetics as changes are made.
- Pilot-test new technologies and build for long-lasting quality (treated and raw water).
- Evaluate the watershed protection plan, and upgrade it as necessary to earn USEPA credit.
- Earn Partnership for Safe Water phase-four-level awards for each treatment plant.

and Technical Services, Engineering and Maintenance, and Finance and Administration) that were attended by the respective divisions' leadership and department managers. These groups articulated their plans to support the overall enterprise's mission and vision and presented their strategies to implement the overall strategic plan.

The process then cascaded down to the individual departments and functional units, which developed their own mission statements, departmental strategies directed at implementing the

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respective divisional strategies, actions to implement their strategies, budget requirements, and timetables. Ultimately, strategic plans were developed for 30 departments and functional units and involved almost every BWW employee.

The initial strategic planning process culminated in a two-day management retreat in August 2004 attended by the board of directors, senior management, departmental management, and key external advisers. During this retreat each department manager had the opportunity to present his or her plan and respond to questions. In addition, several key organizationwide issues were discussed, including human resources, internal communications, best practices implementation, leak identification and prevention, industry involvement, efficiency and cost control, and strategy implementation.

As a result of this process, BWW developed a cohesive management and employee team committed to a shared vision and mission and to implementing a strategic plan that they all helped develop. Once the initial planning was completed, the process continued.

Each department was responsible for reporting progress to the respec-

tive assistant general managers. The divisions reported progress to the general manager and the board of directors, and the general manager monitored the overall enterprise plan and reported the strategic planning committee of the board of directors. This process is ongoing. In May 2005, the board of directors and senior management attended a two-day retreat to review accomplishments, key issues that have become increasingly important, and changes required to keep the plan current. In August 2005, the departmental managers participated in an additional retreat with the board of directors and senior management during which each of the approximately 30 department managers presented and discussed

- major accomplishments in the first year of plan implementation,
- problems and obstacles they are facing and how they are being or will be overcome.
- most critical initiatives for the next 12 months, and
- support required from the board of directors, senior management, and/or other departments and functions.

The strategic planning process timetable is shown in Table 1.

#### **ELEMENTS OF THE STRATEGIC PLAN**

**Vision.** A strategic plan begins with the utility's vision, which is a clear statement of what success looks like. In developing its vision, BWW considered a quote from Leo Burnett, the founder of the advertising agency that bears his name: "When you reach for the stars you may not quite get one, but you won't come up with a handful of mud either." With this in mind, the BWW board of directors and senior management articulated an ambitious shared vision of being recognized as the premier water utility in the United States.

Values. Values are the shared beliefs of an organization that drive day-to-day decision-making and actions. When employees truly believe in and are committed to a set of values, they are more likely to reflect those values in the manner in which they interact with customers, fellow employees, suppliers, elected officials, and others and are more likely to reflect those values in resource allocation, whether for infrastructure, personnel, supplies, or services. BWW's values include the following:

- Quality water—the quality and taste of the water provided is BWW's passion. The BWW team is committed to never compromising on the quality of its product.
- Customer service—customers must be served well (e.g., politely, in a timely fashion, and correctly the first time), not only from an effective and efficient customer service function, but also by every BWW employee having direct or indirect customer interaction.
- Teamwork and mutual appreciation—customers will be served by a cohesive team that is committed to BWW's vision and mission and that appreciates the contributions, opinions, and activities of all personnel at all levels within the organization.
- Fiduciary responsibility— BWW will view itself as a fiduciary of the water supply, financial resources, and other assets and will act accordingly.

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• Environmental stewardship—in pursuit of providing excellent quality water for current and future generations, BWW will be a good environmental citizen.

Mission. The utility's mission should be the central focus of its operations and decisions. The mission is the fundamental, unique purpose that sets the utility apart from other organizations and identifies its scope of operations. It is an enduring general statement of the utility's intent and describes the areas of emphasis for the organization in a manner that reflects the values and philosophies of the governing body, management, and other key decisionmakers. BWWB's mission statement is: "The Birmingham Water Works Board is committed to providing the highest quality water and service to our customers and . . . to future generations."

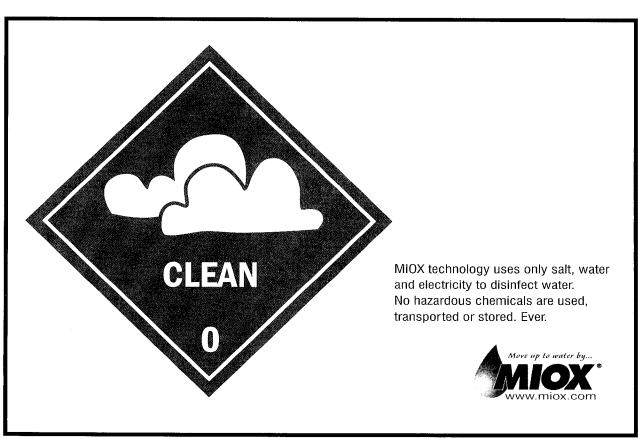
This mission has been clearly communicated to all BWW employees and vendors to provide a sense of belonging to a committed team. BWW management believes it is essential that all of its associates know the mission, believe in it, commit to its accomplishment, and believe in their personal as well as the BWW team's capabilities.

In addition, the board of directors and senior utility management have the responsibility of providing the human resources, capital, systems, equipment, and management to implement the strategic plan and achieve the mission.

Other utilities will have different emphases in their mission statements. Some will focus on efficiency, others on facilitation of economic development, and still others on adequate water supply. **Goals and objectives.** To drive the strategies and evaluate achievement of an organization's mission, greater specificity concerning what is to be achieved needs to be expressed in terms of goals and objectives.

Goals are qualitative statements that in their totality represent achievement of the mission. They should direct the application of the utility's resources in key areas, which in BWW's case are

- Water supply—to implement a clear direction to obtain and protect sufficient future sources of supply.
- Water quality—to provide the best water in the United States recognized for its excellent taste.
- Human resources—to recruit and develop quality staff and to service BWW's human resource needs to achieve the vision.



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- Customer service—to respond to and meet the needs of the entire community and to resolve issues in a timely and effective manner.
- Recognition/reputation—to be recognized locally, regionally, and nationally as the premier water utility.
- Financial performance—to improve BWW's financial position by cost-justifying all major decisions and charging appropriate rates.

Each of these goals is supported by quantitative objectives that enable BWWB to monitor progress and performance.

**Strategies**. Strategies are allocations of time, money, and effort, and are designed to achieve various goals and objectives. The strategies selected must reflect the priorities of the utility as expressed by the mission, goals, and objectives, and they should collectively be both necessary and sufficient to achieve each of the defined goals and sets of objectives. They must be necessary because, in times of economic scarcity, it is important that utilities not waste resources on programs that will not contribute to achievement of their strategic plans. Furthermore, strategies must be sufficient, otherwise the goals will not be achieved. The BWWB strategic plan includes 31 distinct strategies (see sidebar on page 47) for addressing the goal of quality water.

### DIVISIONAL AND DEPARTMENTAL STRATEGIC PLANS

Following the development of the overall enterprise strategic plans, each of the three divisions developed their own plans consisting of the same elements as the overall plan and the same goal categories. Each division was responsible for articulating its role in supporting the overall enterprise strategic plan and contributing to the achievement of the organization's mission, goals, and objectivities. The mission statements for the three key divisions are:

- Engineering and Maintenance— "To achieve innovative and quality planning, design, documentation, construction, and maintenance of BWW's infrastructure."
- Operations and Technical Services—"To provide the highest quality water and service through superior operations, knowledgeable staff, source water protection, and uninterrupted service to our customers."
- Finance and Administration— "To help manage the premier water utility in the United States by helping it to achieve excellent financial performance; provide the best customer service in the nation; and employ a quality staff committed to a shared vision, mission, goals, and objectives."

Once the divisional strategic plans were completed, BWWB convened workshops for each department and function—ranging from water resources to information technologyto enable each department to prepare a strategic plan supportive of its respective divisional plans. Each group developed a mission statement and set of strategies. This process highlighted the interrelationships of the various departments and the overall enterprise goals. For example, at the beginning of the planning effort it was not apparent that the human resources function had an important role in identifying and evaluating alternative water sources. However, after discussion and reflection, it became clear that it did have a role in staff planning to support this effort. Similarly, the water quality and purification group, which does not generally have direct customer contact, has a role in supporting the customer service department's efforts to handle customers' water quality inquiries and issues.

#### **ACCOMPLISHMENTS**

At a retreat in May 2005, the senior management team and board of directors discussed the accomplishments achieved since adoption of the

initial strategic plan in August 2004. These include

- enhanced focus on operating within established budgets;
- new leadership and improved operations of the human resources department;
- industry recognition as exemplified by BWWB activity in helping to establish the standards for large water system accreditation and positioning to be in the first group of water systems to earn AWWA accreditation;
- new information technology and accounting managers who are having a positive effect;
  - action on financial challenges;
- tying capital improvement plan to the strategic plan;
- achievement of director's level in the Partnership for Safe Water (first utility in Alabama to achieve this distinction);
- implementation of security program and involvement in industrywide security projects; and
- creation of an atmosphere of positive change.

### MAJOR INITIATIVES FOR NEXT 12 MONTHS

Despite the considerable accomplishments of the past year, the BWWB team realizes that the strategic plan encompasses five years and there is still substantial work to be done and accomplishments to be achieved. Because of financial pressures resulting from substantially lower demand for water caused by wet weather and past conservation efforts, BWW is implementing enhanced cost control and rate adjustments recommended by its consultant, Raftelis Financial Consulting, to ensure long-term financial stability. Some other major initiatives that will be pursued over the next 12 months are to

- consider expansion opportunities that will benefit BWWB;
- move ahead on efforts to ensure a long-term sufficient supply of quality water;

- evaluate, improve, and adopt best practices for each department to become "best in class";
- continue and enhance the meter replacement program;
- · enhance infrastructure maintenance programs;
- · enhance the customer service culture and function;
- implement an active governmental relations plan;
- continue implementation of security improvements.

#### CONCLUSION

The accomplishments of the past 12 months and the initiatives BWW will pursue indicate that BWWB would have been working on many of these important initiatives with or without the strategic planning process.

However, it is also clear that the process has enhanced the board of directors' and senior management's focus on the key initiatives and has solidified the commitment of the divisions and departments to do their part to achieve a common vision.

Dwight D. Eisenhower said, "Plans are nothing; planning is everything." Recognizing the truth in this statement and its implication that plans must change as the environment changes, the board of directors and management of BWW have created a strategic planning process that is ongoing and involves thinking, communicating, evaluating, and most important, implementing. The environment in which BWW operates will continue to change at an accelerating rate. Although strategies will need to change accordingly, the

entire team will be focused on achieving its vision and mission.

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## It's 2010. Do you know where your workforce is?

With an aging population and low birth rates, the competition for highly skilled workers is expected to greatly intensify in many US industries in the very near future-the water and wastewater industries are no exception.

### Just a few things you should know:

- ► In the US between 2000 and 2030, the **0-65 age group will** grow by 28.6% while the 65+ population will grow by 107.9%
- ▶ 35% of employees in the water and wastewater industry are eligible to retire in the next 10 years, 22% within the next five years
- ► The number of people entering the trade labor pool is declining at a high rate

If you hold a leadership or human resource position in a water or wastewater utility, don't miss this unique opportunity to gain greater insight into the future of water workforce planning.

### The Shrinking Workforce: **Hype or Crisis?**

An AWWA Teleconference: November 3, 2005

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The Authoritative Resource on Safe Water<sup>SM</sup>

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