Message from WRA Director

More than half-a-million people rely on the WRA but may not know how their lives would be different if we did not excel at what we do. We are the Des Moines metro-area’s unsung hero—quietly protecting public health and improving the environment, and we cannot fail in our service to the communities that depend on us. This focus has led us to continually innovate, looking for new ways to recover resources, and develop collaborative partnerships as well as maintain affordable, quality service.

Developing a strategy to help us plan for the opportunities and challenges that lie ahead is the focus of this strategic plan. The plan was developed with the collective input of the WRA Board, employees, and external stakeholders through an inclusive and iterative process.

WRA is known in regional and national wastewater industry circles as an innovative pioneer in operational efficiency and environmental sustainability. To build on our success, we have developed this plan to establish specific goals for future actions. Ultimately, our planning process will lead to a more resilient utility that is better able to respond to social, environmental, and economic trends.

As the WRA looks toward the future, change is the one constant we can rely on. The population of Iowa’s largest city and surrounding metro area will continue to grow—it’s one of the fastest-growing metropolitan areas in the Midwest. And the people living in our service area will want to know more about the services provided by the WRA on behalf of their member communities.

Over the next five years, the WRA will focus on:
- Communication and Collaboration
- Financial Sustainability
- Infrastructure and Asset Management
- Resource Recovery
- Technology and Innovation
- Workforce Development and Safety

To achieve our goals, we must put people at the forefront. Our workforce is the key to our success and our most valuable asset. Our Board of Directors is an engaged partner, ensuring that we meet the current needs of our region while always looking forward to the future.

With our employees and Board actively focused on the goals and priorities in this plan, we will continue to safely, reliably, and cost-effectively treat wastewater to protect public health and the environment. And we’ll be a highly responsive, trusted public utility recognized for leadership in wastewater reclamation.

Our communities deserve no less.

Scott T. Hutchens, P.E.
WRA Director
The WRA has and continues to serve as a model of cooperation and collaboration for the greater metropolitan area. Seventeen metro-area municipalities, counties, and sewer districts work together to protect public health and to enhance the environment by recycling their wastewater through the WRA, and all benefit from the work of this forward-thinking organization.

Together, we accomplish great things—in 2017, WRA treated more than 22 billion gallons of wastewater, providing service for more than half a million people. It applied processed biosolids on approximately 1,200 acres of near-by agricultural land, and it produced more than a quarter of its own energy through innovative biogas generation projects.

This strategic plan, which incorporates feedback from a diverse group of stakeholders, sets the course for the next five years. While it will not be easy to accomplish, it is both comprehensive and necessary to moving the organization forward. I am proud of the effort that we put into this plan, and of WRA’s willingness to stretch itself and achieve its goals far into the future. Throughout implementation of this plan, WRA’s Board, staff, and participating communities will continue to be collaborative partners, focused on the organization’s success and meeting the needs of the region.
OVERVIEW

The Des Moines Wastewater Reclamation Authority (WRA) initiated a strategic planning process in April 2018 to create an organizational vision and a framework to guide the utility into the future. The strategic framework presented in this document will direct investment, allocate resources, and provide a structure for annual reviews to ensure that long-term goals and objectives are achieved.

PROCESS

WRA’s strategic planning process was designed to ensure:

- A shared vision of WRA's ultimate goals that engage the Board of Directors (Board) and inspires employees;
- A mutual understanding between stakeholders of the available resources, the operating environment, and the principles upon which strategies will be based; and
- Acceptance of the direction and urgency of the strategic and implementation plans, which will be integrated into the way WRA operates on a day-to-day basis.

To achieve these conditions for success, WRA’s strategic planning process involved input from a broad group of internal and external stakeholders and consistent communications of WRA’s vision, mission, and overall strategic plan, both internally and externally. Major elements of the process included:

- Stakeholder Input - Input was obtained from Board members, employees, and external stakeholders through interviews, a Board Workshop, an online employee survey, and two employee focus groups.
- Foundation Workshop - A Core Strategic Planning Team (Core Team), consisting of members of WRA’s senior management and Board, met to consider stakeholder input and to draft the organization’s Vision, Values, Mission, and Goals.
- Strategy Workshop - The Core Team brainstormed Strategies and Measures, and then made preliminary decisions regarding what should be included in the final plan.
Environmental Scan

COMMUNITY PROFILE

Situated alongside the Des Moines River, the City of Des Moines is Iowa’s largest city and state capital. Known for its public art and acclaimed Pappajohn Sculpture Park, as well as its museums (including a science museum and geodesic dome), opera, symphony, and ballet, the city is a vibrant tourist destination. The city is also at the center of one of the fastest-growing metropolitan areas in the Midwest. The greater Des Moines area has experienced steady growth, averaging 1.9% per year since 2012, reaching an estimated population of 645,911 in 2017. The Des Moines area is also a hotspot for economic growth, outpacing other Midwestern regions in terms of GDP. The metro region ranked 39th in the country in the Brookings 2015-16 Prosperity Index. The region’s average MHI is $64,144, while the state of Iowa’s MHI is $54,570. The Des Moines metropolitan area has been highlighted recently as a national standout for its low unemployment and robust economy.

WRA’s operating environment was documented through:

- Analysis of community demographics and other external influences (Community Profile)
- Considerations of key industry trends and their potential impact on WRA
- WRA’s Strengths, Opportunities, Aspirations, and Results (SOAR)
39th
in the country in the Brookings 2015-16 Prosperity Index

<3%
Unemployment rate for WRA’s service area

645,911
Estimated Metro Population

$64,144
Regional Median Household Income
Map based on Longitude (generated) and Latitude (generated). Details are shown for Name. The view is filtered on Name, which keeps 17 of 112 members.
The Des Moines Metropolitan Wastewater Reclamation Authority (WRA) provides wastewater treatment for the greater Des Moines metropolitan region. In 2017, the WRA’s service area included a population of half a million people, and it has been experiencing a 1% - 2% annual growth rate. WRA operates a 97 MGD wastewater treatment facility, treating an average of 60.3 million gallons of wastewater per day.

WRA is known regionally and nationally for its innovation, pioneering operational efficiency, and environmental sustainability. By burning biogas generated as part of regular operations, the utility was able to meet 27% of its electricity needs in 2017. WRA also recycles treated wastewater effluent for use within the treatment facility, providing significant cost savings and environmental conservation benefits. WRA has a well-articulated strategy to serve industrial businesses, providing industrial pre-treatment services and reducing sanitary sewer overflows by implementing a Fats, Oils, and Grease disposal program. To proactively address local water quality, WRA developed a plan to invest $19 million to remove nearly 80% of the phosphorous in the wastewater flow coming to the plant, thereby helping to reduce algal blooms downstream.
Industry Trends and Local Context
**TREND #1**

**POPULATION**

**CURRENT SITUATION & FUTURE EXPECTATIONS**

The greater Des Moines metropolitan area is growing, throughout the region. Both the suburbs and the City’s inner core are seeing steady population gains. WRA’s existing capital improvement plan (CIP) positions the organization well to meet the future needs of the service area.

**POTENTIAL WRA RESPONSE**

- Consider opportunities to expand membership to other communities, which would increase WRA’s service area and enlarge the customer base

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**TREND #2**

**POLITICAL ENVIRONMENT**

**CURRENT SITUATION & FUTURE EXPECTATIONS**

The WRA is governed by a well-functioning, engaged Board, representing each member city. Leadership at each of the member cities is stable, and indications are that it will remain that way in the future.

**POTENTIAL WRA RESPONSES**

- Increase public outreach and ensure that Board Members have opportunities to share information about the value of the services WRA provides to their communities.
- The WRA must recognize and be cognizant of its member communities local needs, how it relates to the ability of those communities to carry more debt for WRA capital projects, and how this puts a burden on its rate payers.
CURRENT SITUATION & FUTURE EXPECTATIONS

Regulatory requirements and enforcement have increased, which has impacted WRA’s capital budgeting, rate-setting process, and daily operations. WRA’s collaborative and cooperative relationship with the Iowa Department of Natural Resources has helped the utility adjust to regulatory change. Minimal regulatory changes to the Clean Water Act are expected. However, the WRA’s major “unknown” is how the regulatory environment may change in relation to nutrient reduction requirements. The WRA anticipates significant cost increases associated with nutrient management in the future.

POTENTIAL WRA RESPONSES

- Be prepared to consider end-user affordability, especially with a significant CIP on the horizon
- Nutrient management costs may ultimately lead to increased rates
CURRENT SITUATION & FUTURE EXPECTATIONS

Although WRA proactively recruits new employees by using an apprenticeship program and partnering with a local community college, maintaining a sufficient workforce remains a challenge. The region’s low unemployment rate has made attracting qualified employees particularly difficult. WRA anticipates that staffing deficiencies may increase in the future. Once employees are hired, generational differences between newly-hired, younger employees and more experienced employees are expected to impact WRA’s organization and operations.

POTENTIAL WRA RESPONSES

- Develop outreach programs to local schools
- Ensure that WRA is known regionally as a great place to work
- Continue with job training and apprenticeship programs
- Consider opportunities to increase leadership training and development opportunities
TO INCREASE ORGANIZATIONAL FLEXIBILITY, WRA PLANS TO DEPLOY SEVERAL NEW TECHNOLOGIES AND SYSTEMS OVER THE NEXT 8 TO 10 YEARS.
TREND #5

TECHNOLOGY

CURRENT SITUATION & FUTURE EXPECTATIONS

Technology is vital to every facet of WRA’s operations. Sufficient technological capabilities are necessary to maintain regulatory compliance. To increase organizational flexibility, WRA plans to deploy several new technologies and systems over the next 8 to 10 years.

POTENTIAL WRA RESPONSES

• Aim to be a “fast follower” and track others’ innovative efforts
• Ensure focus on the industry, new ideas, and opportunities to improve operations

TREND #6

CUSTOMER EXPECTATIONS

THE CURRENT SITUATION & FUTURE EXPECTATIONS

The WRA focuses on minimizing financial impacts to Member Communities and their customers. Member Communities expect high quality service at low cost, yet costs (and rates) are expected to increase in the future.

POTENTIAL WRA RESPONSES

• Ensure that WRA is effectively managing expectations of the Member Communities
• Be more assertive about sharing the WRA’s noteworthy accomplishments
• Continue to identify opportunities and implement strategies to increase operational efficiency
TREND #7

TOTAL WATER MANAGEMENT

CURRENT SITUATION & FUTURE EXPECTATIONS

Water agencies in the region are somewhat disconnected. To improve watershed management and water quality, WRA participates in sponsored stormwater projects with other agencies. Regional collaboration is expected to be a growing priority in the future.

POTENTIAL WRA RESPONSE

- The WRA could convene collaborations around sewer issues to ensure that everyone is collectively taking care of the region’s sewer assets.
CURRENT SITUATION & FUTURE EXPECTATIONS

WRA’s financial situation has improved over the last 15 years and its Consent Decree will be completed in 2023. The WRA’s budget is anticipated to remain fairly stable, with moderate increases expected in the next three to five fiscal years.

POTENTIAL WRA RESPONSE

• WRA should continue to communicate with the participating communities, and be mindful of overall affordability
ENERGY / REUSE

CURRENT SITUATION & FUTURE EXPECTATIONS

The WRA produces approximately one-quarter of its own electricity from biogas. As part of the new Biogas Project, WRA anticipates trading clean biogas generated onsite for renewable energy credits, which may be sold to generate revenue to offset operation and maintenance costs.

POTENTIAL WRA RESPONSES

• Begin construction on the new Biogas Project
• Continue to look at energy efficiency and support the renewable fuel program

INCREASED RISK PROFILE

THE CURRENT SITUATION & EXPECTATIONS FOR THE FUTURE

WRA recognizes the risks posed by potential natural disasters, levy breaches, economic fluctuations, and cyber security breaches. WRA anticipates that the risk of disruptive weather events and excessive agricultural runoff will increase in the future due to climate change and changing land use patterns.

POTENTIAL WRA RESPONSES

• Support regional flood resiliency efforts
• Increase site security, install power back-ups, and ensure that critical resources are available if needed
The WRA utilized a Strengths, Opportunities, Aspirations, and Results (SOAR) analysis to form the basis for its strategic plan. This technique, based on the positive change model, Appreciative Inquiry, is part of the environmental scan and provided valuable input to the strategic plan development process.

**Strengths.**

Strengths provided input to the development of a vision and mission that build upon what the organization does extremely well. These include:

- Collaborative company culture
- Employer of choice
- Innovative operations
- Excellent product quality

**Opportunities.**

Opportunities helped the Core Team identify and explore innovative approaches and strategies to meeting future needs, such as:

- Leverage employees’ skills and show employee appreciation as part of a career advancement policy
- Increase public awareness through stakeholder outreach
- Consider new and innovative processes and initiatives
- Being stewards of our financial resources

**Aspirations.**

Aspirations focused on the expectations or vision of internal and external stakeholders. WRA’s aspirations are:

- Wastewater innovation
- Unified Board and employee vision
- Continued cost-effective service delivery
- Environmental stewardship and sustainability

**Results.**

Results identified meaningful measures that indicated progress to achieving goals. These include:

- Track capital spending
- Increase planned maintenance
- Lower energy costs
- Increase career development opportunities
Strategic Direction

This strategic plan serves as a blueprint for future decision-making and provides a structure for annual reviews to ensure that goals and objectives retain relevance over time. By laying out a course of action, this plan represents a disciplined process to make fundamental decisions that will shape WRA's future.

The strategic plan addresses WRA's current challenges and helps to ensure continued success in operations, management of resources and assets through its Vision, Mission, Values, Goals, Objectives, and Strategies.

Objectives and Strategies

Objectives are measures that define accomplishment for each Goal, and Strategies are key resource allocations that should be made over the next several years. These critical elements of the strategic plan, as well as the Vision, Values, Mission, and Goals, are presented on the strategic framework.

Boundaries

The Strategies included in WRA's strategic framework were designed to be innovative and creative with consideration of budgetary, regulatory, legal, and policy boundaries.
Our Vision

Implementation of this plan will enable the WRA to achieve its desired future state as articulated in its Vision:

"To protect public health and enhance the environment by being a recognized leader in innovative water reclamation."

Our Mission

The Mission describes the organization’s purpose and role within the service area. After carefully considering these factors, the Core Team stated:

"Our highly skilled workforce cost-effectively collects, conveys, and cleans wastewater and recovers valuable resources to meet the existing and future needs of Central Iowa."

Our Values

Values are a demonstration of the WRA’s deeply held beliefs, norms, and qualities, which drive day-to-day activities. The WRA has created a Value Statement:

WRA is committed to meeting the needs of its region, through:

Integrity
Doing the right thing

Excellence
Being the best

Innovation
Embracing new ideas

Stewardship
Financial and environmental
GOALS

Goals represent the most important issues that must be addressed to achieve the desired future. WRA’s Goals were driven primarily by the factors that are most critical to the organization’s future success. Comments relating to each are presented here.

Communication and Collaboration - To promote a culture that communicates clearly and concisely at all levels and encourages strong internal and external partnerships

With multiple innovative programs to manage, WRA recognizes the importance of a coordinated effort. Communicating objectives clearly across all levels of the organization, while fostering a culture of collaboration, both within the organization and with the community, is essential to achieving operational excellence.

Financial Sustainability - To manage financial resources in accordance with WRA financial policies and agreements, to operate efficiently, and meet regulatory commitments

Conservative financial management is a high priority to support future growth, operational success, and environmental stewardship.
Infrastructure and Asset Management - To meet future population growth and capacity needs by building, operating, and maintaining reliable infrastructure

With an expectation of continued growth and innovation, the WRA seeks to maintain existing infrastructure, invest in new infrastructure as needed, while maintaining sound financial management.

Resource Recovery - To recover valuable resources from the treatment process and minimize WRA’s energy usage

One of the WRA’s standout features is its resource stewardship, which includes energy use monitoring, byproduct reuse, and nutrient management. WRA plans to further emphasize energy conservation and byproduct resource recovery in the future.

Technology and Innovation - To leverage new and existing technologies through innovative operational approaches and partnerships

WRA will continue to bolster existing relationships with peer utilities and research institutions to grow its technological capacity. WRA aims to stay on the leading edge of technological innovation to strengthen operational resiliency and responsiveness.

Workforce Development and Safety - To attract, cultivate, and retain a well-trained, safety-centric team of specialists

Amid growing regulatory requirements and customer expectations, the WRA relies on dedicated employees to facilitate operational reliability and safety, while supporting organizational progress. WRA will foster an organizational culture that allows employees to grow their careers while taking pride in their respective areas of expertise.
Goals

VISION
To protect public health and enhance the environment by being a recognized leader in innovative water reclamation

MISSION
Our highly skilled workforce cost-effectively collects, conveys, and cleans wastewater and recovers valuable resources to meet the existing and future needs of Central Iowa

VALUES
WRA is committed to meeting the needs of its region, through:
- Integrity
  Doing the right thing
- Excellence
  Being the best
- Innovation
  Embracing new ideas
- Stewardship
  Financial and environmental

COMMUNICATION AND COLLABORATION
To promote a culture that communicates clearly and concisely at all levels; and encourages strong internal and external partnerships

FINANCIAL SUSTAINABILITY
To manage financial resources in accordance with WRA financial policies and agreements, to operate efficiently, and meet regulatory commitments

INFRASTRUCTURE AND ASSET MANAGEMENT
To meet future population growth and capacity needs by building, operating, and maintaining reliable infrastructure

RESOURCE RECOVERY
To recover valuable resources from the treatment process and minimize WRA’s energy usage

TECHNOLOGY AND INNOVATION
To leverage new and existing technologies through innovative operational approaches and partnerships

WORKFORCE DEVELOPMENT AND SAFETY
To attract, cultivate, and retain a well-trained, safety-centric team of specialists
### Objectives

1. Maintain an appropriate number of active cross-functional project or initiative teams
2. Develop, monitor, and track a bi-annual, composite employee engagement survey score
3. Maintain an appropriate number of engaged stakeholder groups

1. Track and trend O&M spending, as compared to a 2018 baseline
2. Track and trend chemical costs per MG treated, as compared to a 2018 baseline
3. Track and trend O&M cost per MG treated, as compared to a 2018 baseline

1. Monitor and track the percent of the total Capital Improvement Plan allocated for growth
2. Track and trend the amount ($ in capital spending that supports growth
3. Ensure that planned maintenance hours increase relative to reactive maintenance hours

1. Increase revenues generated by new lines of business
2. Seek to lower energy cost per MG treated

1. Develop, track, and trend cyber security assessment score
2. Develop major accomplishments memoranda to reveal progress toward increased innovations and partnerships

1. Track and trend reportable incidents, accidents, and injuries
2. Increase the percentage of positions with defined career ladders
3. Monitor, report, and celebrate when new skills or certifications are obtained

### Strategies

1. Enhance collaboration with staff, stakeholders, and Board members
2. Communicate with staff to keep the WRA Vision, Mission, and Values as the primary drivers to promote success
3. Develop and implement a communications plan to enhance awareness of WRA, its mission, initiatives, and capital projects

1. Develop revenue, expense, and control policies and procedures for new related lines of business
2. Collaborate with each community to determine and meet long-term system obligations (debt levels, rate impacts, etc.)
3. Identify opportunities to increase efficiency through research and application of industry best practices

1. Adopt and implement an organization-wide asset management program
2. Assimilate population projections to ensure sufficient infrastructure to meet future capacity needs
3. Evaluate land availability and corridor preservation needs for future WRA assets
4. Improve operational resiliency through site security improvements and flood mitigation efforts

1. Develop a program to measure, minimize, and report resource recovery and net facility energy use
2. Evaluate water quality credit options for future nutrient requirements
3. Expand water and byproduct reuse programs
4. Recover and deliver to market economically viable byproducts, continuing with biogas and phosphorous
5. Implement updated Fats, Oils, and Grease program

1. Develop a plan to enhance operational resiliency and respond to cyber threats
2. Continue to collaborate with peers on evolving technology
3. Strengthen relationships with research institutions and others to explore, pilot, and implement innovative treatment technologies and processes

1. Review position descriptions, to include career ladders and appropriate certifications
2. Develop and implement employee skills and succession capabilities
3. Create and enhance effective programs to focus on core safety training
4. Educate and train on new and existing systems, processes, and technologies
EFFECTIVE COMMUNICATION IS CRITICAL NOT ONLY FOR THE SUCCESSFUL IMPLEMENTATION OF THE STRATEGIC PLAN, BUT ALSO FOR WRA’S OVERALL SUCCESS.

**Communication**

Through this strategic plan, WRA has committed to improving internal and external communications.

The issue of communication, which surfaced in the stakeholder input process, cuts across the various strategic goals. As indicated on the strategic framework, communications will be enhanced through several efforts, including:

- Implementing an external communications plan to enhance awareness of WRA, its mission, initiatives, and capital projects
- Collaborating with each community in WRA’s service area to meet long-term system obligations (debt levels, rate impacts, etc.)
- Strengthening relationships with research institutions and others to explore, pilot, and implement innovative technologies and processes
- Enhancing internal collaboration with staff, stakeholders, and Board members
- Communicating WRA’s Vision, Mission, and Values to staff
Implementation

The goals, objectives, and strategies contain a series of initiatives and projects that will move WRA toward achievement of its desired outcomes. To achieve desired results, the strategies must be effectively implemented. Careful attention and focus on strategy implementation is essential to achieving strategic success. Elements of the implementation process for WRA include:

Create and Leverage Teams: Create teams that are knowledgeable, energized, and committed to the implementation of the strategies for different goals. These teams would:
- Draft implementation plans for each strategy that will include:
  - Tasks necessary for implementation
  - Assigned individuals or groups
  - Due dates for key tasks
  - Resources required
- Monitor implementation progress
- Report on implementation progress to senior management

Involve Senior Management: During the implementation process, the teams will communicate with senior management concerning issues such as:
- Implementation progress
- Resources required (people, money, equipment, etc.)
- Strategies which, after initial implementation efforts, may require updates
- Achievement of objectives

Report to the WRA Board: Senior management is accountable to the WRA Board for implementation of the approved strategic plan and achievement of the stated goals and objectives. Accordingly, senior management will periodically update the Board on progress, achievements, and issues related to the strategic plan.
STRATEGIC PLANNING IS A WAY OF THINKING THAT SUPPORTS AN ANALYSIS OF THE PRESENT AND HELPS CREATE A VISION OF THE FUTURE. THE WRA HAS DEVELOPED A STRATEGIC PLAN THAT WILL TAKE FIVE YEARS TO IMPLEMENT, AND WILL PROVIDE A GUIDE FOR THE ORGANIZATION’S LONG-TERM STRATEGIC SUCCESS.