



# **2007-2021 Strategic Plan**

## **Louisville Water Company**



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## Louisville Water Company

### *Vision*

We will remain the water supplier of choice throughout the region by:

- Providing best of class quality, customer service, and value
- Expanding the geographic areas we serve
- Creating new lines of business building on existing competencies

### *Purpose*

To provide safe, high quality water and related business services earning customer trust and confidence.

### *Values*

- Earning Customer Trust, Confidence, and Satisfaction
- Excellent Quality, Service, and Value in All We Do
- Innovation As A Means For Growth

### *Cornerstones*

- Diversity of employees, suppliers, and customers
- Customer focus
- Community Involvement
- Dedicated workforce committed to innovation and continuous improvement



## **ASSUMPTIONS**

### **Customer Expectations:**

- Expectations for service and water quality, including aesthetic characteristics, will escalate.
- LWC water quality goals will remain stricter than regulatory standards.
- Negative press on the safety and quality of drinking water will affect public confidence.
- Marketplace needs and customer values must be continually understood and addressed.
- Marketing strategies of bottled water industries and point-of-use device manufacturers will impact customer confidence.
- The community expects LWC operations to support and enhance quality of life.
- The community expects water supply facilities to be safe and secure.
- Improved detection technology for microbes and pharmaceuticals will increase customer concerns for water quality.
- The community expects water to be affordable and available to people of limited means.

- Affordability requirements and changes in water use patterns by our customers may require changes to ratemaking methods, billing, and collection practices.
- Combined water and wastewater rate increases will impact the customer's perception of price/value.
- Acceptance of water rate changes above the CPI is dependent upon customer satisfaction and perception of increased value.
- The community expects water system growth and renewal to be timely and closely coordinated with community growth and development.

### **Water Quality:**

- Source water quality and treatment will continue to be challenging.
- Research and development will be a strategic enabler in effectively meeting our future needs.
- Ohio River and the adjacent aquifer will remain the primary source, requiring protection.

- Expanding the service and delivery area will result in challenges in maintaining water quality.
- Customer expectations on aesthetics of tap water require new strategies and techniques in managing distribution water quality.
- Customers expect consistent water quality and timely information on variations in water quality.
- Managing public health risks, meeting customer expectations, and increasing regulatory requirements will increase operating costs and capital investments.
- Community health and safety issues require systems to mitigate threats to plant and distribution facilities.





### **Regulatory Drivers:**

- USEPA Long-term 2 Enhanced Surface Water Treatment Rule (LT2) will require additional microbial treatment service by April 2012.
- USEPA Stage 2 Disinfection By-product Rule will require us to continue using chloramination in the distribution system as the compliance strategy.
- The Clean Water Act will require us to manage the discharge of treatment residuals and flushed water from the distribution system.
- USEPA wellhead protection regulations will require continuing surveillance and enforcement efforts.
- USEPA Total Coliform Rule revision and development of a Distribution System Rule will require best practices, and new strategies and techniques in managing distribution water quality.
- USEPA Lead and Copper Rule will require continuous effort in corrosion control of the distribution system.
- Emerging health issues will result in new regulations, which will require advanced treatment technologies.
- OSHA safety regulations will require enhanced employee safety training and best engineering and management practices.

- Homeland Security and the USEPA Risk Management Plan will require safer chemical application processes.
- Disclosure requirements for tax-exempt bonds may be expanded to include governance practices consistent with the Sarbanes-Oxley Act of 2002.

### **Financial Resources:**

- The CPI will increase by 2% to 3% annually.
- New borrowings will be needed to fund the capital plan during the next five years.
- Rate increases of at least 5% per year (CPI plus 2%) will be needed for the next five years.
- Productivity enhancements, aggressive cost control and top-line revenue growth will be required to reduce the impact on annual water rate increases.
- New regulations and increasing customer expectations for service will require additional capital and operational resources.
- Debt service and depreciation expenses will grow faster than other operating expenses.

### **Infrastructure / System Growth:**

- Population and Demographics will change in accordance with forecasts of U of L Urban Studies Institute and State Data Center.
- Consumption per household will decline due to conservation fixtures and fewer persons per household.
- Population density per mile of water main will decrease as our service area shifts and expands.
- Concurrent opportunities for water sales and related services will arise.
- Continued re-investment in plant, facility and distribution infrastructure will be required for long-term utility viability.
- Developers and builders expect new methods to reduce cycle time and costs and provide "one-stop shopping" for approvals and permits.
- Efficient use of capital requires further capital improvement program optimization.
- Purchase of land and land rights will become increasingly difficult, driving early purchase decisions ahead of development.
- Changing water use patterns will increase peaking factors and decrease water sold per account.





### **Employees:**

- Embracing change is necessary to remain competitive and successful.
- Continuous expansion of know how and expanded competencies are required to meet customer expectations.
- Effective empowerment of employees is required to be a successful TQO.
- Partnership with Local 1683 will continue to provide opportunities for new initiatives.
- Pre-decisional involvement will benefit employees and LWC.
- Improvements in internal customer satisfaction are needed to drive improvements in external customer satisfaction and business results.
- Continuing as an employer of choice will require an integration of cultural diversity and an employee base which mirrors the diversity in our community.
- Distribution system and business expansion may create increased resource needs.

### **Business Environment Influences:**

- Expansion of service area will require careful management to reduce political and regulatory risks.
- Expansion of new business lines will require management of business, political, and regulatory risks.
- LWC ownership will not change.
- Privatization and industry consolidation will create business opportunities in the water utility industry.
- Contract operations of government-owned water and wastewater utilities will increase.
- Increase use of minority and women business enterprises will be expected along with the diversity of workforce of contractors and suppliers.
- Marketplace changes will create competitive options for both in-sourcing and outsourcing utility work.
- Global conflict will affect the cost and availability of certain resources (energy, chemicals).
- The Metro Government presents new partnering opportunities.
- Risk management strategies may require additional investments and increased operational costs.
- The community's expectations for well planned growth and development will require more active involvement by the Company and timely provision of infrastructure.
- Further consolidation of supplier networks and off-shoring of manufacturing will lengthen delivery cycle times.
- Future water sales will be closely linked to economic growth of community.



## *SWOT Analysis*

### STRENGTHS

- Customer-focus.
- Regional service area.
- High quality, low-cost provider.
- High customer satisfaction and public trust.
- Skilled and knowledgeable employees dedicated to LWC's mission.
- Partnership with AFSCME Local 1683.
- Systems and process-based TQO.
- Consideration of employee perceptions.
- Employer of choice.
- Workforce reflective of community.
- Abundant source of supply.
- Unique ownership and governance.
- Financial capacity and stability.
- Product brand recognition of Pure Tap.
- Water industry expertise and reputation.
- Effective infrastructure renewal program.
- Information technology capabilities and scalability.
- Ability to handle multiple regionalization business opportunities.
- Public Information program and partnerships for health and education.

### WEAKNESSES

- Delays in execution of the Capital Improvement Program.
- Timely approval and documentation of capital project changes.
- Gaps in cross process documentation.
- Internal customer service gaps.
- Internal communication gaps.
- Lack of clear priorities to effectively resource strategic plan initiatives.
- Lack of marketing expertise.
- Lack of competitive culture and experience in new business ventures.
- Limited staff resources to pursue new lines of business.

### OPPORTUNITIES

- Expanded water sales.
- Support for regional economic development.
- Promotion of redevelopment in brownfields.
- Partnership with Metro government and key constituents to achieve synergies.
- Strategy Innovation.
- Pursuit of expanding market for water-related products and services.
- Water treatment for industrial customers.
- Energy derived from water.
- Promotion of diversity in workforce and business relationships.
- Further utilization of customer and market research to improve growth, service, and customer education.
- Efforts to shape regulation and legislation to address constituent needs.
- Establishment and improvement of business partnerships to achieve strategic objectives.
- Participation in research and development partnerships to advance the science of water treatment and delivery.

### THREATS

- Possible regulatory non-compliance.
- Possible emergencies affecting the water supply.
- Possible terrorist activities involving the water supply.
- Possible health concerns with emerging contaminants.
- Decreased water sales through changing usage, demographic patterns, economic conditions, and higher water and wastewater rates.
- Economic downturn and global instability.
- Acquisition of regional water systems by competitors.
- Rising pension costs.
- Rising health care costs.
- Water industry cost drivers higher than CPI.
- Political, regulatory, and public perception risk to expanding water sales and related services.
- Legislation/regulation/case law that increases costs without commensurate customer value.
- Potential non-attainment of air quality regulations in Metro region impacting economic development.
- Educational attainment levels in region impacting economic development.





## *Constituent Goals and Objectives*

Metric	Strategic 2011 Objective	Q, S, V
<b><u>Customers</u></b>		
<b>Meet and exceed customer needs and expectations, including providing appropriate information on product quality and services.</b>		
Total CSI	>= 855	Q, S, V
Serviced Accounts CSI	>= 810	Q, S, V
Water rate changes	<= 5%	V
Price Value CSI	>= 805	V
Main break frequency (per 100 miles of pipe)	<= 20 per 100 miles	S
Reliability CSI	>= 896	S
Water pressure	>= 40 psi (% of customers)	S
Metered Water Ratio	>= 86.5%	V
<b>Assure safe water supply, meet water quality regulations and customer expectations for distribution water quality.</b>		
Coliform	Meet annual goal (99% negative)	Q
Chlorine Residual	Meet annual goal (99% > .5 ppm)	Q
Turbidity	Meet annual goal (99% < .5 ntu)	Q
MIB / Geosmin levels	Maximum is less than 10 ppt on a daily basis	Q
Total number of discolored water complaints	< 610 annually (50% reduction from 2003 level)	Q, S
Water Quality CSI	>= 880	Q, S
Partnership for Safe Water	Achieve Phase IV for CHFP & BEP	Q
<b><u>Stockholder</u></b>		
<b>Recognize and support the stockholder's interests.</b>		
Profitability Measured by Return on Equity	Equal to Allowed Returns on Equity for Benchmark Group of Investor-Owned Utilities	V
Liquidity Measured by Days of Cash Available	>= 60 Days	V
Debt Service Coverage Ratio	>= 2.0 Times	V
Capitalization Measured by Debt / Net Utility Plant	<= 35%	V
Dividend Distribution Measured by Payout Ratio	=60% of Net Income after Prescribed Deductions	V
Water Sales	>= 39.6 Billion Gallons (2011 Forecast of 39.2 BG + 1%)	V
Revenue	>= \$152.0 Million (2011 Forecast of \$150.0 Million + 1%)	V
O&M Cost per Customer	<= \$196.90 (Forecast of O&M Expense \$58,238,000 / Forecast of Customers 292,800 - 1%)	V





Bond Rating  
Revenue through Growth

Moody's Aa1 Standard & Poor's AA+  
Achieve 2% annual growth in total revenue and profitability beginning in 2008 through expanded regionalization and strategy innovation.

V  
V

**Metric**

**Strategic 2011 Objective**

**Q, S, V**

**Employees**

**Provide an environment which values quality of work life, continuous learning, employee contribution, and well being.**

Accident frequency rate per 200k person hours	<=2.55 (Number x 200,000÷manhours worked) (12 * 200,000 / (450 *2080))	V
Preventable vehicular accident rate per 100K FMs	<=0.65 (Number x 100,000÷fleet miles driven) ((18 * 100,000)/(2,800,000))	V
AA hiring goal	No underutilized job groups.	V, S
MBE spending	>=15% of value of contracts awarded	V, S
WBE spending	>= 5% of value of contracts awarded	V, S
Internal Customer Satisfaction	The 2011 LWC ICS Composite Goal will be calculated from the 2009 ICS Survey results.	Q, S, V
Organizational Effectiveness Index	The 2010 LWC OEI Goal will be calculated from the 2008 OEI Survey results.	Q, S, V

**Elected Officials**

- Be responsive to elected officials and their staffs by maintaining effective communications and relationships.

**Regulatory Agencies**

- Sustain effective partnerships with public health, water quality, and regulatory agencies to help shape regulations to better serve our customers.

**Community**

- Actively support employee and corporate participation in establishing and supporting community goals.

**Suppliers**

- Sustain and enhance partnerships to link suppliers and contractors to our diversity strategies.
- Build supplier and contractor partnerships to support our ability to meet and enhance standards and service goals.



## ***STRATEGY I Water Quality***

Invest in treatment and delivery systems and technologies that deliver a quality of water proven to assure public health and safety, meet customer expectations, and exceed regulatory standards.

### **Sub-Strategies and Tactics:**

- **Develop and maintain leading edge know how and competencies in the science of water treatment and delivery.**
  - Continue to develop partnerships with research foundations, universities, regulatory agencies and partnering utilities to advance the science of water and water supply.
  - Continue to develop a leading edge applied research program to integrate new science and technology into LWC water quality processes.
  - Continue to recruit and develop a cadre of individuals with advanced knowledge in the science of water and water supply.
  
- **Implement advanced treatment technologies at B.E. Payne & Crescent Hill Filter Plant.**
  - Implement RBF technology and place into operation for BEP by 2009.
  - Evaluate and select advanced treatment technologies for CHFP by 2007.
  - Implement the selected advanced treatment technologies for CHFP by 2012.
  - Assure full compliance of Long Term Stage II Enhanced Surface Water Treatment Rule (LT2ESWTR) by providing an additional barrier for microbial removal by 2011.
  
- **Expand and enhance source water protection.**
  - Work with Ohio River Valley Sanitation Commission to assure effective programs for monitoring, daily surveillance, stream standards and enforcement action to protect and enhance the quality of Ohio River water.
  - Collaborate and partner with USGS, Corps of Engineers, and other local agencies to protect the streams' use as a drinking water supply.
  - Execute and enhance the Wellhead Protection Program in compliance with state requirements.
  
- **Continue to treat and produce high quality water.**
  - Evaluate and implement quality programs such as ISO, Partnership for Safe Water, and AWWA Quality Standards to assure the quality of treated water.
  - Produce finished water that exceeds regulatory standards.
  - Produce finished water that meets customers' expectations on aesthetics.





- **Ensure high-quality water and safety in the distribution system to the customers' point of delivery.**
  - Develop and implement best management practices, including investing in water quality monitoring technologies, identifying facility improvements and design standards, continuing the Main Replacement Rehabilitation Program, and enhancing the cross-connection control and flushing programs to ensure the water quality and distribution system safety.
  - Evaluate technologies to minimize corrosion in the distribution system.
  - Ensure programs are implemented to comply with existing and new regulations including Stage 2 DBPR and future distribution system regulations.
  - Further identify root causes of customer water quality complaints through applied research to enhance customer satisfaction.
  
- **Implement 2002-2021 Facility Plan recommendations to meet quality, quantity, and reliability requirements.**
  - Develop new planning and engineering project delivery process to achieve more efficient and effective water treatment.
  - Improve engineering design efficiency and improve cycle times for projects by further integrating best management practices and innovative approaches.
  - Expand the long-term preventative maintenance program to extend useful life of equipment, assure a high level of reliability, and minimize emergency maintenance of plant facilities.
  - Identify and implement facility improvements to assure distribution water quality, quantity, and reliability are maintained in both retail and wholesale service areas.
  - Review and revise the long-range facility plan every five years.
  
- **Continue renewal in treatment and delivery systems.**
  - Complete 1992-2007 Main Replacement and Rehabilitation Program.
  - Develop a business case for second generation (2005-2025) Main Replacement and Rehabilitation Program for 1935 to 1980 vintage pipelines.
  - Replace or rehabilitate all remaining lead service lines by 2015.
  - Evaluate the long-term serviceability and functionality of existing copper lines.
  - Implement 2005-2025 Main Replacement and Rehabilitation Program.
  
- **Implement improvement and extension programs in Bullitt and Oldham counties service areas. Support sound community planning and design in Jefferson, Oldham, and Bullitt counties.**
  - Complete improvement and extension programs in the former KT Water District, Shepherdsville, and Goshen per merger agreements.
  - Become more involved in community planning efforts in Jefferson, Bullitt, and Oldham counties and integrate into LWC planning operations.
  - Participate in initiatives that promote coordinated capital investments in the community.





## ***STRATEGY II Customer Satisfaction***

Invest in new technologies and programs to enhance customer satisfaction and achieve best in class customer service.

### **Sub-Strategies and Tactics:**

- **Improve services, processes and support to the community, to understand and exceed customer needs and expectations.**
  - Continue hydraulics planning and capital improvements for delivered water quality and quantity.
  - Pursue process and/or operational improvements for water quality, quantity and service.
  - Ensure close partnership with Metro Government.
  - Monitor and address affordability for low income customers.
  - Work cross-functionally to improve customer satisfaction.
  - Fully utilize the Customer Satisfaction Index and the Internal Customer Satisfaction Survey to improve customer satisfaction.
  - Continue use of Customer Advisory Council and Advisory Boards to establish and improve dialogue with key constituents.
  
- **Enhance the Customer Education Program.**
  - Continue implementation of "Pure Tap" education and marketing strategies to improve perception of water quality and price-value.
  - Design, develop and promote the "Pure Tap" Report.
  - Continue to develop customer communications on emergency preparedness and business continuity planning.
  - Continue Advance Treatment Technologies communications strategy.
  
- **Invest in technologies to provide customers and employees reliable and timely access to information and services.**
  - Develop Information Technology disaster recovery plans to meet business continuity objectives.
  - Evaluate and implement solutions for distributed call center capabilities.
  - Seek improved methods for timely mass communications with customers.
  - Re-engineer processes to fully implement Geographic Information System, Automated Mapping/Facilities Management applications.
  - Re-engineer processes to implement Asset and Work Management.
  - Improve internal controls and expand use of Customer Relationship Management systems (ECIS, MDS, IWR, etc.).
  - Continue to evaluate expanded application of Automated Meter Reading.



## ***Strategy III Synergy***

Achieve synergies that reduce cost, improve service, or increase efficiency.

### **Sub-Strategies and Tactics:**

- **Develop procurement consortiums among local governments, private entities and utilities .**
  - Purchase like goods and services for volume discounts, e.g., fuel, pipe, vehicles and equipment (purchase and maintenance), and rigging and shoring.
  - Develop joint strategies and policies to create a larger market for “green products”.
  - Develop joint strategies and policies to increase minority and women business enterprise participation.
  
- **Strengthen business partnerships and key relationships.**
  - Ensure continued effective business relationships with key government agencies and industry associations by developing and mentoring individuals within the company.
  - Strengthen LWC’s involvement in business and community activities to meet the needs of our diverse customers.
  
- **Increase value to the stockholder and customer.**
  - Build competitive advantage through productivity improvements and efficiencies while meeting the needs of customers (including process improvements, investment in new technologies, training and benchmarking, and insourcing and outsourcing).
  - Develop quality and cost standards for processes based on best practice benchmarks.
  - Manage for continually rising health care and retirement costs.
  - Participate in industry research to ensure LWC stays on the leading edge of management and technical best practices.
  - Expand use of alternate capital project delivery methods, i.e., design-build, construction management.
  - Create methods for diminishing weather-related impact on income and expenses.



- **Develop local government and utility planning group for project planning and operational needs.**
  - Coordinate operational planning meetings to align work activities more effectively and efficiently among utilities and governmental entities.
  - Work with utilities and governmental entities to assure coordinated capital investment planning.
  - Explore new service installation partnership with other utilities to reduce cost.
  - Explore shared construction inspection services among utilities and governmental entities and implement as beneficial.
  - Develop uniform, reciprocal field operation training programs among utilities and governmental entities.
  
- **Improve customer service by better facilitating access to information**
  - Develop a plan to enhance City-Call to include other local utilities and to provide for direct connection to the appropriate responder.
  - Provide a link to all utilities and community agencies through the Metro Louisville website.





## ***STRATEGY IV Organizational Effectiveness***

Achieve and maintain a high level of organizational effectiveness.

### **Sub-Strategies and Tactics:**

- **Institutionalize the TQO principles of systems based management, empowerment, quality of work life, and partnership within LWC as defined in the Next Level Plan and Beyond.**
  - Continue the use of performance measurement throughout the utility. Identify company-wide system and process improvements and determine how well customer needs are being met.
  - Assess, mitigate, and manage business risks to assure the long-term stability and financial health of the organization through best practices related to governance and business continuity.
  - Continue cross-system and process cooperation using feedback from corporate measurement tools.
  - Focus on all aspects of performance management including succession, career, and change management to drive improved business results and employee satisfaction.
  - Utilize Information Technology to achieve business objectives and drive business process change.
  
- **Build on strengths of a diverse workforce to meet operational objectives.**
  - Build good measures and accountability to meet long term performance expectations for diversity.
  - Continue to develop management to effectively utilize the Performance Partnerships' process to maximize the diverse talents and perspectives of the workforce.
  - Reward and recognize positive behavior consistent with LWC core values.
  - Continue to recruit, retain and promote a workforce reflecting the community we serve.
  - Use effective communications and training to support diversity initiatives and awareness.

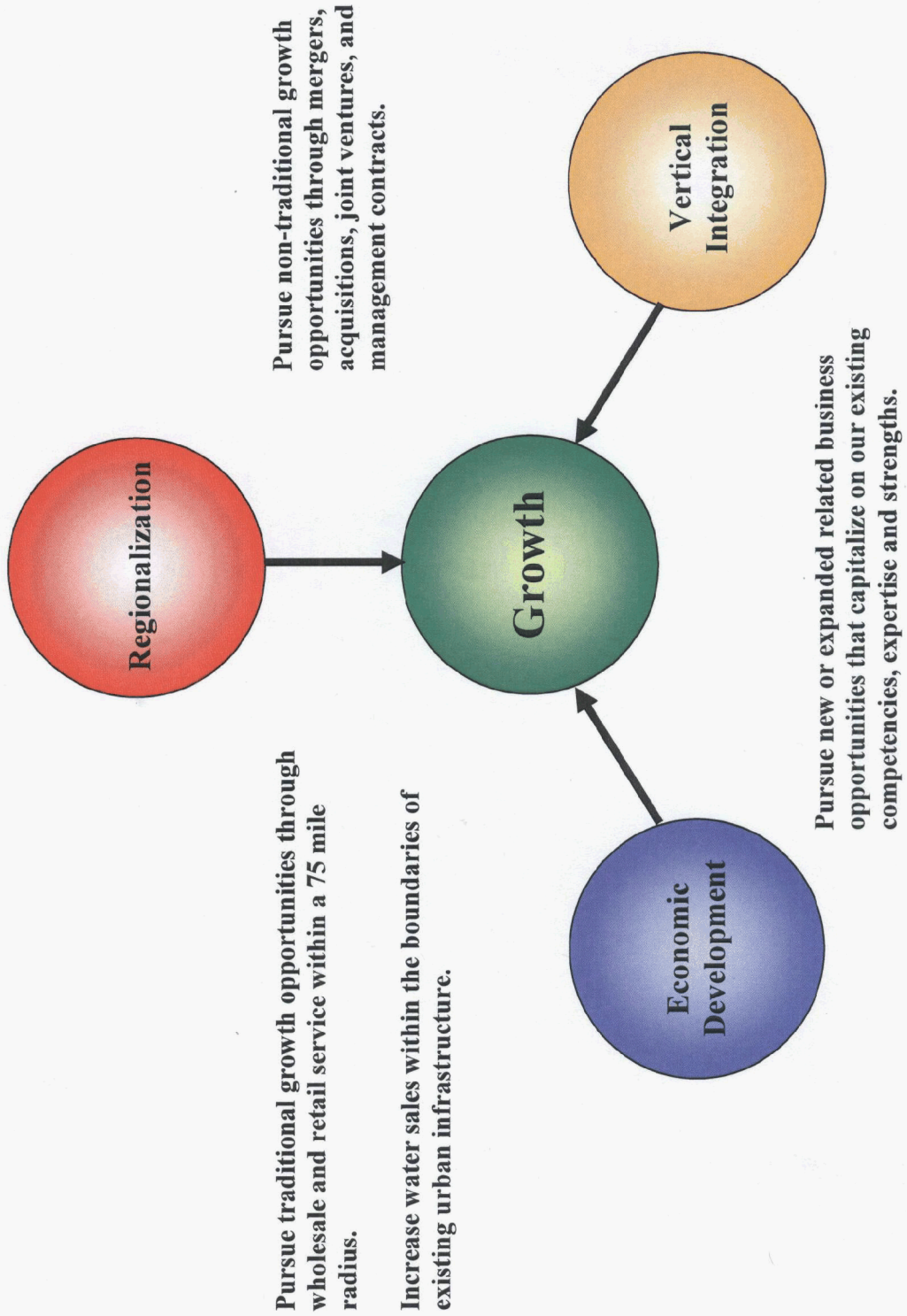


- **Offer competitive compensation and benefits programs to attract and retain a high-performing, results oriented workforce.**
  - Utilize the Performance Partnerships process to increase accountability and drive improved business results.
  - Develop assessment tools to better link competencies to performance goals.
  - Evolve the organizational culture to support managed risk and growth.
  - Continue to build on the successful partnership with AFSCME Local 1683 as the contractor of choice by ensuring skills training in a variety of job classifications.
  
- **Enhance training and development that facilitates continuous learning and improvement to meet business objectives.**
  - Ensure personal/professional development of employees through Individual Development Plans to improve productivity and promote career growth.
  - Continue to build the LWC Leadership Institute to increase LWC's bench strength and leadership skills in support of succession management.
  - Provide ongoing technology training and skill development to ensure effective use of Information Systems and applications.
  - Utilize technology to improve training effectiveness.
  - Continue to partner with AFSCME Local 1683 in identifying training gaps and meeting training needs of the union.
  
- **Foster an environment that promotes effective communication throughout the organization.**
  - Continue LWC Leadership Institute training on communications and internal customer focus.
  - Utilize effective communication forums and technology to improve information sharing.



## **STRATEGY V Growth**

Assure steady top-line revenue growth and profitability.







## *Economic Development*

### **Sub-Strategies and Tactics:**

- **Increase water sales within the boundaries of existing urban infrastructure.**
  - Take an expanded leadership role with regional and local economic development entities.
  - Gain an improved understanding of business plans and water needs of large commercial and industrial customers.
  - Target plant facilities tour program to include elected officials, large commercial and industrial customers, business and civic leaders, and leadership development groups.
  - Expand information available on LWC web site for use by site consultants.
  - Ensure developers ready access to existing infrastructure information.
  - Fully participate in planning activities at the Metro Development Center and ensure one-stop shopping for home builders and developers.
  - Continue no-cost service installation policy for redeveloping urban geographic areas.
  - Participate in and provide support to community planning activities to revitalize brownfields.
  - Evaluate alternative rates to encourage large industrial plants currently using large volumes of ground water or river water for their processes to convert to LWC supply.



## ***Horizontal and Vertical Integration***

### **Sub-Strategies and Tactics:**

- **Pursue new or expanded business opportunities that capitalize on our existing competencies, expertise and strengths.**
  - Develop and implement a strategy innovation process and research and business development process with dedicated resources.
  - Develop policies and controls regarding the pursuit of related business opportunities.
  - Establish and maintain business and customer information, expertise and technology related to or impacting the water industry.
  - Create an environment receptive to exploration and innovation for new business ventures.



## ***Regionalization***

### **Sub-Strategies:**

- **Pursue traditional growth opportunities through wholesale and retail service within a 75 mile radius.**
- **Pursue non-traditional growth opportunities through mergers, acquisitions, joint ventures, and management contracts.**

### **Tactics/Action Plan:**

- Provide resources and develop additional business competencies needed for business expansion.
- Complete plant and transmission capacity study to validate available capacity for expanded sales.
- Profile and prioritize regional growth opportunities.
- Adapt governance and risk management systems to accommodate business expansions.