



Electric, Water, and Sewer Utility

STRATEGIC PLAN

Ten-Year Outlook | 2019

Final Plan | April 2019

Introduction



Introduction

The utility industry is going through a time of transformation, driven by advances in technologies, changes in customer use and expectations, and increasing regulations. The Lewes Board of Public Works (Lewes BPW) determined that updating its Strategic Plan for the Electric, Water, Sewer and Stormwater Utilities was the best method to address these issues in a thoughtful and professional manner. The Lewes BPW contracted Spotts, Stevens and McCoy, an engineering and consulting group specializing in the government utility marketplace, to facilitate the strategic planning process.

The Strategic Planning Process

A Strategic Planning Team was established which included the BPW Board, Operations Leadership, and City of Lewes representatives. The mission of the Team was to guide the strategic planning initiative and develop the content of the Plan. The Team sought insight from various sources, including Operations staff and key stakeholders/customers, utilizing workshops, surveys and one-on-one interviews. The Team focused on identifying the community values and critical issues that the Lewes BPW should embrace and address in the Plan.

The Team worked together over numerous months to develop a 10-year plan for the utilities anticipating that periodic updates will occur in the future. The Plan includes short and long term goals/objectives to achieve the priorities identified in the planning process. The Plan will become the strategic roadmap for the future success of the Lewes BPW.

While developing the new Strategic Plan, Lewes BPW reaffirmed its Mission and Vision. These statements set the course for Lewes BPW, the end point that will be reached by implementing the initiatives and achieving the goals/objectives laid out in this plan.

Strategic Planning Team

Board of Public Works

- D. Preston Lee, P.E., President
- Thomas Owen, Vice President
- Jack Leshner, Treasurer
- Robert Kennedy III, Secretary
- Thomas Panetta, Assistant Treasurer

Operations Leadership

- Darrin Gordon, General Manager
- Austin Calaman, Assistant General Manager

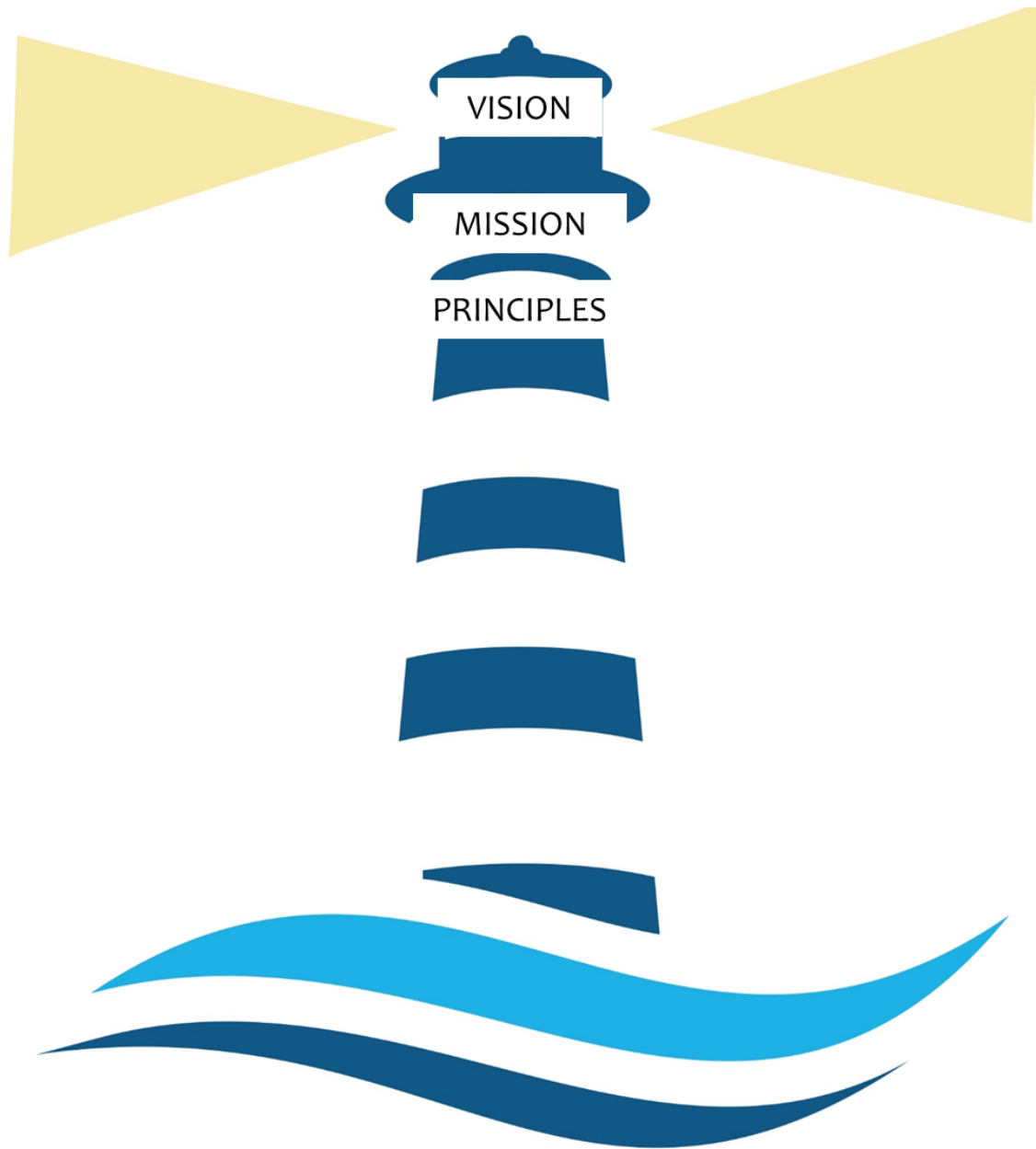
City of Lewes

- Theodore Becker, Mayor
- Ann Marie Townshend, City Manager

Focus Group

- B. J. Clark, MD - Residential, Town - Retired MD, small business owner
- Amy Cornelious - Residential, Beach - Consultant sustainable living
- Matt DiSabatino - Restaurateur
- Mark Loukides - VP Facilities & Environment of Care, Beebe Healthcare
- Jen Mason - Small Business Owner
- Tracy Nasarenko - Site Manager, SPI Pharma
- Richard Palmer, MD - Residential, Town - Pathologist
- Betsey Reamer - Executive Director, Lewes Chamber of Commerce
- Lenny Richardson - Supervisor of Facilities, Cape Henlopen School District
- Preston Schell - Developer - President Ocean Atlantic Companies
- Jim Sleasman - Residential, Town - President, Pilottown Village HOA
- Mike Tappan - Site Controller, SPI Pharma
- Paul Townsend - Residential, Outside City - President, Wolfe Pointe HOA
- Lee Ann Wilkinson - Realtor

What We're About



Our Vision

The Lewes Board of Public Works exists to improve the quality of life of the customers we serve by providing quality and reliable utility services.

Our Mission

We are dedicated to providing our customers with electric, water, wastewater, stormwater management, and other value-added services in a safe, reliable, and economic manner with sound business practices, sustainable growth, community engagement, economic development, and environmental stewardship.

Our Guiding Principles

Service Excellence

We will emphasize service excellence, responding to our customers' needs by:

- Implementing projects/programs to enhance utility system reliability and capacity to meet projected demands over the long term.
- Developing ways to increase the ease of customer interactions with us.
- Maximizing the value of being a multi-service utility.
- Focusing on providing core electric, water, wastewater and stormwater services, and doing business as a full service provider within the policies established by the Lewes BPW.
- Offering new products and services where appropriate.
- Forming partnerships and alliances to serve our customers.
- Enhancing the capability to better understand customer expectations and needs.
- Developing the capability to predict and respond to the actions and plans of competitors.
- Developing and implementing programs to enhance customer recognition of the Lewes BPW as a service provider.

Financial Health

We will assure financial strength to provide the resources and services needed by:

- Operating to minimize cost of service over the long term and maximize value to our customers.
- Emphasizing sharing of resources (people and assets) to minimize expenses.
- Promoting our services to attract customers.
- Operating with sound financial principles.
- Maintaining rate classes based on the nature of services provided to the customer.
- Evaluating systems and process for efficiencies on an ongoing basis.

Safety

We will provide products and services in a safe manner by:

- Exercising the highest practical degree of care in complying with applicable public safety and health standards.
- Assuring necessary training, tools, and equipment to strive for the best employee safety practices at work.

Organization/Work Force Development

We will maintain our most important asset, a productive work force, by:

- Emphasizing employee performance is aligned with the Lewes Board of Public Works' Guiding Principles.
- Promoting an organizational culture that supports an open and inclusive work environment. We recognize and respect a variety of perspectives, experiences and approaches that will help us achieve our organizational goals.
- Maintaining a competitive compensation system which attracts and retains quality employees.
- Ongoing monitoring and evaluation of our processes to identify ways to improve.
- Supporting training to enhance leadership and management practices, operational efficiency, safety, employee and customer relations, and employee/organizational development.
- Building employee awareness of the Lewes BPW's Mission.
- Emphasizing an organizational focus on customer satisfaction.
- Respecting employees and showing appreciation of their efforts.

Environmental Stewardship

We will be environmentally responsible by:

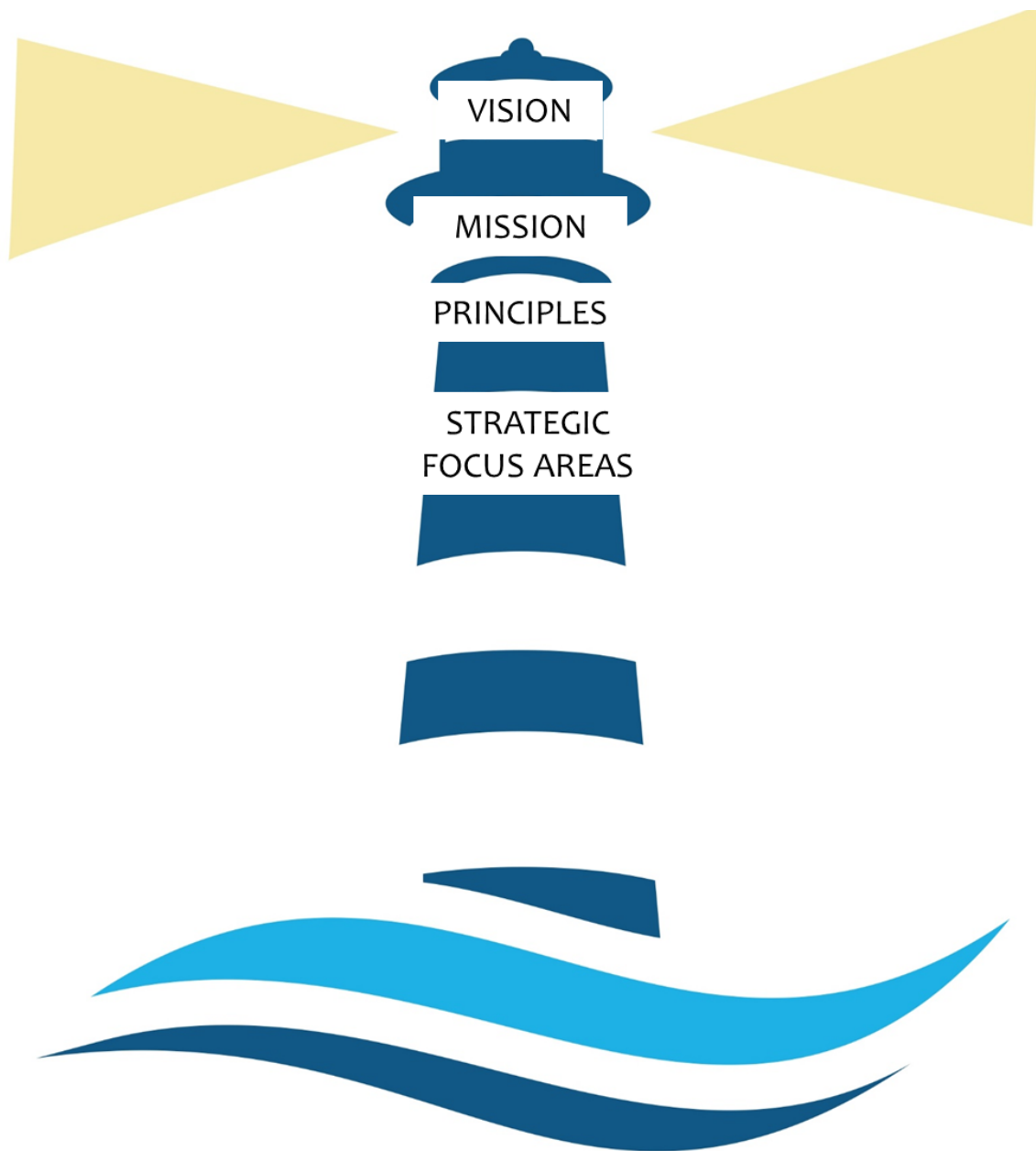
- Building and maintaining infrastructure in a context-sensitive manner.
- Working within the regulatory/legislative process to assure optimal balance of environmental sensitivity and utility risk on behalf of the community's overall interest.
- Operating to meet or exceed Federal and State regulatory standards in a cost-effective manner.
- Assessing and addressing the impact of climate change and sea level rise on utilities.

Community Involvement

We will be actively involved in the community by:

- Supporting the Core Values of the City of Lewes.
- Encouraging public involvement in planning and development of Lewes BPW projects and programs.
- Fostering a sense of ownership and brand recognition of the Lewes BPW.
- Providing information to assist customers in making informed decisions on utility services.
- Encouraging Lewes BPW representatives' involvement and support of community events and volunteerism.

Strategic Focus Areas



Strategic Focus Areas



Infrastructure

To support and sustain the mission of the Lewes BPW, support economic development, increase customer satisfaction, and withstand potential impacts of extreme weather events and sea level rise, Lewes BPW will build and maintain reliable infrastructure.



Engagement

We will foster customer, partner and community relationships.



Administrative Operations

To support the mission of the Lewes BPW, we must maintain operational excellence.



Growth

Lewes BPW will support the economic growth of the community.

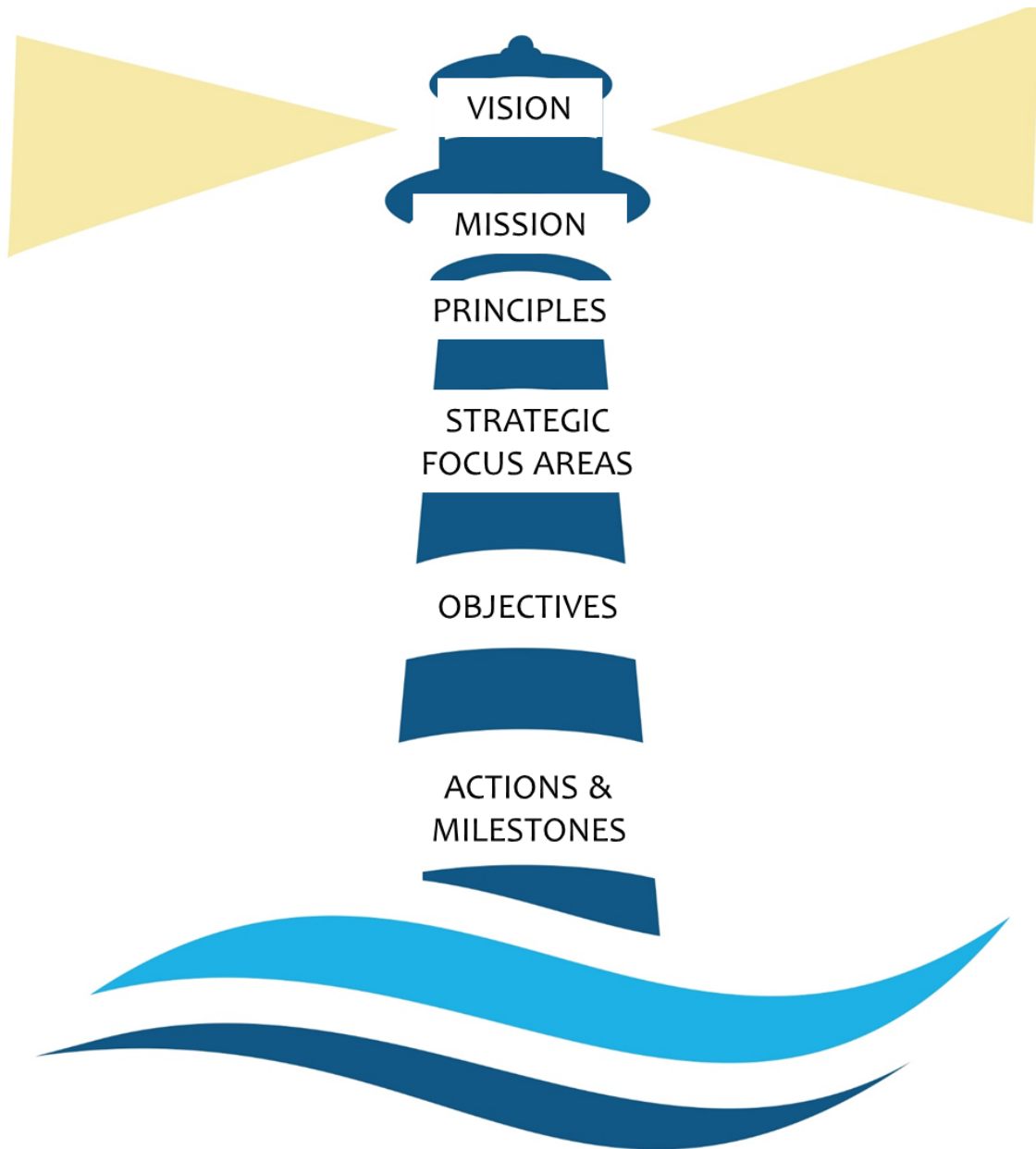


Environmental Stewardship

Recognizing the City of Lewes as a green community, Lewes BPW will proactively take measures to reduce pollutants and to increase use of renewable energy sources.



Objectives





Infrastructure

To support and sustain the mission of the Lewes BPW, support economic development, increase customer satisfaction, and withstand potential impacts of extreme weather events and sea level rise, Lewes BPW will build and maintain reliable infrastructure.

Strategic Objective	Preliminary - Tactical Activities & Milestones
Support electric infrastructure to meet future demand requirements and provide sufficient redundancy.	<ol style="list-style-type: none"> 1. <i>Conduct Capacity Study with a 10-year horizon. Evaluate Electrical system redundancy.</i> 2. <i>Review electric grid technologies to improve reliability and increase capacity.</i> 3. <i>Conduct study to identify growth trends for EV, etc.</i> 4. <i>Identify feasible renewable source options.</i> 5. <i>Identify sources and funding.</i>
Prepare for regulatory impact of Municipal Separate Storm Sewer Systems (MS4) and establish public education program.	<ol style="list-style-type: none"> 1. <i>Monitor MS4 requirements and continue public education program.</i> 2. <i>Identify assets and map outfalls.</i> 3. <i>Integrate City participation for MS4 compliance planning and develop areas of responsibility.</i> 4. <i>Review and evaluate all outfalls to the canal (keep the canal clean).</i> 5. <i>Review tax ditch practices and implement improvements if possible.</i>
Identify the impacts of sea level rise/climate change on utility infrastructure.	<ol style="list-style-type: none"> 1. <i>Develop a Vulnerability Plan to include a multi-discipline Vulnerability Study which will provide a guide for future capital projects.</i> 2. <i>Determine critical assets for all utilities and implement Capital Plan to reduce impacts.</i> 3. <i>Perform hydro study of well head area to access all water intrusion risk.</i>
Systematically remove problematic infrastructure to provide quality and reliable service.	<ol style="list-style-type: none"> 1. <i>Create and implement plan to reduce water quality complaints.</i> 2. <i>Create a back-up plan for potential loss of individual services.</i> 3. <i>Reduce outages or near miss outages.</i>
Reduce Sanitary Sewer System Infiltration and Inflow (I&I).	<ol style="list-style-type: none"> 1. <i>Reduce sanitary sewer infiltration and inflow.</i> 2. <i>Identify sources of I&I.</i> 3. <i>Develop a short and long-term plan to reduce I&I.</i>
Determine if smart meters would benefit Lewes BPW and its customers.	<ol style="list-style-type: none"> 1. <i>Gather data as a part of assessment of electric infrastructure.</i> 2. <i>Perform cost benefit analysis.</i> 3. <i>Implement if smart meters provide a net benefit to Lewes BPW and customers.</i> 4. <i>Evaluate peak/congestive charges with DEMEC.</i>



Engagement

We will foster customer, partner and community relationships.

Strategic Objective	Preliminary - Tactical Activities & Milestones
Develop a plan for building and maintaining relationships with stakeholders.	<ol style="list-style-type: none"> 1. Identify internal or external advocate (DEMEC, DELDOT, Board of Health, DNREC, City/Council, Sustainable Energy Utility, Chesapeake and other providers, Sussex Conservation District, Developers, Army Corps of Engineers, County, State and Federal Legislatures). 2. Review key agency organizational charts. 3. Conduct personal and regularly-scheduled, agenda-driven meetings with key individuals. 4. Measure # interactions/# joint meetings.
Develop an education program that will inform and engage customers and the community.	<ol style="list-style-type: none"> 1. Integrate the educational communications into the Communications schedule. 2. Prioritize educational needs: <ol style="list-style-type: none"> a. Services - Who to call. b. What Lewes BPW does vs what City does? c. Fees - Ready-to-Serve. 3. Stormwater Management – why and how community can participate. 4. Match appropriate platforms (website, text, email, mail, and social) with specific messaging. 5. Develop messaging schedule to include what, how and frequency. 6. Develop regular, consistent messaging tools (did you know, signage, post cards, kiosk). 7. Update website to be interactive tool for use by customers.
Maintain City/Lewes BPW relationship and work toward achieving collaborative initiatives.	<ol style="list-style-type: none"> 1. Identify any areas of overlap (tree trimming, electrical, street sweepers) and explore opportunities for sharing resources to eliminate redundant spending in the relationship (IT/GIS). 2. No Wrong Call - Reduce calls to wrong departments.
Implement process improvement practices that evaluate Lewes BPW procedures from a customer’s perspective, with the objective being to make it easier to communicate with the Lewes BPW.	<ol style="list-style-type: none"> 1. Solicit feedback from customers to measure effectiveness and identify potential value-add services. 2. Conduct semi-annual meetings with Large Customers 3. Introduce regular, customer survey/annual survey with consistent questions/ratings to develop benchmark performance. Determine the % customer rating desired by Lewes BPW. 4. Conduct semi-annual or annual “stockholder” meeting(s) to inform/answer and address customer concerns.



Administrative Operations

To support the mission of the BPW, we must maintain operational excellence.

Strategic Objective	<i>Preliminary - Tactical Activities & Milestones</i>
Attract, train and retain a workforce with the skills and knowledge needed for utility operations.	<ol style="list-style-type: none"> 1. <i>Explore options for incentive related to affordable housing.</i> 2. <i>Develop career advancement plans to retain employees.</i>
Evaluate all areas of the organization to identify workforce gaps and identify key positions for hire and succession planning.	<ol style="list-style-type: none"> 1. <i>Identify internal roles that need to be expanded or additional staff hired.</i> 2. <i>Cross-train key staff on essential functions.</i>
Evaluate current IT infrastructure, evolving needs and potential threats.	<ol style="list-style-type: none"> 1. <i>Assess current IT capabilities to meet identified requirements.</i> 2. <i>Determine if new hardware/software is required.</i> 3. <i>Implement replacement of IT platforms as necessary.</i>
Protect data, systems and equipment from cyber-attack.	<ol style="list-style-type: none"> 1. <i>Conduct and document periodic reviews of current IT software to ensure up to date versions are in use.</i> 2. <i>Ensure all future IT hardware and software purchases/upgrades incorporate up to date cyber security protection.</i>



Growth

Lewes BPW will support the economic growth of the community.

Strategic Objective	<i>Preliminary - Tactical Activities & Milestones</i>
Explore ways to facilitate the extension of natural gas service within the Lewes BPW service area.	<ol style="list-style-type: none"> 1. <i>Work with City to develop means to facilitate expansion.</i> 2. <i>Provide ongoing coordination with Chesapeake Utilities.</i>
Reduce number of domestic wells and septic systems in the Lewes BPW service area.	<ol style="list-style-type: none"> 1. <i>Extend central water and sewer in our service area as appropriate.</i>
Meet growing demand for utility services throughout Lewes BPW service area.	<ol style="list-style-type: none"> 1. <i>Evaluate the 2-mile radius outside of the City to coordinate with the City on next efforts.</i> 2. <i>Revise City and BPW Annexation process to meet the needs of all parties.</i> 3. <i>Develop master plan for providing service.</i>



Environmental Stewardship

Recognizing the City of Lewes as a green community, Lewes BPW will proactively take measures to reduce pollutants and to increase use of renewable energy sources.

Strategic Objective	<i>Preliminary - Tactical Activities & Milestones</i>
Review and evaluate all stormwater outfalls to the canal/Bay/marsh (keep the canal clean).	<ol style="list-style-type: none"> 1. <i>Locate and enter into GIS all outfalls.</i> 2. <i>Assess condition and serviceability.</i> 3. <i>Prioritize and repair as required.</i>
Continue to address our commitment to reduce greenhouse emissions by increasing our use of renewable energy.	<ol style="list-style-type: none"> 1. <i>Convert administrative fleet to EV.</i> 2. <i>Addition of solar to energy mix.</i> 3. <i>Consider impact of Green House gas on selection of additional energy sources.</i>
Identify methods to improve the stormwater quality of the outfalls to the canal.	<ol style="list-style-type: none"> 1. <i>Review routine maintenance plan and improve as necessary.</i> 2. <i>Review Best Management Practices for MS4 coastal communities and implement as appropriate.</i>
Support Community priorities and improve the sustainability of daily operations.	<ol style="list-style-type: none"> 1. <i>Meet or exceed Delaware Renewable Energy Requirements by 2025.</i>
Facilitate the proper disposal of household hazardous waste (HHQ) and pharmaceuticals.	<ol style="list-style-type: none"> 1. <i>Provide semi-annual collection services.</i>

Appendix

Responses Developed During Board and Staff Leadership Workshop SWOT

SWOT: Strengths

* Represents workshop flip charts - priority stickers

ELECTRIC	WATER	SEWER	STORMWATER
<ul style="list-style-type: none"> • DEMEC relationship ** • Infrastructure is small * • Reliability * • Service and staffing a smaller area *** • Competitive rates – CPCM * • Small, manageable infrastructure • On-site customer communication • Infrastructure recently updated • Reliability • Response time • System is simple • Safety 	<ul style="list-style-type: none"> • High quality * • Quantity, dependable supply • Good well water • Good, new water plant • Supply excellent • Staff • Supply • Water well field (capacity) • Good crew • Response time • Aquifer quality • Quality • Quantity 	<ul style="list-style-type: none"> • New treatment plant ***** • Excess capacity ***** • Good management • County partnership • New, good plant • WWTP capacity • Plant above flood plain • Good WWTP • Excess capacity • Reliability • New facility • Excess capacity • Nutrient trade – pay 2.5X to mitigate – transport chicken manure out of state - \$5,000 per year 	<ul style="list-style-type: none"> • Utility Fee established • Revenue, Utility Fee • Small Town infrastructure • Revenue Stream • Utility Established and Money collected • Small Town infrastructure • Drains to the Sea
<p>OVERALL</p> <ul style="list-style-type: none"> • Strong balance sheet * • Intelligent/caring Board * • Staffing ** • Response time * • Excess Capacity ** • Customer Service * • Well water is good • Good staff • Coordination between BPW and the City • Analysis for Competitive Rates 			

SWOT: Weaknesses

* Represents workshop flip charts - priority stickers

ELECTRIC	WATER	SEWER	STORMWATER
<ul style="list-style-type: none"> • No redundant second service **** • Succession Plan – Aging Workforce ** • No smart technology * • Near limits of system * • Future response time • Infrastructure on beach side – and impact of salt air • Dependent on DEMEC • DEMEC dependency • Do not generate • No Community Solar • Underwater • Response time • Staff • Aging infrastructure • Infrastructure age 	<ul style="list-style-type: none"> • Infrastructure **** • No maps/GIS information * • Aging Infrastructure • Outside of the City, salt intrusion, shallow wells • Age of customers' properties • Aging infrastructure • Communication • Aging infrastructure • In-ground • GIS • Communication (Water Quality, House Plumbing) 	<ul style="list-style-type: none"> • Condition of Outfall • I/I * • In-ground • Elevation • Polluting Waterways • Biosolid Handling • High Water Flooding • Condition of Outfall • Aging in-ground infrastructure **** • Cost of Infrastructure • Stormwater I/I • Plant in flood zone 	<ul style="list-style-type: none"> • MS4 Strength • Elevation • Canal Discharge • State Mandates • Lacking infrastructure • Expectation Management • Increased Regulation MS4 Treatment **** • Expectation Management • Knowledge for Management • High Water Flooding
<p>OVERALL</p> <ul style="list-style-type: none"> • Areas in Town with no infrastructure – or ability to install • Low elevation of Town • Billing system – Blue Ocean * • Communications - Ready to Serve ** • Customer Email – get all * • Aging Infrastructure • Water – limited storage for emergency 			

SWOT: Opportunities

* Represents workshop flip charts - priority stickers

ELECTRIC	WATER	SEWER	STORMWATER
<ul style="list-style-type: none"> • Community Solar – smart meter ***** • Consumption with EVs * • Annexation Areas *** • Installed Solar • Solar • Expansion thru development 	<ul style="list-style-type: none"> • GIS/Asset Management * • Annexation • Communication • More water storage (tank) • Extra capacity to serve • Minimize number of shallow wells • Replace infrastructure • Billing improvement 	<ul style="list-style-type: none"> • Growth potential * • Extra Capacity in wastewater plant * • Minimize septic systems in surrounding areas * • Sell reclaimed water * • Expansion of service area • Operator change • County usage • Annexation • Grow System – county and Park 	<ul style="list-style-type: none"> • Tax Ditch *** • Community Education • Treat stormwater • Community Education • Expand infrastructure • Drain to the Sea
<p>OVERALL</p> <ul style="list-style-type: none"> • Expansion of Services, like natural gas * • Communication with critical customers * • Building DOT relationship (DELDOT) * • Growth (water/sewer) and capacity to grow * • Capital project (OK can it improve) • Oysters in the Bay – bio solids • Well Quality valuable resource • Annexation • Communication – Code Red and Routine (Emergency and other updates) 			

SWOT: Threats

* Represents workshop flip charts - priority stickers

<p>ELECTRIC</p> <ul style="list-style-type: none"> • Changing Markets (renewables, EV) **** • Climate change, storm intensity * • EV – Renewables • Staffing • Cyber Vandalism • Property Damage • Staffing • Politics • CO-OP • New Government Regulations • DEMEC imploding • Emergency, Disasters • Sell to CO-OP • Political • Terrorism • Vandalism 	<p>WATER</p> <ul style="list-style-type: none"> • Well contamination – salt water intrusion, chemicals, etc. *** • Aging Infrastructure ** • Terrorism on Wells * • Flooding of Wells • Overall IT System • Salt Intrusion • Infrastructure • Reliance on outside consultants • Communication • Surface Water • Saltwater intrusion • Wells in County • Loss of employees to other companies • Shallow wells • Salt water intrusion • New Employees • Well head protection • Staffing • Salt water intrusion • Lead/copper • Increased regulations • Supply • New government regulations 	<p>SEWER</p> <ul style="list-style-type: none"> • Storms * • Flooding and Sea Level Rise **** • Need to treat additional pharmaceuticals in wastewater * • Stricter discharge requirement • Increase in sludge handling and disposal • Major cost to rehab/maintain • Aging Infrastructure • Sea level rise • Climate change • Future pollution limits • Outfall • Taking it in house • Nutrient trade • Staffing 	<p>STORMWATER</p> <ul style="list-style-type: none"> • Costly to treat, expand, timing * • Tax Ditch * • Sea Level • Climate Change • State mandated treatment • MS4 • Tidal Influence • Sea level rise • Increased volume of run-off due to increased housing • Government Regulations • MS4 • Clogging from storms • Shutdown from Hurricanes
<p>OVERALL</p> <ul style="list-style-type: none"> • New Government Regulations *** • Aging Filters • Headwork upgrade 			

SWOT: Priorities

Represents Summary of workshop flip charts - priority stickers

<p>ENVIRONMENTAL</p> <ul style="list-style-type: none"> • Flooding and Sea Level Rising • Reduce greenhouse emissions 	<p>OPERATIONS</p> <ul style="list-style-type: none"> • Staffing and succession planning • Attracting and Retaining staff • Billing process • IT upgrades • Staying on top of new government regulations and their impact on BPW services • Asset management/GIS • Rate Study/Ready to Serve Fee 	<p>GROWTH</p> <ul style="list-style-type: none"> • Annexation process • Excess Capacity • Planning for impact of Lewes Planning Commission and Economic Development efforts – preparing for the future • Natural Gas – explore
<p>COMMUNICATION</p> <ul style="list-style-type: none"> • Community Education • Ready to Serve • Stormwater Expectation management • BMPs and Stormwater • Service/Maintenance/Upgrades • Planned outages • Road closures • Customer Service • Lead – notices and alignment with other agencies • Billings • Website 	<p>INFRASTRUCTURE</p> <ul style="list-style-type: none"> • Aging Water, Wastewater (I/I), and Electric Infrastructure • Stormwater Upgrades (MS4) • Tax Ditch • Redundancy: Electric, Water • Community Solar • Smart Grid, Smart Meter • Electric Vehicles • Infrastructure to support • Size of transformer on home, impact fee • Understanding and planning for future use – changing markets • Do we need regulations? • Future capacity • Feeder lines • Potential Development • Electric System • Complete evaluation of system – looking forward to needs/demands in next 20 years 	<p>COLLABORATION</p> <ul style="list-style-type: none"> • Building Relationships to foster cooperation • DEMEC • DELDOT • Board of Health • DNREC • City/Council • County Engineer’s Office • Sustainable Energy Utility • Chesapeake and other providers • Sussex Conservation District • Developers • Army Corps of Engineers • State and Federal Legislators

Focus Group Summary Table

Client Survey Results