CITY OF LABELLE COMPREHENSIVE PLAN UPDATE

Assessment Report/Plan Framework

September 10, 2026



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EXECUTIVE SUMMARY

The purpose of this Preliminary Assessment Report is to provide a comprehensive analysis of the existing City of LaBelle Comprehensive Plan. The following discussion establishes the foundation for the preliminary assessment and provides a series of observations and recommendations for subsequent amendments. This document is intended to start the conversation about possible changes to the Plan and not dictate or prescribe specific amendments or plan changes. Any subsequent amendments will require considerable vetting by the public, and the Board of Commissioners.



Source: Adobe Stock

The Comprehensive Plan ("Plan") is the long-range framework for the planning of activities that affect the built form – the City's "blueprint" for growth, guiding future decisions. It is the foundation upon which all land use decisions in the City are based.

The principles and strategies contained in the Plan are expressed through Goals, Objectives, and Policies (GOPs), which inform the City's decisions. The GOPs in the Plan ensure that the City is prepared to meet challenges today, and in the future.

The City's Plan should provide for sound land use planning from a long-term perspective. This includes the provision of public services and infrastructure to maintain and improve the City's natural and built environments and residents' quality of life. The Plan's alignment with the community's vision is critical as it provides the means by which to achieve its collective goals.

This Preliminary Assessment Report provides an analysis of changes in LaBelle since 2010 when the current Comprehensive Plan was adopted. The Plan has not been substantially updated since that time. It is noted that the City did update the Plan in 2010 and 2011 to reflect changes to the Capital Improvement Element and 5-year Capital Improvements Plan, as well as in 2021 to adopt the state-mandated Private Property Rights Element.

The preliminary assessment includes profiles of the City, population, education, economics, and housing. It reports on existing land use and summarizes any improvements or policy changes since the last Evaluation and Appraisal Report conducted in 2010.

Two significant supplementary documents are provided in this Preliminary Assessment that will help to shape later possible amendments: a State Consistency Review (Appendix A) and an "Element – by – Element" review (Appendix B) of the Comprehensive Plan to evaluate consistency with changes to Florida Statutes since the last update.

As a part of the assessment, the Consultant conducted a Community Workshop to solicit public input on the Comprehensive Plan Update. Feedback from the workshop informed additional

aspects of the Comprehensive Plan that must be reviewed to align with and implement the community's vision for their City.

This Preliminary Assessment Report concludes that: 1) the Comprehensive Plan must be amended to reflect changes in State requirements since the last update; 2) some policies are out of date and have been accomplished or should be re-directed to address current needs; and 3) trends and conditions in the LaBelle suggest updates to the Elements in order to strengthen the community vision for preservation of small-town charm and quality of life in historic LaBelle while balancing opportunities for growth within the 5,200+/-acre annexation area south of Helms Road known as "South LaBelle Village".

A summary of this report was presented to the Board of Commissioners in June 2025. Based on direction from the Board, updates to the Comprehensive Plan will be made in two stages. Stage 2 will include additional public workshops to refine the community vision.

Stage 1: Amendments for Consistency with State Statutes

Stage 2: Additional Amendments per Recommendations of this Report

Following final input and direction on the recommendations of this Report, the Consultant anticipates starting the process of amending the Comprehensive Plan. Both stages of amendments will include local review by the public, LaBelle City Staff, and the Board. Following review of the Board, the amendments are transmitted to the State for review. This includes the Florida Department of Commerce and other reviewing agencies such as the Department of Environmental Protection and the Department of Transportation. Upon receipt and addressing of state comments, the final step is formal adoption of the amendments through final public hearings.

Full implementation of an amended Plan would necessitate further changes to the City's Land Development Code (LDC).

BACKGROUND AND PLANNING CONTEXT

City Description

The City of LaBelle is located in southwest Florida within Hendry County, bordered by the Caloosahatchee River and proximate to the Fort Myers metropolitan area. LaBelle is known for its charming small-town atmosphere and serves as a hub of local commerce and culture. According to the Shimberg Center for Housing Studies, the current population estimate is 5,167 people.

LaBelle encompasses an area of about 3.2 square miles, with the scenic Caloosahatchee River running along its northern edge, which is a significant feature of the City. The river not only defines the northern boundary of LaBelle but also frames the historic downtown district and provides recreational opportunities and showcases the area's natural beauty. State Road 80 runs through the heart of LaBelle, acting as a vital corridor connecting the city to nearby areas and supporting its growth and accessibility.



Source: City of LaBelle

The City is the "county seat" of Hendry County and the only urban area near western Hendry County and southern Glades County. As such, LaBelle provides the commercial and economic base for an area that reaches far beyond the corporate limits of the City into surrounding unincorporated areas.

Two major state roads, SR 80 and SR 29, bisect LaBelle with their intersections forming the city center and gateway to the historical downtown district along Bridge Street. Both SR 80 and 29 are state-maintained arterials roads designated as Strategic Intermodal Systems (SIS) corridors. These roadways are the State's highest priority network of transportation facilities based upon their importance to the state's economy and mobility. SR 80 (Hickpochee Avenue) connects LaBelle to more heavily populated areas in Southeastern and Southwestern Florida (Fort Myers to West Palm Beach), while SR 29 connects travelers north and south from SR 27 to Everglades City.

The Florida Department of Transportation is conducting a PD&E Study relating to the expansion of SR 29, including that portion that bisects Downtown LaBelle and crosses the Caloosahatchee River via an existing bridge. Other improvements to SR 80 within the LaBelle city limits are also planned by FDOT.

The City has a distinctive small-town atmosphere due to its strong agricultural heritage. While active agriculture in the City is relatively limited today, with the exception of South LaBelle Village, development patterns within the City continue to be low density single-family neighborhoods, commercial uses flanking the SR 80 (Hickpochee Avenue), Cowboy Way and Main Street (SR 29) corridors, as well as industrial areas focused around the county-owned airport. The historical downtown core runs along Bridge Street, to the north of SR 80 and south of the Caloosahatchee River. As the neighboring coastal counties reach buildout, increasing growth pressures have resulted in development of multi-family uses on available infill sites throughout town, creating



Source: Adobe Stock

varying densities and associated compatibility concerns by neighbors in abutting, established single-family neighborhoods.

Through the 2050 long-range planning horizon adopted into this Comprehensive Plan Update the City will evaluate appropriate ranges of densities and intensities and their locations in relation to established residential areas, major transportation corridors, other public services and infrastructure to maintain LaBelle's small-town charm. The update will also address the framework to support high quality, local employment to ensure the City does not build out as a "bedroom" community of Fort Myers, and achieves a sustainable mix of land uses.

Adopted Comprehensive Plan Vision

The current Comprehensive Plan was adopted in 2010 and was based upon an Evaluation and Appraisal Report process conducted in 2008. While the Plan provides no explicit vision or mission statement, the Plan's Future Land Use Element provides the following context for the document as its first goal:

"Ensure that land uses and development are guided in a manner to produce sustained and planned growth within the capabilities of the natural, physical and human resources of the city."

Through the efforts that will be realized during this major undertaking, updates to the Vision and Mission may be appropriate, such as the inclusion of a formal, adopted Vision Statement to guide the entirety of the Comprehensive Plan based on the community's long-term vision. While the nature and character of the City may not have changed drastically, the new and unique outlooks of fresh leadership in the City provide for a timely opportunity to revisit previous decisions and outlay what the future holds.

Along with a strong future-centric vision, the recommendations of this Assessment outline the amendments needed to the Comprehensive Plan to ensure the City continues to thrive during its next 100 years. The following section reports on the changes that have occurred, both characteristically and legally in the City since the last Plan was adopted in 2010. The goal of this section is to highlight what areas of the Plan may need to be amended based on these changes since the last Plan was adopted in 2010.

CHANGED CONDITIONS SINCE PLAN ADOPTION

Background of Comprehensive Plan Updates

Florida Statutes require municipalities and counties to adopt and implement a local comprehensive plan to describe how they will provide the required services to meet the current and future needs of the community, while protecting the natural environment. A comprehensive plan is a policy document that is intended to provide a coordinated approach to making the many decisions regarding land use. For example, plans should guide decisions about the location of development, the expansion of urban services, the placement of community facilities, adaptation to climate change impacts, and more.

The City's current Comprehensive Plan was last updated in 2010. The 2010 Plan identified a planning timeframe for the next 25 years (until 2035). It is composed of 11 elements that each contain GOPs organized by topic area. Each element's GOPs are based upon data and analysis including demographics, infrastructure calculations, environmental data, and property information. The most recent Element to be adopted by the City is the Private Property Rights Element, which was required to be created as a result of changes to Florida Statute 163.3177(6)(i)(2).

The City's Plan also contains a map series that generally describes existing or future conditions related to the elements. One of the most important maps is the City's Future Land Use Map (FLUM), which depicts future land use designations that specify what general range of uses are allowed on each property. The FLUM is implemented through the Zoning Map and the LDC.



Source: Adobe Stock

Local comprehensive plans in Florida are required to meet a number of requirements, in particular Chapter 163.3177, F.S. The statutes require that comprehensive plans provide the principles, guidelines, standards, and strategies for the orderly and balanced future economic, social, physical, environmental, and fiscal development of the area.

Chapter 163.3177, F.S. also requires that comprehensive plans identify procedures for monitoring, evaluating, and appraising the implementation of the plan. Historically, this process was known as the Evaluation and Appraisal Report, or "EAR". Statutes require the EAR to be conducted every seven years by a jurisdiction to ensure the adopted GOPs are still relevant and appropriate. LaBelle last conducted a full EAR in 2010.

Effective June 2, 2011, local governments have more discretion in determining whether they need to update their local comprehensive plan. As such, local governments no longer need to submit EARs to the Florida Commerce for a sufficiency determination. Instead, local governments may undertake an update outside the EAR process and transmit the new adopted plan as a city-initiated amendment, or amendments.

Preliminary Assessment Process: Purpose and Outcomes

The first step in the process of updating the Comprehensive Plan is assessing the current GOPs in relation to local changes, as well as changes at the state-level. In the process of updating the Comprehensive Plan, the City of LaBelle identified the following major goals:

- Identify changes in state requirements that necessitate changes in the Plan.
- Identify changing conditions and trends affecting the community that should be reflected in the Comprehensive Plan, including development and redevelopment, community character, resiliency, economic development, and environmental considerations.
- Conduct a review of implementation of the existing Comprehensive Plan and the degree to which plan objectives have been achieved.
- Assess successes and shortcomings of the plan.
- Vacant Land Availability/Build Out Analysis and Annexation Strategies.
- Understand the current and future demographic mix and how it may impact strategic decisions determined by the Comprehensive Plan.

Stage 1: Amendments for Consistency with State Statutes

Following the issuance of this Assessment Report the Board of Commissioners will provide recommendations and direction to begin the Plan update process, including the drafting of updated elements, and their respective GOPs to comply with State Statutes. These amendments will be transmitted to Florida Commerce and applicable state agencies under the State's Expedited Review Process. Following comments from the State, the City Council may then conduct final adoption hearings to ratify the amendments.

Stage 2: Additional Amendments per Recommendations of this Report

Following Stage 1, additional amendments related to implementing the vision and goals of the community will be drafted. This process will include additional meetings with the public, strategic stakeholders, City Staff and Elected Officials to refine the vision and solutions. Stage 2 will have to go through the same process as detailed above for adoption, including review by the Board of Commissioners, transmittal to the State for review and final adoption.

Full implementation of the amended Comprehensive Plan will require amendments to the City's LDC. Figure 1: The Comprehensive Plan Update Anticipated Timeline, graphically represents this process.

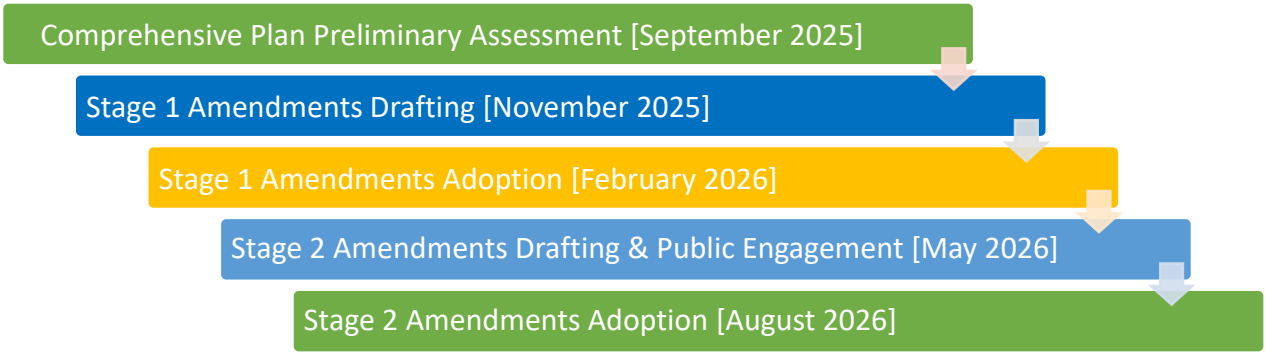


Figure 1: The Comprehensive Plan Update Anticipated Timeline

The next section presents data that the City can use as part of its Plan update and will provide context for some of the recommendations and observations that appear later in this Report.

LaBelle's Demographic Profile

There are several population-related changes that will need to be considered by the City in planning growth through 2050. In general, Southwest Florida has been a rapidly growing region for decades. The impact of that population growth is far reaching from community characteristics and housing availability to public infrastructure needs. The following datasets detail the overall demographics of the permanent population in the City of LaBelle.

The following estimates are generated from the Shimberg Center for Housing Studies and is based on 2020 U.S. Census data and population projections by the Bureau of Economic and Business Research (BEBR) at the University of Florida. [1] [2] [3] Shimberg and BEBR both provide data on the permanent population. Shimberg focuses on municipalities, while BEBR typically provides estimates at the county level.

Projected Population Growth and Implications for Housing

The projected population from 2025 to 2050 is expected to go from 5,167 to 5,918, a 14.5% increase.

Table 1: Permanent Population Estimates

Year	2010	2020	2025	2030	2035	2040	2045	2050
Permanent Population	4,640	4,966	5,167	5,360	5,527	5,678	5,797	5,918

Based on population projections, the City is expected to grow from the current 2025 estimate of 5,167 to 5,918 by 2050, an increase of 751 residents (+/- 14.5%). Assuming 2.84[4] Persons per Household, the growth of 751 residents may imply that an additional 264 housing units may be needed to accommodate the growth of permanent residents. This is a modest housing need, that would likely be met if vacant lands in the City are developed. It is important to note that population projections are based on the current trends in population growth, and do not capture trends that may occur based on specific events. For example, South LaBelle Village represents significant land in the City that is currently vacant. If such lands were to be developed, there would be a sharp increase in population not reflected in the current projections. LaBelle's infrastructure should be planned anticipating an increase beyond that shown in the population projections.

Population Age

The age of the population may also impact the decisions made by the City as the amendments move forward. According to the analysis provided in Table 2 below, based on data from the

[1] Shimberg manages the Florida Housing Data Clearinghouse and provides population estimates for household projections at the sub-county (e.g., municipal) level, while BEBR generally provides population estimates at the county level.

[2] For more information about the BEBR methodology to estimate population, please see: https://bebr.ufl.edu/articles_publication/behind-the-numbers-the-population-estimation-process/

[3] The data used for this analysis appears is available through the Florida Housing Data Clearinghouse managed by the Shimberg Center. Please see: http://flhousingdata.shimberg.ufl.edu/population-and-household-projections/results?nid=4812

[4] The U.S. Census Quick Facts estimates 2.84 Persons per Household for the City of LaBelle. These estimates may vary based on the availability of information from the Census. For more information, please see: https://www.census.gov/quickfacts/fact/table/labellecityflorida/PST045224 .

Shimberg Center for Housing Studies, the distribution between age cohorts is expected to remain relatively steady over time until 2050. Over 80% of the City's population is and will be under 65 years old, representing a generally younger population than the State and surrounding areas. Further, almost 50% of the population is in their prime working age between 25-64 years old. These dynamics provide opportunities for growth of local business and employment base due to available workforce, but also generates demand for diverse, workforce housing.

Table 2: Population as Percent of Total

Age / Year	2010	2025	2030	2040	2050
0-24	36%	37%	37%	36%	36%
25-64	45%	45%	45%	46%	45%
65 and older	19%	18%	18%	18%	18%

Housing Characteristics

The Shimberg Center for Housing Studies also provides estimates for housing conditions in Florida's communities. Based on the U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates, Shimberg calculates the tenure and age of householders. In this estimate, home ownership in LaBelle is at 70% on average with 477 rental units in the City. This is significant and a relatively unique metric, demonstrating very high level of stability for LaBelle neighborhoods and minimal transient residents. This metric also indicates limitations on affordability, as the vast majority of new residents must be financially able to purchase a home.



Source: Google Maps

Table 3: Home Ownership by Age 2023 Estimate [5]

Age of Householder	Owners	Margin of Error (+/-)	Renters	Margin of Error (+/-)	Homeownership Rate
15-34	114	105	109	123	51%
35-54	463	223	125	87	79%
55-64	154	124	50	39	75%
65 and older	370	142	193	114	66%
Total	**1101**	**217**	**477**	**159**	**70%**

[5] See: http://flhousingdata.shimberg.ufl.edu/population-and-household-projections/results?nid=2509

The housing units by type according to the Shimberg Center for Housing Studies appears in **Error! Reference source not found.** below [6]. It is also significant that 64% of the housing stock i s single-family detached dwelling types. This inherently limits affordability.

Table 4: Housing Units by Type, 2019-2023 5-Year Estimates

Single-Family (1 att./detach.)	Multi-family (2 or more)	Mobile Homes	Other	Total
1,301 (64%)	153 (7%)	572 (28%)	-	2,026

Other notable statistics for housing may be important as the City develops its amendments:

- The overall home ownership rate in 2019-2023 was 73%, which decreased from 82% in the year 1990.[7]
- The median gross rent in LaBelle is $1,375 per month.
- The median monthly owner costs with a mortgage is $1,084 per month.[8]
- While monthly rents and mortgage are lower than the national average, on average residents pay more than 30% towards housing costs
- There are trends of affordability in the home ownership market, but not in the rental housing market in LaBelle.
    - Approximately 237 renter households pay more than 50% of their gross income on rent, 269 pay between 30.1-50% and 187 pay 30% or less of their gross income on rent. (Cost Burden by Income for Renter Households)
    - Approximately 159 of owner households pay more than 30% for housing and approximately 788 owner households pay less than 30% (Cost Burden by Income for Owner-Occupied Households)

[6] All estimates provided by Shimberg Center for Housing Studies analysis of the 2018 American Community Survey. See: http://flhousingdata.shimberg.ufl.edu/comprehensive-plan-data/results?nid=2509
[7] All estimates provided by Shimberg Center for Housing Studies analysis of the 2018 American Community Survey. See: http://flhousingdata.shimberg.ufl.edu/affordability/results?nid=2509
[8] From the U.S. Census Quick Facts for LaBelle. See: https://www.census.gov/quickfacts/fact/table/labellecityflorida/LFE041223

Economic Characteristics



Source: Adobe Stock

The U.S. Census provides information using a 5-Year Estimation process between census years. The most recent 2019-2023 estimations show that the median household income in LaBelle was $49,385[9]. This is considerably less than the median income of $78,538 in the U.S. and lesser than the median income of $53,044 in Hendry County. There are 22.6% persons in poverty in LaBelle, as compared to 11.1% nationally, 22.1% in Hendry County, and 10.7% in City of Clewiston. While household income in LaBelle is relatively low compared to the national average, the high percentage of home ownership, as well as median rent and mortgage costs indicate affordability in housing as well as living costs. These dynamics also demonstrate the need to attract new industry to the City to create high paying employment opportunities and replace jobs lost through the steady decline of agriculture, formerly the area's most significant employment base.

Education Characteristics

For LaBelle, the U.S. Census estimates that 64.6% of the population over 25 years of age are high school graduates, while 14.2% also have a Bachelor's degree or higher. This is significantly lower than the United States education rate of 89.4% of the population over 25 years of age having obtained a high school degree and 35% who have achieved a Bachelor's degree or higher. In the City of Clewiston, 71.5% of the population over 25 years of age have obtained a high school degree and 16.3% have achieved a Bachelor's degree or higher.

In summary, LaBelle is experiencing steady population growth and modest demographic shifts. The City has a high percentage of young and workforce aged population. While the city has high homeownership rates and stable neighborhoods, limited availability of rental units and a predominantly single-family housing stock may present some affordability challenges over time. Additionally, median income and education levels in LaBelle are lower relative to national averages and neighboring areas, highlighting the need for targeted housing and economic development strategies to support a diverse and economically stable community in the future.

Existing Land Use, Development Potential, and Annexations

Existing Land Use

The Future Land Use Element within the Plan identifies the types, densities and intensities of various land uses in the City of LaBelle, and specifies where these land uses are permitted within the City's 25-year planning horizon.[10] The Future Land Use Map and supportive Future Land Use Goals, Objectives & Policies provide the framework for implementing the City's Zoning Map and

[9] See: https://www.census.gov/quickfacts/fact/table/US,labellecityflorida/LFE041223
[10] The 2010 Comprehensive Plan planning horizon was to end in 2035.

the LDC.[11] The LDC provide the details of specific allowable uses for each parcel of land within the City, along with the form of allowable development based upon setbacks, maximum building height, lot coverage, and other spatial elements. The result of the Future Land Use Map and Zoning Maps is realized through the built form of LaBelle.

Error! Reference source not found. below summarizes the distribution of the adopted future l and use categories based on the Future Land Use Map data as of June 2025. The table indicates the largest land use allocation within South LaBelle Community designation, representing approximately 5,209 acres, or 55.8%, of the City's total acreage. Public is the next largest future land use represented on the City's Map with 934 acres or 10% of the total land area, due largely to the C-43 reservoir owned by the South Florida Water Management District in the southeast portion of the City and the LaBelle Municipal Airport, owned and operated by Henry County By contrast, the Residential category only represents 750 acres, or 8%.

Table 5: Total Land Area by Future Land Use

Total Land Area by Future Land Use		
Future Land Use Category	**Total Acreage**	**% of Total Land Area**
Commercial	273	2.9%
Downtown District	52	0.56%
Employment Village	754	8.2%
Old Grove Subdistrict	333	3.6%
Industrial	258	2.8%
Outlying Mixed Use	664	7.2%
Public	935	10.1%
Residential	752	8.4%
South LaBelle Community	5,209	56.4%
TOTAL	**9,230 Acres**	**100%**

Development Potential via Vacant Land

An additional analysis was conducted on vacant lands in the City. Table 6 below provides a breakdown of vacant acreage and density potential within each future land use designation. The table correlates the vacant lands to the potential density of its assigned Future Land Use designation.

This analysis indicates there are approximately 6,757+/-acres of vacant lands within the City boundaries representing approximately 73% of the land area. In effect, the City is not built out and has an abundance of land available for new development.

The South LaBelle Community future land use designation contains approximately 5,209 vacant acres or 56.4% of the available vacant lands. These lands are designated for a mix of housing, employment, education, recreational and civic uses that is intended to accommodate the anticipated growth within Western Hendry County.

The collection of parcels of the South LaBelle Community has multiple owners, but given its size, has the highest level of development potential of all vacant land in the City. Given its existing Future Land Use designation of South LaBelle Community, in its current state, the maximum residential development potential in terms of dwelling units per acre ranges from 2.5 du/acre up

[11] Land development regulations are documented in the City's Land Development Code (LDC).

to 15 du/acre per the Comprehensive Plan. However, additional land use and engineering analysis would be required to best understand the true potential of the parcel.

It is evident that the City has a significant amount of land for new development and the trends over the next 25-year planning horizon suggest a focus on development of these lands. While annexation strategies are not essential to meet the projected housing demand, it can be considered strategically in order to continue to stimulate tax base growth for the City, particularly where the City serves unincorporated areas with potable water and sanitary sewer.

Table 6: Vacant Land by Future Land Use

Vacant Land by Future Land Use				
Future Land Use Category	**Maximum Allowable Density**	**Vacant Acres**	**% of Total Land Area**	**Estimated Remaining Unit Potential***
Commercial	N/A	117	1.2%	0
Downtown District	18 du/acre	11	0.11%	198
Employment Village	3 du/acre	385	4.2%	1,155
Industrial	N/A	116	1.2%	0
Old Groves Mixed Use	4 du/acre	333	3.6%	400
Outlying Mixed Use	16 du/acre	437	4.7%	6,992
Public	N/A	6	0.06%	0
Residential	3 du/acre	143	1.5%	429
South LaBelle Community	Ranges from 2.5 du/acre to 15 du/acre	5,209	56.4%	5,280-15,840**
TOTAL		**6,757 Acres**	**73%**	**14,454 – 25,014 DU**

* For mixed use districts, 30% residential development is assumed.
** Density potential for South LaBelle is provided as a range, as this large land area can have a substantial impact on availability of land/development potential of the City. Minimum and maximum unit potential are based on standards in Policy 1.3.9.1 of the current Comprehensive Plan.

Annexations

Since adoption of the 2010 Comprehensive Plan, LaBelle has approved ten (10) voluntary annexations adding roughly 175 acres to the city limits, most of them small infill parcels fronting State Road 80. These tracts range from the 1.9-acre RaceTrac site at the western gateway (2024-01) and several sub-5-acre commercial or residential pads (O'Reilly Auto Parts, Ridgdill, Whidden, Bedolla Rentals, KMJ, and 1240 W. Cowboy Way) to larger strategic additions such as the 12.96-acre FPL sub-station yard (2015-12) and the ±37-acre LaBelle Fruit Company cold-storage/light-industrial site (2023-23).

By incorporating parcels that already connect to municipal water, sewer, and emergency services, the City of LaBelle broadens its tax base without costly utility extensions into undeveloped

hinterlands. Bringing highway-oriented retail, light-industrial, and mixed-use infill properties under city zoning gives LaBelle direct control over design standards, SR 80 access management, and neighborhood compatibility. Annexation also eliminates enclaves that complicate policing, code enforcement, and storm-water planning, allowing uniform levels of service and better positioning the City for infrastructure grants tied to municipal boundaries. The annexations collectively aim to diversify the tax base with while providing necessary development to the residents of the City of LaBelle.

Annexations since 2010:

- Area Housing of Clewiston - 52.2+/- Acres
- Florida Power & Light - 12.96+/- Acres
- O'Reilly Automotive - 1.42+/- Acres
- Halo Real Estate Holding - 0.9+/- Acres
- Bedolla Rentals - 0.5+/- Acres
- KMJ Investments Group - 2.0+/- Acres
- Ridgdill - 30.0 +/- Acres
- Whidden Helms - 0.11+/- Acres
- LaBelle Fruit Company - 64.67+/- Acres
- Racetrac - 9.73+/- Acres
- Residences at Grand Paks 26+/-acres

Infrastructure Analysis & Capital Improvements

Previously, 163.3177, F.S. required that cities annually update their Capital Improvements Element (CIE) and Five-Year Schedule of Capital Improvements. However, Chapter 163.3177 was modified in two important ways upon passing of the 2011 Community Planning Act.[12]

First, Section 163.3117(3)(a)(4) previously required that the capital improvements element cover a 5-year period and identify whether projects were funded or unfunded and be accompanied by a priority. This section of Florida Statutes no longer requires the demonstration of financial feasibility.

Second, Section 163.3177(3)(b) modifies the requirements for local governments to annually review the capital improvements element. The City is no longer required to transmit the adopted amendment to the state land planning agency, adopt a long-term concurrency management system, or to address financial feasibility.

Water & Sewer[13,14]

The City owns and maintains both water and wastewater facilities servicing the City and surrounding areas of unincorporated Hendry County. The facilities are operated by Woodard & Curran. The City of LaBelle Public Works Department has set a goal to provide water treatment and distribution, as well as wastewater treatment that meets the health and safety of the community. To this end, the City commissioned Four Waters Engineering, Inc. (4Waters) to

[12] The Community Planning Act was pursuant to House Bill 7202.
[13] The City of LaBelle 2023 Water Master Plan
[14] The City of LaBelle 2023 Sewer Master Plan

prepare Water and Sewer Master Plans to assess the status of the existing system and to plan for capital improvements that meet the current and projected service area needs. The plans will ensure the current level of service is being met and projected service needs are identified. The Master Plans were completed and published in 2023.

The Water Master Plan notes that the City has not been able to provide public water to all developed areas within the service area. Approximately 10% of City residents utilize private wells. Similarly, central sewer service is not available throughout the City. The Sewer Master Plan estimates that there are approximately 300 private septic systems in the City. The City is working to convert private well and septic systems to centralized water and sewer, actively seeking and winning grant funds for the same. The requirements to evaluate the septic conversion feasibility per Section 163.3177(6)(c)3, F.S. do not apply as the City is a designated Rural Area of Opportunity under Section 288.0656, F.S.

The Master Plans, indicate that both the existing sewer and water systems are effectively operated and in relatively good condition. Limited concerns were identified such as significant corrosion on discharging piping, a need for increased hydraulic capacity and required electoral upgrades. City staff is aware of this and is actively engaging in efforts to address the concerns and conditions of the pipes.

It is important to note that the City in conjunction with Hendry County and a private developer extended existing water and sewer lines approximately +/- 7 miles to the Lee County line. Both the City and Hendry County are anticipating heavy growth along the SR 80 corridor in the next 25 years, and the current systems are at capacity. In addition to the utility line extension, the City of LaBelle Public Works Department will be developing a new treatment plant that is anticipated to be built within 36-48 months.

Table 8 and 9 below represent the City's 25-year projected water and wastewater demands. The demands were projected using Lee County's LOS standards. The City's current LOS standards in the Comprehensive Plan are dated and so, Lee County's LOS standards provide a comparable alternative for accurately projecting demand based.

Table 8: Potable Water Level of Service and Capacity

	Potable Water LOS				
	2025 Est. # of Households*	**LOS Standard**	**LOS Needed 2025**	**2050 Est. # of Households***	**LOS Needed 2050**
Residential	1,819	250/GPD/ERU	454,750 GPD	2,084	521,000 GPD

* # of Households are calculated using population projections and assuming 2.84 persons per household

Table 9: Wastewater Level of Service and Capacity

	Wastewater LOS				
	2025 Est. # of Households*	**LOS Standard**	**LOS Needed 2025**	**2050 Est. # of Households***	**LOS Needed 2050**
Residential	1,819	200/GPD/ERU	363,800 GPD	2,084	416,800 GPD

* # of Households are calculated using population projections and assuming 2.84 persons per household

Stormwater

The current LOS for all new drainage systems are as follows: Historic discharge for a storm of 25-year frequency and 3-day duration

All retention/detention facilities shall retain either the first 1 inch of runoff from the entire site or the runoff from 2.5 inches of rainfall from the impervious areas, whichever is greater, and comply with the rules from Florida Department of Environmental Regulation, the South Florida Water Management District (SFWMD), and other agencies per the Land Development Code.

Solid Waste

The City of LaBelle utilizes Waste Connections as the sole provider of solid waste, yard waste, and recycling pick up. The Lee/Hendry Transfer station, located at 1280 Forestry Division Road in LaBelle, is the primary facility for waste disposal in the area which is then transferred to the Lee/Hendry Regional Solid Waste Disposal Facility. The Lee/Hendry Regional Solid Waste Disposal Facility further serves the City at the landfill operated by Lee County located at 5500 S. Church Road in Felda. The facility has a total capacity of approximately 9 million gallons, including a 38-acre Class I (MSW) disposal area, a 36-acre Ash Monofill, and a 25-acre Class III (construction and demolition debris) area. The facility also has a waste-to-energy plant with a capacity of around 610,000 tons annually, and a recycling program with a capacity of 150,000 tons annually.

The City's current adopted LOS for solid waste is 3.5 pounds per person per day.

Parks & Recreation

Due to the generally rural nature of Hendry County, the City of LaBelle and Hendry County provide joint recreational facilities on a county-wide basis to serve the population bases oriented around the cities of LaBelle and Clewiston. The Hendry-LaBelle Recreation Board consisting of representatives from the County Commission, the City of LaBelle and the Hendry County School Board oversee existing and future facilities and their needs.



Source: Adobe Stock

The City has four (4) total parks within the municipal boundary, one of which is a smaller facility referred to as a “neighborhood park”. Generally, a neighborhood park is created with the specific interests and needs of the contiguous community – that is, the nearby individuals and families, in this case the Kid Jones Park. The remaining parks are classified as “Community Parks”, serving a larger population in LaBelle.

Objective 8.5 of the Capital Improvements Element

establishes a LOS standard of half an acre to 10 acres per 1,000 persons depending on park classification. The LOS standard for park facilities can be found below.

- Pocket Park/Tot Lots: 0.5 acre/1,000
- Neighborhood Parks: 1-2 acre/1,000
- Community Parks: 5-8 acre/1,000
- City Parks: 5-10 acre/1,000

Based on the 2050 population estimate of 5,918, the LOS standards prescribes 2.9 acres of pocket park/tot lots, 11.8 acres of neighborhood parks, 47.3 acres of community parks and 59.2 acres of city parks. This totals 121.2 acres of parks needed. Currently there are 243.26 +/- acres in the City. While the existing park acreage exceeds the LOS standards as a total, park distribution should be further analyzed as one park (LaBelle Sports Complex) accounts for 237 acres (97%) of total park acreage. The current LOS standards in the Plan are nuanced but difficult to implement and ensure city-wide accountability. A more streamlined LOS standard is recommended.

Table 10: Parks and Recreation Facilities Inventory

Park Name	Park Type	Approximate Acreage
1. Alton "Kid" Jones Park	Active Park	3 AC
2. Joe Culliver Park	Active Park	0.26 AC
3. LaBelle Sports Complex	Active Park	237 AC
4. Barron Park	Active Park	3 AC
	Total Acreage	**243.26 ACRES**

Table 11: Boat Ramp Inventory

Boat Ramp	Acreage
1. LaBelle Boat Dock	0.16 acres
Total Acreage	**0.16 acres**

Transportation

Objective 8.5 adopts the following LOS for County, State and local roadway facilities that are in and adjacent to LaBelle as follows:

Table 12: Adopted Roadway LOS

Roadway	Classification	LOS
State Road 80	Major Arterial	C
State Road 29	Major Arterial	C*
County Road 80A	Major Arterial	C*
All other streets within the City limits	Local Street	D

* Policy 2.1.1 notes level of service for SR 29 and CR 80A as D, in conflict with Objective 8.5. Such inconsistencies will have to be remedied as a part of the update.

Schools

Since the 2010 Comprehensive Plan was adopted, Florida Statutes no longer requires local comprehensive plans to include a Public School Facilities Element and maintain an adopted Level of Service for these facilities. The current Comprehensive Plan adopted a Public School facilities element with the goal to collaborate and coordinate with the Hendry County School Board to ensure high quality public school, which meet the needs of Hendry County's existing and future population. These provisions are no longer required by the State of Florida.

The City of LaBelle works jointly via an interlocal agreement with Hendry County and the School Board to address adequacy of school facilities.

The City of LaBelle is serviced by the following public schools through the Interlocal Agreement:

Table 14: Public Schools serving LaBelle

Grade Level	School	Location*
Elementary	LaBelle Elementary School Upthegrove Elementary	150 Cowboy Way, LaBelle, FL 33935 218 Main Street, LaBelle, FL 33935
Middle	LaBelle Middle School	8000 E. Cowboy Way, LaBelle, FL 33935
High**	LaBelle High School	4050 E. Cowboy Way, LaBelle, FL 33935

*Dependent on school capacity, residents may not be limited to the schools that are located within their specific zone. Adjacent Concurrency Service Areas may have capacity which allows for students to attend other schools within the zone.

**The School District has acquired 40+/-acres of land on Helms Road in the City to build a new high school, with construction planned for 2026-2028. The existing LaBelle High School will be repurposed as a middle school to accommodate student demands.

Table 15: Public Schools Enrollment[15]

School	Total Enrollment By Student	Total Capacity By Student (FISH Capacity)	Available Capacity by Student
LaBelle Elementary School	696	696	0
Upthegrove Elementary	659	659	0
LaBelle Middle School	1,070	963	-107
LaBelle High School	1,647	1,564	-83

Additional schools will be needed, or expansions to existing schools to manage the long-term needs of the growing population in LaBelle and neighboring municipalities and unincorporated areas.

[15] Hendry County School District 2023-2024 Work Plan: https://www.fldoe.org/core/fileparse.php/9948/urlt/HENDRY2024.pdf

SUMMARY OF PUBLIC OUTREACH APPROACH

Due to the impact of a comprehensive plan on citizens, public outreach is a key component of a community planning process. A comprehensive plan has broad influence that touches all aspects of the community, from aesthetics and the character of existing neighborhoods, to planning for new growth and development.

City of LaBelle's Commissioners have further emphasized the importance of community engagement in this Comprehensive Plan assessment and update process throughout the project scope. The scope calls for a coordinated and transparent outreach program that includes community meetings, strategic stakeholder meetings and other avenues of obtaining public input to arrive at a final product.

The process was structured to ensure early and continuous public involvement throughout the life cycle of the project. The following is a summary of the public outreach strategies utilized for preparation of this assessment and the forthcoming Comprehensive Plan amendments.

- ✓ City Council "Kick-Off" Workshop
- ✓ Community Workshops
- ✓ City Council Workshop to present Preliminary Assessment Report
- ✓ Public Hearings for Transmittal & Adoption

Community Workshop

An initial community workshop was conducted on May 1, 2025, at the Civil Center located at 481 W Hickpochee Ave, LaBelle, FL 33935. This workshop was well attended by City Commissioners, City staff and members of the general public. A summary of the public input process is included as Appendix C.

During Stage 2 of the process, the Consultant Team will conduct additional broadly advertised community workshops to have conversations with the community and ask direct questions that will guide updates to the Comprehensive Plan Vision and implementing GOPs.

Public Hearings

Following publication of this Preliminary Assessment Report, and drafting of amendments for each stage, additional publicly advertised hearings will occur to allow for additional public comment and feedback on the proposed amendments.

COMPREHENSIVE PLAN ELEMENT REVIEW

This Element Review section includes a comprehensive examination of all of the existing GOPs of each Element of the Comprehensive Plan ("Plan"). The purpose of this review is to determine the continued applicability of the Plan's goals, objectives and policies as they relate to the City's vision, stated priorities, and compliance with Florida Statutes. The following section also inventories amendments adopted to the Plan since 2010 as well as annexations.

Subsequent to adoption of the 2010 Comprehensive Plan, there have been significant changes to Florida Statutes that have resulted in a "deregulation", or pre-emption, of compliance requirements and significant changes to how local governments can handle concurrency, or the timing of infrastructure to serve existing and future development.

The state-mandated or "state consistency" review subsection under each Element below is a summary of the Comprehensive Plan changes required for compliance with Section §163.3191(2)(f), Florida Statutes. This Section is supplemented by the State Consistency Review and Policy-by-Policy review that appears later in this Report.

The majority of recommendations below relate to "general" amendments that would be required to align the Plan with the public input received and the strategic priorities identified by the Board. This includes priorities relating to the protection of Labelle's small-town character while planning for increased attainable residential development and economic development.

Plan Changes Since 2010 Adoption

To understand the processing of Comprehensive Plan changes since the last adopted Comprehensive Plan of LaBelle, the following analysis documents changes that have been made since 2010. This analysis will help guide the update process and provides key indicators on where revisions are needed to address changing conditions.

Comprehensive Plan Amendments

Since adoption of the Current Comprehensive Plan, there have been multiple amendments to the Plan over the years, as detailed in Table 18 below.

Table 18: Comprehensive Plan Amendments Since 2010

Ordinance No.	Summary
Ordinance 2011-05	Adopting amendments and revisions to the Comprehensive Plan as recommended by the 2010 EAR
Ordinance 2013-14	Adopting amendments to support aviation safety and land use compatibility with the LaBelle Municipal airport
Ordinance 2013-16	Adopting a revised FLU map adding a 52.2 acre property to the City with a Residential FLU category designation
Ordinance 2014-04	Adopting the 2014 update to the LaBelle Water Supply Work Plan and amending related policies
Ordinance 2015-03	Adopting changes to policies for South LaBelle Community

Ordinance 2015-04	Adopting a revised FLU map amending the FLU designation for a City-owned property from Public Services to Outlying Mixed-Use
Ordinance 2017-05	Adopting Large-Scale amendment to allow for multi-family housing under specific density provisions to make to economically feasible
Ordinance 2018-07	Amending the GOPs of the South LaBelle Community Category
Ordinance 2019-11	Amending the GOPs of the Outlying Mixed-Use Category to include neighborhood protection and compatibility
Ordinance 2019-21	Adopting the 2019 Water Supply Facilities Work Plan
Ordinance 2020-05	Adopting a FLU amendment for a private property
Ordinance 2021-13	Adoption of the Private Property Rights Element
Ordinance 2022-08	Amending the density provisions for the Outlying Mixed-Use Category
Ordinance 2022-02	Adoption of the Employment Village Old Groves Mixed Use Subdistrict

Annexations

Since adoption of the current Comprehensive Plan in 2010, there have been 10 annexations of land into the City totaling 200.49 acres:

Annexations since 2010:

- Area Housing of Clewiston 52.2+/- Acres
- Florida Power & Light 12.96+/- Acres
- O'Reilly Automotive 1.42+/- Acres
- Halo Real Estate Holding 0.9+/- Acres
- Bedolla Rentals 0.5+/- Acres
- KMJ Investments Group 2.0+/- Acres
- Ridgdill 30.0 +/- Acres
- Whidden Helms 0.11+/- Acres
- LaBelle Fruit Company 64.67+/- Acres
- Racetrac 9.73+/- Acres
- Residences at Grand Paks 26+/-acres

Currently, the City considers annexation requests from property owners who wish to voluntarily become part of the city and whose properties are contiguous to existing city limits. The City may also consider strategic annexation initiatives that may increase the tax-base. It is recommended that further analysis be done to better understand the financial impacts to the City and its delivery of services prior to annexing additional lands.

Element-By-Element Review

The following section provides a review of each Element of the Comprehensive Plan and summarizes the overall analysis that is detailed in Appendix B. Each section is generally organized into three (3) parts: Key recommendations to consider, State-consistency amendments, and General amendments. The Definitions and the Map Series included in the Comprehensive Plan will also need to be updated to be consistent with State Statutes and current conditions. The state-mandated or state-consistency amendments listed under each Element below is a summary of the Comprehensive Plan changes **required** for compliance with Section 163.3191(2)(f), F.S. A review of all changes in statutory requirements since 2010 related to community planning is included in Appendix A.

Note that all proposed amendments are in their initial stages. Please note, during the amendment process, additional changes to Elements may be required/warranted. This is intended as a preliminary "road map" of the major statutory changes required and not an exhaustive list.

Overall Observations
The following are overarching observations relating to the Plan as a whole:

- The planning horizon should be extended to **2050** to comply with the State law's minimum 20-year horizon.
- A Vision Statement should be included in the introduction of the Plan to frame the Elements.
- The data and analysis comprising the first 30+ pages of the Comprehensive Plan should be updated (via this Assessment) and relocated to a separate document or appendix.
- While projections show a modest increase in population by 2050, development of South LaBelle could cause sharp additional population growth.
- The Comprehensive Plan may be branded via its name to reinforce its overarching goal.
- Provisions for protection of community character and historic neighborhoods should be introduced to ensure that new development is aligned with the community's vision.
- Density and intensity allowances within the community must be evaluated, as the current allowances are not aligned with the community's vision, nor implemented in practice.
- Housing affordability is a key matter of interest, and the blueprint for achieving housing affordability should be introduced into the Comprehensive Plan.
- Broad goals and direction for future annexations should be considered.
- Economic development should be further incentivized so the City's residents may live, work, and play locally, resulting in a diversified tax base.
- Transportation policies related to complete streets should be strengthened in order to promote such investment within the City's neighborhoods. Partnerships will be required due to jurisdictional and ownership boundaries of certain roadways within the City.
- Statutory changes, especially as they relate to concurrency should be reflected.

Future Land Use Element

- **Key Recommendations**

- Create a new, broader and complete Future Land Use Element Goal to address all aspects relating to land use and quality of life, highlighting goals of enhancing work and recreational opportunities for residents within the City.
- Review density/intensity allowances under all future land use categories to align with the community's vision:
    - Create a comprehensive table that more succinctly details the maximum densities and intensities allowed in each future land use category and which zoning districts comply with the respective future land use categories.
    - Review policies that require densification of the historic Downtown and how it relates to compatibility and preservation of community character.
    - Allow for vesting of higher densities than the future land use allowance when permitted under existing zoning to reduce conflicts.
    - Define how density and intensity for mixed use projects are calculated.
    - Consider removal of use thresholds Citywide within the Employment Village Category, as implementation is typically difficult based on land ownership. Consider incentives to maintain the desired mix of land uses.
    - Consider removal of the Agriculture Use Category as there are no lands under this designation.
- Expand Goals, Objectives and Policies in the Future Land Use Element to account for large vacant land opportunities in South LaBelle.
- Integrate the Future Land Use Element with Infrastructure, Transportation and Housing Elements through additional policies.
- Add goals and framework to guide annexations into the City.

- **State Consistency Amendments**
    - Specify ranges of density/intensity permitted in different future land use categories based on gross acreage.
    - Require/reinforce that future land use amendments be consistent with the requirements in Section 163.3177(6)(a), F.S.
    - Update future land use map boundaries as needed to accommodate projected population growth.
    - Update any provisions related to transportation concurrency, consistent with State laws.
    - Modify/remove any residential design standards for single-family and two-family dwelling types.
    - Modify policy references to impact fees, development agreements for clarifications based on State law.

- **General Amendments**
    - Review key resources and amenities of the community to provide more specificity in compatibility- and protection-related policies.
    - Consider moving detailed development requirements to the LDC, unless maintaining such regulations in the Comprehensive Plan would engender additional protections of community character.

- Remove or revise policies that had timelines/deadlines that have expired or references to other plans that are no longer relevant/active.
- Provide cross-references to policy language that is repeated in other Elements to create clear connections.
- Strengthen linkage between land use and community resiliency.
- Make clear which future land use categories permit public schools.
- Consider provisions for allowances of Accessory Dwelling Units (ADUs) to enhance affordability.
- Consider review of future land use designations, and additions of protections for commercial/industrial lands based on impacts of the Live Local Act (LLA).

Traffic Circulation Element

- **Key Recommendations**
  - Consider renaming Element to “Mobility Element” to broaden applicability to multi-modal transportation facilities, emphasize bicycle-pedestrian forms of transportation to the same degree as automobiles, and allow for consistency with State statute directives.
  - Update overall Goal to explicitly note a commitment to complete streets across the City.
  - Strengthen and improve coordination between land use and transportation planning, in the development review process as well as in capital funding decisions.
  - Continue to coordinate and collaborate with key strategic partners in the region to obtain funding for transportation projects.
  - Emphasize safety and complete streets concepts throughout the Element.

- **State Consistency Amendments**
  - Consider whether to maintain transportation concurrency. Provide tools and techniques to address the application of transportation concurrency, if maintained. Tools and techniques may include but are not limited to: proportionate-share formula, which deducts costs of providing for "transportation deficiencies"; transportation sufficiency plans; and development patterns that encourage multi-modal transportation systems.

- **General Amendments**
  - Integrate a multi-modal Objective to address the City’s vision for bicycle, pedestrian, boating and other forms of transportation as appropriate for the City.
  - Adopt policies related to future improvements for bicycle and pedestrian safety.
  - Remove or revise policies that had timelines/deadlines that have expired or references to other plans that are no longer relevant/active.
  - Consider integration of appropriate and context sensitive transit options.
  - Integrate and emphasize safety and health for all users and age groups. Consider incorporating a new Goal with supportive objectives and policies.

- Consider addressing innovation and technology regarding potential for accommodating autonomous vehicles in the future.

Housing Element

- **Key Recommendations**
  - Strengthen policies relating to protection of neighborhoods and community character in concert with Future Land Use Element and zoning changes.
  - Encourage housing provision via higher densities while maintaining community character.
  - Clarify how affordable and workforce housing units are supported through policies and the LDC.
  - Include provisions for encouraging public-private partnerships in affordable/workforce housing provision.
  - Create ties between the Housing and Economic Development Elements to enhance work and recreation opportunities hand-in-hand with development of housing.
  - Review policies to require adequate infrastructure availability to support housing development.

- **State Consistency Amendments**
  - Amendments to comply with HB 1339 passed in 2020, which requires local governments to fully offset all costs to the developer for any requirements to provide affordable housing.
  - Consider including guidance for “Live Local Act" implementation.

- **General Amendments**
  - Update references to the LDC, State/County resources across Element.
  - Consider provisions for allowances of Accessory Dwelling Units (ADUs) and other provisions to enhance affordability.
  - Consider review of future land use designations, and additions of protections for commercial/industrial lands based on impacts of the Live Local Act (LLA).

Infrastructure Element

- **Key Recommendations**
  - Review Level of Service standards for required updates.
  - Update references to adopted master plans.

- **State Consistency Amendments**
  - Amendments to comply with HB 1339 passed in 2020 to require local governments to provide impact fee reporting in their annual financial audit to the Department of Financial Services.
  - Include objective and policies to address septic conversion feasibility plan per Section 163.3177(6)(c)3, F.S.
  - Incorporate updated Water Supply and Sewer Plans by reference.

- **General Amendments**
  - Several policies require updating to address current status of plans/studies, and update timeline/deadline references throughout.
  - Updates required throughout to address regular monitoring.

Conservation Element

- **Key Recommendations**
  - Reorganize the existing Conservation Element, adding more targeted goals to address specific conservation needs. Consider aligning objectives and policies under one or more of the five Conservation Element Sections recommended by the Florida Department of Environmental Protection (FDEP) listed below:
    - Water Supply and Wetlands
    - Mineral, Soils, and native vegetative communities, including forests
    - Fisheries, wildlife, wildlife habitat, and marine habitat
    - Hazardous waste
    - Air Quality
  - Create provisions for Transfer of Development of Rights (TDR) programs to encourage conservation of environmentally sensitive lands. Review TDR policies related to wetlands for density/intensity calculations.
  - Create a new objective that supports and promotes public access to waterfront areas by residents and visitors.
  - Consider policies that include an approach to the promotion of open space and conservation. This would include policies to support community gardens, public pathways, shade for walkability, and air quality.
  - Transfer provisions related to conservation of historic and archeological resources from the Recreation and Open Space Element.

- **State Consistency Amendments**
  - Provide guidance for addressing State requirements to address wastewater and onsite sewage treatment & disposal systems (OSTDS) required by the 2020 Clean Waterways Act (SB 712).

- **General Amendments**
  - Remove redundancies with the Infrastructure Element, where necessary.
  - Remove or revise policies that had timelines/deadlines that have expired.
  - Update all references to LDC Ordinances.
  - Strengthen provisions for collaboration with Hendry County and other local governments and agencies on conservation of shared resources.
  - Update policies specific to public engagement to modernize outreach efforts and broaden language to remove specificities.

Recreation and Open Space Element

- **Key Recommendations**
  - Update overall goal to tie recreation and open space development to economic development and quality of life.
  - Add/Update policies to encourage appropriate commercial activity adjacent to recreation and open space areas.
  - Consider a level of service system that addresses both acreage-based standards and amenity-based such as baseball fields, swimming pools, and trails.
  - Emphasize recreational opportunities to support programs that meet the community's interests.

- **State Consistency Amendments**
  - Consider whether the Level of Service (LOS) standards are an appropriate tool for meeting the City's goals for parks and recreational facilities. Concurrency for parks and recreational facilities are no longer required by Florida Statutes. If concurrency is maintained, appropriate tools are required.

- **General Amendments**
  - Expand targeted disadvantaged groups enlisted across various policies to ensure equitable access.

Intergovernmental Coordination

- **Key Recommendations**
  - Given the City's goals related to annexation, specific policies related to coordinating with neighboring agency staff on LaBelle specific issues is recommended.

- **State Consistency Amendments**
  - None

- **General Amendments**
  - Review and update agency references throughout.

Capital Improvements Element

- **Key Recommendations**
  - Make overall goal less specific, focusing on timely and efficient provision of public facilities to support growth.
  - Expand capital improvement categories as follows:
    - Potable Water
    - Sanitary Sewer
    - Stormwater Management & Drainage
    - *Parks, Recreation & Open Space* (formerly recreation)
    - *Transportation & Mobility* (formerly roads)
    - Schools
    - *Facilities* (not included)

- **State Consistency Amendments**
  - Review all specific LOS standards references, including decision on whether to retain or modify optional concurrency standards for roads, public schools, and parks.
  - Include the 5-Year Capital Improvements Schedule in the Comprehensive Plan.

- **General Amendments**
  - DRI-related policies may be eliminated.

Concurrency Management Element

- **Key Recommendations**
  - Update the overall goal to reflect changes in State Statutes detailed below.

- **State Consistency Amendments**
  - Transportation concurrency standards must be removed or revised to comply with changes to Florida Statutes.
  - The City may elect to maintain optional concurrency standards for public schools, roads, parks contained in this Element.
  - Public School Facilities Element and supportive Goals, Objectives and Policies are now optional. Consider elimination based upon changes to Florida Statutes and/or streamlining to address readily understandable and meaningful policy directive.

- **General Amendments**
  - Review time limits specified throughout, specifically for optional concurrency standards.

Public School Facilities Element

- **Key Recommendations**
  - Consider removal/updates based on changes in State Statutes detailed below.
  - If retained, update overall goal to be specific to LaBelle's needs, in coordination with Hendry County.

- **State Consistency Amendments**
  - Public School Facilities Element and supportive Goals, Objectives and Policies are now optional. Consider elimination based upon changes to Florida Statutes and/or streamlining to address readily understandable and meaningful policy directive.
  - The City may elect to maintain optional concurrency standards for public schools contained in this Element. If retained, review for consistency with LOS standards noted in other Chapters, as well as standards adopted via Interlocal Agreement with the School Board.

- **General Amendments**
  - Update Statute and agency references throughout.

Economic Development Element

- **Key Recommendations**
  - Update overall goal to encourage opportunities to live, work and play in LaBelle.
  - Be specific on target ratios between residential and non-residential uses in mixed-use developments and overall to ensure economic vitality.
  - Differentiate between policies for tourism and targeted industries.

- **State Consistency Amendments**
  - None.

- **General Amendments**
  - Enhance ties to the Housing Element for affordability, and Recreation and Open Space Element to incentivize desirable commercial activities for residents.
  - Consider what industries should be targeted to diversify the tax base.
  - Update locational limits on economic development policies, expanding such opportunities beyond the Employment Village land use category.

Property Rights Element

- **Key Recommendations**
  - None.

- **State Consistency Amendments**
  - None.

- **General Amendments**
  - Update Statute references, as needed.

Map Series

Below is a summary of recommended changes to the City's Map Series:

- Future Land Use Map
  - Update to reflect all amendments until adoption
  - Add future annexation area
- 2007 Roadway Level of Service Map
  - Update based on current conditions (revised City boundary, roadways)
  - Update to show current & adopted LOS for each roadway
- 2007 Roadway Maintenance Responsibility Map
  - Update based on current conditions (revised City boundary, roadways)
  - Update maintenance responsibilities as applicable
- Service Area Overlay Map
  - Update boundaries per input from Public Works
- Floodways Map

    - Exclude
- Soils Map
    - Exclude
- Historic Locations Map
    - Update based on current conditions (revised City boundary, roadways)
- Schools Map
    - Update map based on new information from the Hendry County School District

The following additional maps may be added to the map series:

- Map 1b: Annexed Lands Map
- Map 1c: Vacant Lands Map
- Map 1d: South LaBelle Community Conceptual Land Use Map

CONCLUSION

In summary, the City must update several Comprehensive Plan Elements to remain consistent with State law and address the community's long-term vision based upon input received to date. Even with proactive maintenance efforts since the last overall Plan update in 2010, the Comprehensive Plan must be updated holistically to comply with State Statutes. This effort will be undertaken under Stage 1 of the update process. Most of the proposed amendments in this Stage focus on maintaining statutory compliance—particularly in areas related to infrastructure planning and state preemptions affecting certain uses and regulations.

The vision for the City has changed since the last overall amendment. Thus, the optional amendments should be strongly considered in order to refine Goals, Objectives, and Policies that support the City's vision for protecting established residential neighborhoods while creating opportunities for workforce housing and enhanced employment opportunities. The optional amendments are recommended to be undertaken under Stage 2, to allow for additional time for public input and engagement outside of statutory deadlines.

APPENDIX A: STATE CONSISTENCY REVIEW

The following analysis was conducted utilizing all of the changes that have occurred to the State Comprehensive Plan since 2010, when the City adopted its most recent Comprehensive Plan. Where inconsistencies were identified, such as a requirement not currently addressed in the City of LaBelle Comprehensive Plan, the appropriate Element is identified for update. Where changes to the State Comprehensive Plan do not apply to the City, such as Sector Planning or Rural Land Stewardship legislation, “Not Applicable” has been denoted in the “F.S. Change Applicability to LaBelle” column.

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
2010 [Chapters 2010-5, 2010-33, 2010-70, 2010-102, 2010-182, 2010-205 and 2010-209, Laws of Florida]					
1	Deletes section 163.31771(6), F.S. (obsolete language that addressed an accessory dwelling unit); no substantive comprehensive planning requirement impact. Section 16, Chapter 2010-5, LOF.	[Deleted]	Not Applicable	N/A	N/A
2	Chapter 2010-102, Laws of Florida, makes several minor changes which do not effect substantive comprehensive planning requirements: Section 163.2526, F.S.: repealed Section 163.3167(2), F.S.: obsolete language deleted Section 163.3177(6)(h), F.S.: minor wording changes Section 163.3177(10)(k), F.S.: minor wording changes Section 163.3178(6), F.S.: obsolete language deleted Section 163.2511(1), F.S.: minor wording changes Section 163.2514, F.S.: minor wording changes Section 163.3202, F.S.: minor wording changes	[Revised]	Applicable	Not Addressed	Can be addressed in an Administrative Section or Capital Improvements Element
3	Chapter 2010-205, Laws of Florida, makes several minor wording changes Chapter 163, Part II, F.S., which do not affect substantive comprehensive planning requirements: Section 163.3167(13), F.S. Section 163.3177(4)(a), F.S. Section 163.3177(6)(c), (d) and (h), F.S. Section 163.3191(2)(l), F.S.	[Revised]	Not Applicable	N/A	N/A
4	Chapter 2010-209, Laws of Florida, make a minor wording change in Section 163.2523, F.S., which does not affect substantive comprehensive planning requirements.	[Revised]	Not Applicable	N/A	N/A
5	Deleted the phrase “SMART Schools Clearinghouse”. Section 11, Chapter 2010-70, LOF.	163.31777(1)(a) and (3)(a) [Deleted]	Not Applicable	N/A	N/A
6	Revises section 163.3175, F.S., to list the 14 military installations and 43 local governments affected by special coordination and communication requirements. Section 1, Chapter 2010-182, LOF.	163.3175(2) [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
7	Revises section 163.3177(6)(a), F.S., to specify that the 43 local governments listed in section 163.3175(2), F.S., must consider the factors listed in section 163.3175(5), F.S., when considering the compatibility of land uses proximate to military installations. Section 2, Chapter 2010-182, LOF.	163.3177(6)(a) [Revised]	Not Applicable	N/A	N/A
8	Revised section 163.3180(4)(b), F.S., to define hangars for the assembly, manufacture, maintenance or storage of aircraft as public transit facilities. Section 1, Chapter 2010-33, LOF.	163.3180(4)(b) [Revised]	Not Applicable	N/A	N/A
2011 [Chapter 2011-139, Laws of Florida]					
1	Deletes the exemption for plan amendments to designate an urban infill and redevelopment area from the twice per year amendment limitation of Section 163.3187.	Section 163.2517(4) [Deleted]	Not Applicable	N/A	N/A
2	Changes “Local Government Comprehensive Planning and Land Development Regulation Act” to “Community Planning Act.”	Section 163.3161(1) [Revised]	Applicable	Not Addressed	Update references to the Act in Definitions
3	Expresses the purpose of the act, changing “control” future development to “manage” future development “consistent with the proper role of local government.”	Section 163.3161(2)	Not Applicable	N/A	N/A
4	States the intent of the act is to focus the state role in managing growth to protect the functions of important state resources and facilities.	Section 163.3161(3) [New]	Not Applicable	N/A	N/A
5	Modifies the intent of the legislature with respect to how comprehensive plans and amendments affect property rights.	Section 163.3161(10) [Revised]	Applicable	Private Property Rights Element (Ord. 21-13)	N/A
6	Expresses legislative intent to recognize and protect agriculture, tourism, and military presence as being the state’s traditional economic base.	Section 163.3161(11) [New]	Not Applicable	N/A	N/A
7	Expresses legislative intent to not require local government plans that have been found to be in compliance to adopt amendments implementing the new statutory requirements	Section 163.3161(12) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	until the evaluation and appraisal period provided in section 163.3191				
8	Modifies the provisions for agricultural lands and practices to state that a plan amendment for an agricultural enclave is presumed not to be urban sprawl as defined in section 163.3164.	Section 163.3162(4) [Revised]	Not Applicable	N/A	N/A
9	Changes "Local Government Comprehensive Planning and Land Development Regulation Act" to "Community Planning Act" and sets forth new and modified definitions, many of which were included in repealed Rule 9J-5.003, Florida Administrative Code.	Section 163.3164 [Revised]	Not Applicable	Not Addressed	Update references to the Act in Definitions
10	Establishes definition for "adaptation action area."	Section 163.3164(1) [New]	Not Applicable	N/A	N/A
11	Establishes definition for "affordable housing" [same meaning as in Section 420.0004(3)].	Section 163.3164(3) [previously in Rule Chapter 9J-5] [New]	Applicable	Not Addressed	Update in Definitions
12	Establishes definition of "antiquated subdivision."	Section 163.3164(5) [New]	Not Applicable	Not Addressed	Add to Definitions
13	Establishes definition of "capital improvement."	Section 163.3164(7) [previously in Rule Chapter 9J-5] [New]	Applicable	Not Addressed	Add to Definitions
14	Establishes definition of "compatibility."	Section 163.3164(9) [previously in Rule Chapter 9J-5] [New]	Applicable	Not Addressed	Add to Definitions
15	Establishes definition of "deepwater ports."	Section 163.3164(11) [previously in Rule Chapter 9J-5] [New]	Not Applicable	N/A	N/A
16	Establishes definition of "density."	Section 163.3164(12)	Applicable	Not Addressed	Update in Definitions

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
		[previously in Rule Chapter 9J-5] [New]			
17	Establishes definition of “flood prone areas.”	Section 163.3164(18) [previously in Rule Chapter 9J-5] [New]	Applicable	Not Addressed	Update in Definitions
18	Establishes definition of “goal.”	Section 163.3164(19) [previously in Rule Chapter 9J-5] [New]	Applicable	Definitions	Update/Remove F.A.C. reference
19	Establishes definition of “intensity.”	Section 163.3164(22) [previously in Rule Chapter 9J-5] [New]	Applicable	Definitions	Add F.S. reference
20	Establishes definition of “internal trip capture.”	Section 163.3164(23) [New]	Applicable	Not Addressed	Add to Definitions
21	Establishes definition of “level of service.”	Section 163.3164(28) [previously in Rule Chapter 9J-5] [New]	Applicable	Definitions	Update/Remove F.A.C. reference
22	Deletes definition of “financial feasibility.”	Section 163.3164(32) [Deleted]	Not Applicable	N/A	N/A
23	Establishes definition of “new town.”	Section 163.3164(32) [previously in Rule Chapter 9J-5]	Not Applicable	N/A	N/A
24	Establishes definition of “objective.”	Section 163.3164(33) [previously in Rule Chapter 9J-5]	Applicable	Definitions	Update/Remove F.A.C. reference
25	Deletes definition of “dense urban land areas.”	Section 163.3164(34) [Deleted]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
26	Establishes definition of "policy."	Section 163.3164(36) [previously in Rule Chapter 9J-5] [New]	Applicable	Definitions	Update/Remove F.A.C. reference
27	Amends the definition of "public facilities" to delete health systems and spoil disposal sites for maintenance dredging located in intracoastal waterways (except sites owned by ports).	Section 163.3164(38) [Revised]	Applicable	Not Addressed	Update in Definitions
28	Changes definition of "regional planning agency" to "the council created pursuant to chapter 186."	Section 163.3164(41) [Revised]	Applicable	Not Addressed	Add to Definitions
29	Establishes definition of "seasonal population."	Section 163.3164(41) [previously in Rule Chapter 9J-5] [New]	Applicable	Not Addressed	Update in Definitions
30	Changes definition of "optional sector plan" to "sector plan" and clarifies the purpose of a sector plan. The term includes an optional sector plan that was adopted before the effective date of the act.	Section 163.3164(42) [Revised]	Applicable	Not Addressed	Update in Definitions
31	Establishes definition of "suitability."	Section 163.3164(45) [previously in Rule Chapter 9J-5] [New]	Applicable	Definitions	Add F.S. reference
32	Establishes definition of "transit-oriented development."	Section 163.3164(46) [New]	Not Applicable	Not Addressed	Add to Definitions
33	Clarifies the definition of "urban service area" to delete the term "built-up" and to include any areas identified in the comprehensive plan as urban service areas, regardless of local government limitation.	Section 163.3164(50) [Revised]	Applicable.	Not Addressed	Update in Definitions
34	Establishes new definition of "urban sprawl."	Section 163.3164(51) [replaces definition previously in Rule Chapter 9J-5]	Applicable	Not Addressed	Update in Definitions

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
		[New]			
35	Modifies requirements for maintaining comprehensive plan, deleting the reference to section 163.3184 and the requirement that proposed plan amendments be submitted to the state land planning agency.	Section 163.3167(2) [Revised]	Not Applicable	N/A	N/A
36	Deletes provisions for regional planning agency adoption of plan amendments for elements and amendments not prepared by a local government.	Section 163.3167(3) and (6) [Deleted]	Not Applicable	N/A	N/A
37	Deletes provisions for local government challenge of costs associated with preparing a comprehensive plan and related state land planning agency action.	Section 163.3167(7) [Deleted]	Not Applicable	N/A	N/A
38	Deletes provisions for encouraging each local government to articulate a vision of its future physical appearance and qualities of its community.	Section 163.3167(11) [Deleted]	Not Applicable	N/A	N/A
39	Establishes provisions for “planning innovations and technical assistance” and clarifies the roles of the state land planning agency and all other appropriate state and regional agencies in the process. Requires, upon request by the local government, the state land planning agency to coordinate multi-agency assistance on plan amendments that may adversely impact important state resources or facilities. Requires the state land planning agency to provide on its website guidance on the submittal and adoption of comprehensive plans, amendments and land development regulations, prohibiting such guidance from being adopted by rule and exempting such guidance from section 120.54(1)(a).	Section 163.3168(1) – (4) [New]	Not Applicable	N/A	N/A
40	Modifies areas of authority under this act with respect to joint agreements and intergovernmental coordination between	Section 163.3171(4) [Revised]	Not Applicable	Not Addressed	Intergovernmental Coordination Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	cities and counties and planning in advance of jurisdictional changes.				
41	Modifies military base compatibility provisions to not require that commanding officer comments, underlying studies and reports be binding on the local government. Requires the affected local government to be sensitive to private property rights and not be unduly restrictive on those rights in considering the comments provided by the commanding officer or designee.	Section 163.3175(5)(d) and (6) [Revised]	Not Applicable	N/A	N/A
42	Modified to require that any local government comprehensive plan that has been amended to address military compatibility requirements after 2004 and was found in compliance be deemed in compliance until the local government conducts its evaluation and appraisal review pursuant to section 163.3191 and determines that amendments are necessary.	Section 163.3175(9) [Revised]	Not Applicable	N/A	N/A
43	Modified to include significant portions of repealed Rules 9J-5.001 and 9J-5.005, Florida Administrative Code, with respect to the principles, guidelines, standards and strategies to be set forth in required and optional elements of the comprehensive plan and requirements for basing these elements on relevant, appropriate and professionally accepted data.	Section 163.3177(1) [Revised]	Not Applicable	N/A	N/A
44	Deletes financial feasibility requirements.	Section 163.3177(2) [Deleted]	Not Applicable	N/A	N/A
45	Modifies provisions for preparing the capital improvements element to require the schedule to cover a 5-year period and identify whether projects are either funded or unfunded and given a level of priority for funding. Deletes requirements for financial feasibility.	Section 163.3177(3)(a)4 [Revised]	Applicable	Not Addressed	Add Schedule to Capital Improvements Element
46	Modifies requirements for local government annual review of capital improvements	Section 163.3177(3)(b)	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	element to no longer require transmittal of the adopted amendment to the state land planning agency and deletes provisions related to sanctions by the Administration Commission, adoption of long-term concurrency management systems and financial feasibility.	[Revised]			
47	Modifies planning period requirements, allowing additional planning periods for specific components, elements, land use amendments, or projects as part of the planning process.	Section 163.3177(5)(a) [Revised]	Not Applicable	N/A	N/A
48	Modifies requirements for the future land use element to include guidance from repealed Rule 9J-5.006, Florida Administrative Code, relative to general range of density or intensity of uses for gross land area and establishing a long term end toward which land use programs and activities are ultimately directed.	Section 163.3177(6)(a) [Revised]	Applicable	Not Addressed	Future Land Use Element
49	Modifies the standards on which future land use plan and plan amendments are based to include: permanent and seasonal population, compatibility, the need to modify land uses and development patterns within antiquated subdivisions, preservation of waterfronts, location of schools proximate to urban residential areas, and other considerations taken from repealed Rule 9J-5.006, Florida Administrative Code.	Section 163.3177(6)(a)2 and 3 [Revised]	Applicable	Not Addressed	Future Land Use Element
50	Modifies requirements for the future land use element “to accommodate at least the minimum amount of land required to accommodate the medium projections of the University of Florida’s Bureau of Economic and Business Research for at least a 10-year planning period unless otherwise limited.”	Section 163.3177(6)(a)4 [Revised]	Applicable	Not Addressed	Future Land Use Element
51	Establishes requirements for analyzing future land use map amendments using portions of	Section 163.3177(6)(a)8 [New]	Applicable	Not Addressed	Future Land Use Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	repealed Rule 9J-5.006, Florida Administrative Code.				
52	Establishes requirements for the future land use element and map series, including with slight revisions the primary indicators that a plan or plan amendment does not discourage the proliferation of urban sprawl that were in repealed Rule 9J-5.006, Florida Administrative Code.	Section 163.3177(6)(a)9 and 10 [New]	Applicable	Not Addressed	Future Land Use Element
53	Modifies requirements for the transportation element to include significant portions of repealed Rule 9J-5.019, Florida Administrative Code, addressing circulation of recreational traffic, including bicycle facilities, exercise trails, riding facilities, and airport master plans.	Section 163.3177(6)(b) [Revised]	Applicable	Not Addressed	Traffic Circulation Element
54	Modifies requirements for the general sanitary sewer, solid waste, drainage, potable water, and natural groundwater aquifer recharge element to include guidance from portions of repealed Rule 9J-5.011, Florida Administrative Code, and deletes requirements for including a topographic map depicting any areas adopted by a water management district as prime groundwater recharge areas and addressing areas served by septic tanks.	Section 163.3177(6)(c) [Revised]	Not Applicable	NA	NA
55	Modifies potable water supply planning requirements to remove the provision that states that “amendments to incorporate the work plan do not count toward the limitation on the frequency of adoption of amendments to the comprehensive plan.”	Section 163.3177(6)(c)3 [Revised]	Not Applicable	N/A	N/A
56	Modifies requirements for the conservation element to include portions of repealed Rule 9J-5.013, Florida Administrative Code, to list the natural resources to be identified, analyzed and protected and toward which conservation principles, guidelines and standards are to be directed.	Section 163.3177(6)(d)1 and 2 [New]	Applicable	Not Addressed	Conservation Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
57	Modifies requirements for analyzing current and projected water sources for a 10-year period to include consideration of demands for industrial, agricultural and potable water use and the quality and quantity of water available to meet these demands and the existing levels of conservation, use and protection and policies of the regional water management district.	Section 163.3177(6)(d)3 [Revised]	Applicable	N/A	Infrastructure Element, Future Land Use Element
58	Clarifies requirements for the housing element to include guidelines, standards and strategies based on an inventory taken from the latest decennial United States Census or more recent estimates and various other considerations listed in repealed Rule 9J-5.010, Florida Administrative Code.	Section 163.3177(6)(f)1 and 2 [Revised]	Applicable	Not Addressed	Housing Element
59	Deletes requirement for an affordable housing needs assessment conducted by the state land planning agency.	Section 163.3177(6)(f)2 [Deleted]	Not Applicable	N/A	N/A
60	Based on repealed Rule 9J-5.010, Florida Administrative Code, sets forth new requirements for the creation and preservation of affordable housing, elimination of substandard housing conditions, providing for adequate sites and distribution for a range of incomes and types, and including programs for partnering, streamlined permitting, quality of housing, neighborhood stabilization, and improving historically significant housing.	Section 163.3177(6)(f)3 [New]	Applicable	Not Addressed	Housing Element
61	Modifies the objectives of the coastal management element and includes a new requirement for preserving historic and archaeological resources.	Section 163.3177(6)(g) [Revised]	Applicable	Conservation Element Policy 5.9.2	N/A
62	Deletes provisions for local government adoption of recreational surface water use policies.	Section 163.3177(6)(g)2 [Deleted]	Not Applicable	N/A	N/A
63	Sets forth an option for the local government to develop an adaptation action area designation for low-lying coastal zones	Section 163.3177(6)(g)10 [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	experiencing coastal flooding due to extreme high tides and storm surge and that are vulnerable to the impacts of rising sea level.				
64	Deletes requirement for intergovernmental coordination element to provide for recognition of campus master plans and airport master plans.	Section 163.3177(6)(h)1.b [Deleted]	Not Applicable	N/A	N/A
65	Modifies requirements for the intergovernmental coordination element to include portions of repealed Rule 9J-5.015, Florida Administrative Code, including coordinating and addressing impacts on adjacent municipalities and coordinating the establishment of level of service standards.	Section 163.3177(6)(h)3.a and b [New]	Applicable	N/A	Intergovernmental Coordination Element
66	Deletes requirements in intergovernmental coordination element for fostering coordination between special districts and local general purpose governments, submittal of public facilities report, execution of interlocal agreement with district school board, the county and nonexempt municipalities, and submittal of reports to the Florida Department of Community Affairs by counties with populations greater than 100,000.	Section 163.3177(6)(h)3 and 4 [Deleted]	Not Applicable	N/A	N/A
67	Deletes provisions for optional elements of the comprehensive plan, transportation and traffic circulation, airport compatibility and other requirements related to transportation corridors and reduction of greenhouse gas emissions specific to local governments within an urbanized area.	Section 163.3177(6)(i), (j), (k) [Deleted]	Not Applicable	N/A	N/A
68	Deletes provisions for airport master plans.	Section 163.3177(6)(k) [Deleted]	Not Applicable	N/A	N/A
69	Deletes provisions for additional plan elements, or portions or phases thereof, including an economic development element.	Section 163.3177(7)(a)(l) [Deleted]	Not Applicable	N/A	N/A
72	Modifies provisions for processing plan amendments for land located within a rural	Section 163.3177(7)(c)2	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	agricultural industrial center to presume that these amendments are not urban sprawl as defined in section 163.3164 and shall be considered within 90 days after any review required by the state land planning agency if required by section 163.3184.	[Revised]			
73	Deletes requirements for public schools interlocal agreements with respect to submittal of the agreements to the state land planning agency based on an established schedule and other requirements involving the state land planning agency related to waivers and exemptions.	Section 163.31777(1)(b)(d) and (2) [Deleted]	Not Applicable	N/A	N/A
74	Deletes requirements related to the submittal of comments from the Office of Educational Facilities on the interlocal agreement, challenges to the state land planning agency notice of intent and other review process requirements.	Section 163.31777(3)(a)-(c) and (4)-(7) [Deleted]	Not Applicable	N/A	N/A
75	Deletes parks and recreation, schools and transportation from the list of public facilities and services subject to the concurrency requirement on a statewide basis.	Section 163.3180(1) [Deleted]	Applicable	Not Addressed	Infrastructure Element, Recreation and Open Space Element, Concurrency Management Element, Public School Facilities Element
76	Modifies concurrency requirements to include portions of repealed Rule 9J-5.0055, Florida Administrative Code, which relate to achieving and maintaining adopted levels of service for a 5-year period, and providing for rescission of any optional concurrency provisions by plan amendment, which is not subject to state review.	Section 163.3180 (1)(a) and (b) [New]	Applicable	Not Addressed	Capital Improvements Element, Concurrency Management Element
77	Deletes requirement that professionally accepted techniques be used for measuring levels of service for automobiles, bicycles, pedestrians, transit and trucks.	Section 163.3180(1)(b) [Deleted]	Not Applicable	N/A	N/A
78	Deletes requirement that parks and recreation facilities to serve new development are in place or under actual construction no later than one year after	Section 163.3180(2)(b) and (c) [Deleted]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	issuance of a certificate of occupancy or its functional equivalent.				
79	Deletes provisions addressing governmental entities and establishment of binding level of service standards with respect to limiting the authority of any agency to recommend or make objections, recommendations, comments or determinations during reviews conducted under section 163.3184	Section 163.3180(3) [Deleted]	Not Applicable	N/A	N/A
80	Deletes concurrency provisions specifically related to public transit facilities and urban infill and redevelopment areas.	Section 163.3180(4)(b) and (c) [Deleted]	Not Applicable	N/A	N/A
81	Establishes concurrency provisions for transportation facilities, which include portions of repealed Rule 9J-5.0055, Florida Administrative Code. Sets forth requirements with respect to adopted level of service standards, including use of professionally accepted studies to evaluate levels of service, achieving, and maintaining adopted levels of service standards, and including the projects needed to accomplish this in 5-year schedule of capital improvements. Requires coordination with adjacent local governments and setting forth the method to be used in calculating proportionate-share contribution. Defines the term “transportation deficiency.”	Section 163.3180(5)(a)-(h) [New]	Applicable	N/A	Transportation Element, Infrastructure Elements, Capital Improvements Element, Concurrency Management Element
83	Sets forth concurrency provisions for public education, setting forth provisions for those local governments that apply concurrency to public education. If a county and one or more municipalities that represent at least 80 percent of the total countywide population have adopted school concurrency, the failure of one or more municipalities to adopt the concurrency and enter into the interlocal agreement does not preclude implementation of school concurrency within jurisdictions of	Section 163.3180(6)(a) [New]	Applicable	Public School Facilities Elements	Add reference in Intergovernmental Coordination Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	the school district that have opted to implement concurrency.				
84	Modifies school concurrency provisions to clarify that adoption and application of school concurrency is optional.	Section 163.3180(6)(f)1 and 2 [Revised]	Not Applicable	N/A	N/A
85	Modifies school concurrency provisions to remove requirement for financial feasibility and to require that facilities necessary to meet adopted levels of service during a 5-year period are identified and consistent with the school board's educational facilities plan.	Section 163.3180(d) [2014 cite: Section 163.3180(g)] [Revised]	Applicable	Not Addressed	Public Schools Facilities Element
86	Modifies school concurrency provisions to allow a landowner to proceed with development of a specific parcel of land notwithstanding a failure of the development to satisfy school concurrency if certain factors are shown to exist, including adequate facilities are provided for in the capital improvements element and school board's educational facilities plan, demonstration that facilities needs can be reasonably provided, and the local government and school board have provided a means by which proportionate share is assessed.	Section 163.3180(h)1.a., b. and c. [New]	Applicable	Not Addressed	Public School Facilities Element
88	Changes "transportation concurrency backlogs" to "transportation deficiencies" and makes related clarifications.	Section 163.3182 [Revised]	Not Applicable	N/A	Traffic Circulation Element
89	Changes "creation of transportation concurrency backlog authorities" to "creation of transportation development authorities" and makes related clarifications.	Section 163.3182(2) [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
90	Changes “powers of a transportation concurrency backlog authority” to “powers of a transportation development authority” and makes related clarifications.	Section 163.3182(4) [Revised]	Not Applicable	N/A	N/A
91	Modifies the definition of “in compliance” to include a reference to section 163.3248 and delete the reference to now repealed chapter 9J-5, Florida Administrative Code.	Section 163.3184(1)(b) [Revised]	Not Applicable	N/A	N/A
92	Provides a list of the “reviewing agencies.”	Section 163.3184(1)(c) [New]	Not Applicable	N/A	N/A
93	Sets forth the “expedited” and “coordinated” review processes.	Section 163.3184(2) [New]	Not Applicable	N/A	N/A
94	Sets forth requirements for adopting and processing plan amendments according to the “expedited” and “coordinated” review processes, the scope of the comments to be provided by review agencies, responsibilities of the state land planning agency with respect to its various levels of review and coordination with other state agencies and public hearings.	Section 163.3184(3) and (4) [New]	Not Applicable	N/A	N/A
95	Sets forth requirements for administrative challenges to plans and plan amendments, compliance agreements and mediation and expeditious resolution.	Section 163.3184(5)-(7) [New]	Not Applicable	N/A	N/A
96	Modifies provisions to enable the administration commission to specify sanctions to which the local government will be subject if it elects to make a plan amendment effective notwithstanding a determination of noncompliance.	Section 163.3184(11); 2014 cite: Section 163.3184(8) [Revised]	Not Applicable	N/A	N/A
97	Modifies provisions for public hearings to state there is no prohibition or limitation on the authority of local governments to require a person requesting an amendment to pay some or all of the cost of the public notice.	Section 163.3184(15); 2014 cite: Section 163.3184(11) [Revised]	Not Applicable.	N/A	N/A
98	Establishes provisions for concurrent zoning, requiring a local government, at the request of an applicant, to consider an application for	Section 163.3184(12) [New]	Applicable	Not Addressed	Future Land Use Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	zoning changes that would be required to properly enact any proposed plan amendment and making the approved zoning changes contingent upon the comprehensive plan or amendment becoming effective.				
99	Revises provisions to require that no proposed local government comprehensive plan or plan amendment that is applicable to a designated area of critical state concern shall be effective until a final order is issued finding the plan or amendment to be in compliance as defined in subsection (1)(b).	Section 163.3184(13) [New]	Not Applicable	N/A	N/A
100	Modifies provisions to address the process for adoption of small-scale comprehensive plan amendments, deleting several exceptions. Plan amendments are no longer limited to two times per calendar year and text changes that relate directly to and are adopted simultaneously with small scale future land use map amendments are permissible.	Section 163.3187(1)(a)-(f); 2014 cite: Section 163.3187(1)(a)-(d) [Revised]	Not Applicable	N/A	N/A
101	Modifies the public notice requirements for small scale plan amendments, addressing petitions, prohibiting the state land planning agency from intervening and requiring that consideration be given to the plan amendment as a whole and whether it furthers the intent of this part in all challenges.	Section 163.3187(1)2.a and b;3,4 and (e)-(q); 2014 Section cite: 163.3187(2)-(5) [Revised]	Not Applicable	N/A	N/A
102	Modifies provisions for evaluation and appraisal of comprehensive plan. Maintains the requirement for local government evaluation of plan to occur at least once every 7 years. The local government is required to determine if amendments are necessary to reflect changes in state requirements (only) since the last update and to notify the state land planning agency by letter as to its determination. If needed, these amendments are to be prepared and	Section 163.3191(1)-(14); 2014 cite: Section 163.3191(1)-(5) [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	transmitted within 1 year of this determination for review pursuant to section 163.3184(4) (State Coordinated Review). Local governments are encouraged to comprehensively evaluate and as necessary update plans to reflect changes in local conditions. If a local government fails to submit its notification letter to the state land planning agency or fails to update its plan to reflect changes in state requirements, then the local government is prohibited from amending its plan until it complies with these requirements. The state land planning agency may not adopt rules to implement this section, other than procedural rules or a schedule indicating when local governments must comply with these requirements.				
103	Deletes the reference to section 163.3187(1) and provisions regarding the frequency of adoption of plan amendments as they relate to adoption of a municipal overlay.	Section 163.3217(2) [Deleted]	Not Applicable	N/A	N/A
104	Changes “Local Government Comprehensive Planning and Land Development Regulation Act” to “Community Planning Act.”	Section 163.3220(3) [Revised]	Applicable	Not Addressed	Update references to the Act in Definitions
105	Changes “Local Government Comprehensive Planning and Land Development Regulation Act” to “Community Planning Act.”	Section 163.3221(2) and (11) [Revised]	Applicable	Not Addressed	Update references to the Act in Definitions
106	Revises the duration of a development agreement from 20 years to 30 years, unless it is extended by mutual consent, and deletes reference to sections 163.3187 and 163.3189 regarding compliance determination by state land planning agency.	Section 163.3229 [Revised]	Applicable	Not Addressed	Update in Policy 8.6.3 of Capital Improvements Element
107	Modifies provisions for periodic review of a development agreement to delete requirements for annual review conducted during years 6 through 10, incorporation of the review into a written report and the state land planning agency adoption of rules regarding the contents of the report.	Section 163.3235 [Revised]	Not Applicable.	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
108	Deletes requirements that a copy of the recorded development agreement be submitted to the state land planning agency within 14 days after the agreement is recorded and for the effectiveness of the agreement based on receipt by the state land planning agency.	Section 163.3239 [Deleted]	Not Applicable	N/A	N/A
109	Changes "Optional Sector Plans" to "Sector Plans" and clarifies the intent to promote and encourage long-term planning for conservation, development and agriculture on a landscape scale and protection of regionally significant resources, including regionally significant water courses and wildlife corridors. Revises the amount of geographic area intended for sector plans from at least 5,000 acres to at least 15,000 acres and protection of public facilities.	Section 163.3245(1) [Revised]	Not Applicable	N/A	N/A
110	Deletes provisions for the state land planning agency entering into an agreement to authorize preparation of an optional sector plan, and consideration of the state comprehensive and strategic regional policy plans, and clarifies the process for scoping meetings and joint planning agreements.	Section 163.3245(2) [Deleted]	Not Applicable	N/A	N/A
111	Modifies the provisions for two levels of sector planning, clarifying the requirements for the long term master plan and detailed specific area plan. These plans may be based upon a planning period longer than timeframe on which the local comprehensive plan is based and are not required to demonstrate need. The state land planning agency is required to consult with certain other agencies as part of its review of the plans.	Section 163.3245(3) [Revised]	Not Applicable	N/A	N/A
112	Requires consistency with any long-range transportation plan and regional water supply plans, including consideration of water supply availability and consumptive use permitting.	Section 163.3245(4) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
113	Requires the detailed specific area plan to establish a buildout date until which the approved development is not subject to downzoning, unit density reduction or intensity reduction, with certain exceptions.	Section 163.3245(5)(d) [New]	Not Applicable	N/A	N/A
114	Establishes provisions for master development approval, pursuant to section 380.06(21), for the entire planning area in order to establish a buildout date and describes the level of detail appropriate for review of the application.	Section 163.3245(6) [New]	Not Applicable	N/A	N/A
115	Establishes provisions for a developer within an area subject to a long-term master plan or detailed specific area plan to enter into a development agreement.	Section 163.3245(7) [New]	Not Applicable	N/A	N/A
116	Establishes provisions for landowner withdrawal of consent to the master plan relative to proposed and adopted amendments.	Section 163.3245(8) [New]	Not Applicable	N/A	N/A
117	Allows the right to continue, after adoption of a long-term master plan or a detailed specific area plan, existing agricultural or silvicultural uses or other natural resource-based operations or establishment of similar new uses that are consistent with plans approved pursuant to this section.	Section 163.3245(9) [New]	Not Applicable	N/A	N/A
118	Allows the state land planning agency to enter into an agreement with a local government that on or before July 1, 2011 adopted a large-area comprehensive plan amendment consisting of at least 15,000 acres based on certain requirements.	Section 163.3245(10) [New]	Not Applicable	N/A	N/A
119	Addresses a detailed specific area plan to implement a conceptual long-term buildout overlay found in compliance before July 1, 2011.	Section 163.3245(11) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
120	Provides for a landowner or developer that has received approval of a master DRI development order to implement this order by filing application(s) to approve the detailed specific area plan.	Section 163.3245(12) [New]	Not Applicable	N/A	N/A
121	Modifies provisions in the local government comprehensive planning certification program to allow small scale development amendments to follow the process in section 163.3187.	Section 163.3246(9)(a) [Revised]	Applicable	Not Addressed	Future Land Use Element or Definitions
122	Deletes provisions in the local government comprehensive planning certification program that address the failure to adopt a timely evaluation and appraisal report and failure to adopt an evaluation and appraisal report found to be sufficient.	Section 163.3246(12) [Deleted]	Not Applicable	N/A	N/A
123	Deletes the requirement that the Office of Program Policy Analysis and Government Accountability prepare a report evaluating the certification program.	Section 163.3246(14) [Deleted]	Not Applicable	N/A	N/A
124	See prior entries for description of repealed provisions.	Section 163.32465; Now: Repealed	Not Applicable	N/A	N/A
125	Establishes provisions for Rural Land Stewardship Areas, which were provided for as part of the innovative and flexible planning and development strategies in now repealed section 163.3177(11).	Section 163.3248 [New]	Not Applicable	N/A	N/A
126	Sets forth the intent of Rural Land Stewardship Areas	Section 163.3248(1) [New]	Not Applicable	N/A	N/A
127	Establishes a process upon which local governments may adopt a future land use overlay, which may not require a demonstration of need based on population projections or any other factors.	Section 163.3248(2) [New]	Not Applicable	N/A	N/A
128	Sets forth six broad principles of rural sustainability that rural land stewardship areas are to further.	Section 163.3248(3) [New]	Not Applicable	N/A	N/A
129	Provides for agency assistance and participation to local governments or property	Section 163.3248(4) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	owners in development of a plan for rural land stewardship area.				
130	Requires that a rural land stewardship area not be less than 10,000 acres, is located outside of municipalities and established urban service areas and is designated by plan amendment by each local government with jurisdiction.	Section 163.3248(5) [New]	Not Applicable	N/A	N/A
131	Requires the plan amendment(s) designating a rural land stewardship area to be reviewed pursuant to section 163.3184 and to meet certain requirements involving criteria for designating receiving areas, the application of innovative planning and development strategies, a process for implementing these strategies and a mix of densities and intensities that would not be characterized as urban sprawl.	Section 163.3248(5)(a)-(d) [New]	Not Applicable	N/A	N/A
132	Requires a receiving area to be designated only pursuant to procedures established in the local government's land development regulations. If approval of the designation by a county board of county commissioners is required, it is to be made by resolution with a simple majority vote. A listed species survey must be performed and coordinated with appropriate agencies if listed species occur on the receiving area development site. Protective measures must be based on the rural land stewardship area as a whole.	Section 163.3248(6) [New]	Not Applicable	N/A	N/A
133	Sets forth requirements for establishing a rural land stewardship overlay zoning district and methodology for the creation, conveyance, and use of transferrable rural land use/stewardship credits.	Section 163.3248(7) [New]	Not Applicable	N/A	N/A
134	Sets forth limitations for creating, assigning and transferring stewardship credits based on underlying permitted uses, densities and intensities, and considerations for assigning	Section 163.3248(8)(a)-(k) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	credits based on the value and location of land and environmental resources.				
135	Provides for incentives to owners of land within rural land stewardship sending areas, in addition to use or conveyance of credits, to enter into rural land stewardship agreements.	Section 163.3248(9)(a)-(e) [New]	Not Applicable	N/A	N/A
136	Expresses the intent of the section as an overlay of land use options that provide economic and regulatory incentives for landowners outside of established and planned urban service areas.	Section 163.3248(10) [New]	Not Applicable	N/A	N/A
137	Expresses the intent of the Legislature that the rural land stewardship area in Collier County be recognized as a statutory rural land stewardship area and be afforded the incentives in this section.	Section 163.3248(11) [New]	Not Applicable.	N/A	N/A
138	Changes "Local Government Comprehensive Planning and Land Development Regulation Act" to "Community Planning Act."	Section 163.360(2)(a) [Revised]	Applicable	Not Addressed	Update reference to Act in Definitions
139	Changes "Local Government Comprehensive Planning and Land Development Regulation Act" to "Community Planning Act."	Section 163.516(3)(a) [Revised]	Applicable	Not Addressed	Update reference to Act in Definitions
2012: [Chapters 2012-5, 2012-75, 2012-83, 2012-90, 2012-96 and 2012- 99, Laws of Florida]					
1	Rewords the definition of "farm" to the same meaning provided in section 823.14	Section 163.3162(2)(a) [Revised]	Applicable	Definitions	Add F.S. reference
2	Rewords the definition of farm operation to the same meaning provided in section 823.14	Section 163.3162(2)(b) [Revised]	Applicable	Not Addressed	Update in Definitions
3	Adds a definition of "governmental entity," which has the same meaning provided in section 164.1031. The term does not include a water control district or a special district created to manage water.	Section 163.3162(2)(d) [New]	Not Applicable	N/A	N/A
4	Changes "county" to "governmental entity"	Section 163.3162(3)(b); (3)(c) [Revised]	Not Applicable	N/A	N/A
5	Adds provisions related to agricultural enclaves	Section 163.3162 Note	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
6	Provides that any local government charter provision that was in effect as of June 1, 2011 for an initiative or referendum process for development orders or comprehensive plan amendments may be retained and implemented	Section 163.3167(8)	Not Applicable	N/A	N/A
7	Changes the "preparation of the periodic reports" to "the periodic evaluation and appraisal of the comprehensive plan"	Section 163.3174(4)(b) [Revised]	Not Applicable	N/A	N/A
8	Adds "advisory" to define the commanding officer's comments on the impact of proposed changes on military bases, and requires the comments to be based on appropriate data and analysis which must be provided to the local government with the comments	Section 163.3175(5) [New]	Not Applicable	N/A	N/A
9	Requires local governments to consider the commanding officer's comments in the same manner as comments from other reviewing agencies, and deletes the language that states the comments are not binding.	Section 163.3175(5)(d)	Not Applicable	N/A	N/A
10	Adds language requiring the local government to consider the accompanying data and analysis provided by the commanding officer, in addition to the comments, and adds language stating that consideration shall be based on how the change relates to the strategic mission of the base, public safety and the economic vitality of the base while respecting private property rights	Section 163.3175(6) [New]	Not Applicable	N/A	N/A
11	Changes the "University of Florida's Bureau of Economic and Business Research" to the "Office of Economic and Demographic Research" and adds language stating that population projections must, at a minimum, reflect each area's proportional share of the total county population and the total county population growth	Section 163.3177(1)(f)3. [Revised]	Applicable	Not Addressed	Introduction (Preliminary Assessment)
12	Changes the "University of Florida's Bureau of Economic and Business Research" to the	Section 163.3177(6)(a)4.	Applicable	Not Addressed	Introduction (Preliminary Assessment)

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	"Office of Economic and Demographic Research"	[Revised]			
13	Changes the requirement that future land use map amendments be based on an analysis of the minimum amount of land needed as determined by the local government, to instead be based on an analysis of the minimum amount of land needed to achieve the requirements of the statute	Section 163.3177(6)(a)8.c. [Revised]	Not Applicable	N/A	N/A
14	Deletes the requirement that the housing element be based in part on an inventory taken from the latest Census	Section 163.3177(6)(f)2. [Deleted]	Not Applicable	N/A	N/A
15	Moves the exemptions from having a public school interlocal agreement from section 163.3180(6)(i) to section 163.31777(3)	Section 163.31777(3)	Not Applicable	N/A	N/A
16	Adds language requiring each local government exempt from having a public school interlocal agreement to assess at the time of evaluation and appraisal if the local government still meets the requirements for exemptions described in section 163.31777(3). Each local government that is exempt must comply with the interlocal agreement provisions within one year of a new school within the municipality being proposed in the 5-year district facilities work program	Section 163.31777(4) [New]	Not Applicable	N/A	N/A
17	Replaces "Department of Community Affairs" with "state land planning agency" and changes the language that stated intermodal transportation facilities "shall" not be designated as developments of regional impact to "may" not be designated as developments of regional impact.	Section 163.3178(3) [Revised]	Applicable	Not Addressed	Update reference to DCA in Definitions
18	Deletes the provision that the Coastal Resources Interagency Management Committee shall identify incentives to encourage local governments to adopt siting plans and uniform criteria and standards to	Section 163.3178(6) [Deleted]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	be used by local governments to implement state goals related to marina siting				
19	Adds language stating that an amendment that rescinds concurrency shall be processed under the expedited state review process, and is not required to be transmitted to reviewing agencies for comment, except for agencies that have requested transmittal, and for municipal amendments, it must be transmitted to the county. A copy of the adopted amendment shall be transmitted to the state land agency. If the amendment rescinds transportation or school concurrency, the adopted amendment must also be sent to the Department of Transportation or Department of Education, respectively.	Section 163.3180(1)(a) [New]	Not Applicable	N/A	N/A
20	Provides general rewording. Adds language to clarify that the choice of one or more municipality to not adopt school concurrency does not preclude implementation of school concurrency within other jurisdictions of the school district.	Section 163.3180(6)(a) [Revised]	Not Applicable	N/A	N/A
21	Adds developments that are proposed under section 380.06(24)(x) to the list of amendments that must follow the state coordinated review process.	Section 163.3184(2)(c) [New]	Not Applicable	N/A	N/A
22	Added the word “working” to clarify the number of days a local government has to transmit an amendment	Section 163.3184(3)(b)1.	Not Applicable	N/A	N/A
23	Changed the time limit for the reviewing agencies’ transmittal to 30 days “after” instead of “from” the date the amendment was received	Section 163.3184(3)(b)2. [Revised]	Not Applicable	N/A	N/A
24	Added the word “working” to clarify the number of days a local government has to transmit an amendment	Section 163.3184(3)(c)2. [New]	Not Applicable.	N/A	N/A
25	Changes the time limit a local government has to transmit an amendment from	Section 163.3184(4)(b)	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	"immediately following" the first public hearing to "within 10 working days after" the first public hearing.	[Revised]			
26	Added the word "working" to clarify the number of days a local government has to transmit an amendment	Section 163.3184(4)(e)2. [New]	Not Applicable	N/A	N/A
27	Corrects the citation related to plan amendment package completeness from (3)(c)3. To (4)(e)3.	Section 163.3184(5)(b) [Revised]	Not Applicable	N/A	N/A
2	Changes the time limit by which the Administration Commission must enter into a final order from 45 days after the receipt of the recommended order to the time period specified in section 120.569.	Section 163.3184(5)(d) [Revised]	Not Applicable	N/A	N/A
29	Changes the time limit for the state land planning agency to submit a not in compliance recommended order to the Administration Commission from no later than 30 days after the receipt of the recommended order to the time period provided in section 120.569	Section 163.3184(5)(e)1. [Revised]	Not Applicable	N/A	N/A
30	Changes the time limit by which the state land planning agency must enter into an in compliance final order from 30 days after the receipt of the recommended order to the time period provided in section 120.569	Section 163.3184(5)(e)2. [Revised]	Not Applicable	N/A	N/A
31	Changes the time period by which the state land planning agency must issue a cumulative notice of intent from "upon receipt of a plan or plan amendment adopted pursuant to a compliance agreement" to "within 20 days after receiving a complete plan or plan amendment adopted pursuant to a compliance agreement"	Section 163.3184(6)(f) [Revised]	Not Applicable	N/A	N/A
32	Changes the statutory reference for the Florida Small Cities Community Development Block Grant program	Section 163.3184(8)(b)1.a. [Revised]	Not Applicable	N/A	N/A
33	Changes "subsection" to "section"	Section 163.3184(12) [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
34	Changes “in accordance with” to “pursuant to” and adds (4) to the section 163.3184 citation.	Section 163.3191(3) [Revised]	Not Applicable	N/A	N/A
35	Replaces “Department of Community Affairs” with “state land planning agency” and changes “this” Act to “the Community Planning Act”	Section 163.3204 [Revised]	Applicable	Not Addressed	Update reference to DCA in Definitions
36	Changes the citation that refers to the sanctions that can be the sole issue before the Administration Commission when land development regulations are inconsistent with the comprehensive plan from section 163.3184(11)(a) or (b) to sections 163.3184(8)(a) or (b)1. or 2.	Section 163.3213(6) [Revised]	Not Applicable	N/A	N/A
37	Changes the definition of state land planning agency to refer to the Department of Economic Opportunity instead of the Department of Community Affairs	Section 163.3221(14) [Revised]	Applicable	Not Addressed	Update in Definitions
38	Deletes the reference to section 163.3177(11)	Section 163.3245(1) [Deleted]	Not Applicable	N/A	N/A
39	Deletes the requirement that the department provide an annual status report to the legislature regarding every optional sector plan.	Section 163.3245(7) [Deleted]	Not Applicable	N/A	N/A
40	Adds “or her” to “his consent to the master plan”	Section 163.3245(9)	Not Applicable	N/A	N/A
41	Replaces “Department of Community Affairs” with “state land planning agency”	Section 163.3246(1) [Revised]	Applicable	Introduction	Update reference to DCA in Definitions
42	Replaces “Secretary of Community Affairs” with “executive director of the state land planning agency”	Section 163.3247(5)(a) [Revised]	Not Applicable	N/A	N/A
43	Replaces “Department of Community Affairs” with “state land planning agency”	Section 163.3247(5)(b) [Revised]	Applicable	Introduction	Update reference to DCA in Definitions
44	Removes the word “county” from “board of commissioners”	Section 163.3248(6) [Revised]	Not Applicable	N/A	N/A
2013: [Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida]					
1	Re-numbers section 163.3162(3)(b)-(j) as 163.3162(3)(c)-(k) in order to accommodate	Section 163.2136(3)(c)-(k) [re-numbered]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	new section 163.3162(3)(b) – see item 4 below.				
2	Amends the definition of "governmental entity" in the provisions for agricultural lands and practices, clarifying that in addition to not including a water control district established under chapter 298 or a special district created by special act for water management purposes, the term does not include a water management district.	Section 163.3162(2)(d) [Revised]	Not Applicable	N/A	N/A
3	Replaces "county" with "governmental entity."	Section 163.3162(3)(a) [Revised]	Not Applicable	N/A	N/A
4	Prohibits a governmental entity from charging a fee on a specific agricultural activity of a bona fide farm operation on land classified as agricultural land pursuant to section 193.461, if such agricultural activity is regulated through implemented best management practices, interim measures, or regulations adopted as rules under chapter 120 by the Department of Environmental Protection, the Department of Agriculture and Consumer Services, or a water management district as part of a statewide or regional program; or if such agricultural activity is expressly regulated by the United States Department of Agriculture, the United States Army Corps of Engineers, or the United States Environmental Protection Agency.	Section 163.3162(3)(b) [New]	Not Applicable	N/A	N/A
5	Clarifies the provisions for growth management that an initiative or referendum process in regard to any development order is prohibited. Removes language that allowed an initiative or referendum process by a local government charter in effect as of June 1, 2011 to be retained and implemented.	Section 163.3167(8)(a) [New]	Applicable	Not Addressed	N/A
6	Clarifies that an initiative or referendum process in regard to any local comprehensive plan amendment or map amendment is	Section 163.3167(8)(b) [New]	Applicable	Not Addressed	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	prohibited, except for those amendments that affect more than five parcels of land if it is expressly authorized by specific language in a local government charter that was lawful and in effect on June 1, 2011. A general local government charter provision for an initiative or referendum process is not sufficient.				
7	States the intent of the Legislature is to prohibit any initiative and referendum in regard to any development order, and prohibit any initiative and referendum in regard to any local comprehensive plan or map amendment except as specifically and narrowly permitted in paragraph (b). States these prohibitions are remedial in nature and apply retroactively to any initiative or referendum process commenced after June 1, 2011, clarifying that any such initiative or referendum process that has been commenced or completed thereafter is null and void and of no legal force and effect.	Section 163.3167(8)(c) [New]	Applicable	Not Addressed	N/A
8	Revises and adds requirements for local governments that continue to implement a transportation concurrency system, whether in the form adopted into the comprehensive plan before the effective date of the Community Planning Act, Chapter 2011-139, Laws of Florida, or as subsequently modified.	Section 163.3180(5)(h)1 [New]	Applicable	Not Addressed	Traffic Circulation Element, Concurrency Management
9	Adds “development agreement” in the listed land use development permits for which an applicant may satisfy transportation concurrency requirements of the local comprehensive plan, the local government’s concurrency management system and section 380.06 when applicable, if conditions in subsequent sections are met.	Section 163.3180(5)(h)1.c [New]	Applicable.	Not Addressed	Traffic Circulation Element
10	Adds language allowing a local government to accept contributions from multiple applicants for a planned improvement if it	Section 163.3180(5)(h)1.c.II [New]	Applicable	Not Addressed	Traffic Circulation Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	maintains contributions in a separate account designated for that purpose.				
11	Modifies language to require local governments that continue to implement a transportation concurrency system to "provide the basis upon which the landowners will be assessed a proportionate share of the cost addressing the transportation impacts resulting from a proposed development.	Section 163.3180(5)(h)1.d [New]	Applicable	Not Addressed	Traffic Circulation Element
12	Clarifies that a local government is not required to approve a development that, for reasons other than transportation impacts, is not qualified for approval pursuant to the applicable local comprehensive plan and land development regulations.	Section 163.3180(5)(h)3 [New]	Applicable	Not Addressed	Traffic Circulation Element
13	Sets forth new provisions for any local government that elects to repeal transportation concurrency. Encourages adoption of alternative mobility funding system that uses one or more of the tools and techniques identified in subsection (f). Clarifies that any alternative mobility funding system adopted may not be used to deny, time or phase an application for site plan approval, plat approval, final subdivision approval, building permits, or the functional equivalent of such approvals provided that the developer agrees to pay for the development's identified transportation impacts via the funding mechanism implemented by the local government. States that the revenue from the funding mechanism used in the alternative system must be used to implement the needs of the local government's plan which serves as the basis for the fee imposed.	Section 163.3180(5)(i) [New]	Applicable	Not Addressed	Future Land Use Element, Traffic Circulation Element, Capital Improvements Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	Requires a mobility fee-based funding system to comply with the dual rational nexus test applicable to impact fees. An alternative system that is not mobility fee-based shall not be applied in a manner that imposes upon new development any responsibility for funding an existing transportation deficiency as defined in subsection (h).				
14	Changes numerous references in the provisions for the local government comprehensive planning certification program from "department" to "state land planning agency."	Section 163.3246(1),(4)-(7), (9)(a), (12) and (13) [Revised]	Applicable	Not Addressed	Update references to DCA in Definitions
15	Creates short title for sections 163.325-163.3253 as the "Manufacturing Competitiveness Act."	Section 163.325 [New]	Not Applicable	N/A	N/A
16	Creates six definitions as used in the provisions for manufacturing development in sections 163.3251-163.3253: • (1) "Department" means Department of Economic Opportunity; • (2) "Local government development approval" means a local land development permit, order, or other approval issued by a local government, or a modification of such permit, order, or approval, which is required for a manufacturer to physically locate or expand and includes, but is not limited to, the review and approval of a master development plan required under section 163.3252(2)(c). • (3) "Local manufacturing development program" means a program enacted by a local government for approval of master development plans under section 163.3252. • (4) "Manufacturer" means a business that is classified in Sectors 31-33 of the	Section 163.3251(1)–(6) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	National American Industry Classification System (NAICS) and is located, or intends to locate, within the geographic boundaries of an area designated by a local government as provided under section 163.3252. • (5) "Participating agency" means: (a) The Department of Environmental Protection, (b) The Department of Transportation, (c) The Fish and Wildlife Conservation Commission, when acting pursuant to statutory authority granted by the Legislature and (d) Water management districts. • (6) "State development approval" means a state or regional permit or other approval issued by a participating agency, or a modification of such permit or approval, which must be obtained before the development or expansion of a manufacturer's site, and includes, but is not limited to, those specified in section 163.3253(1).				
17	Setting forth provisions for a local manufacturing development program and master development approval for manufacturers, allows a local government to adopt an ordinance establishing a local manufacturing development program through which the local government may grant master development approval for the development or expansion of sites that are, or are proposed to be, operated by manufacturers at specified locations within the local government's geographic boundaries.	Section 163.3252 [New]	Not Applicable	N/A	N/A
18	Requires a local government that elects to establish a local manufacturing development program to submit a copy of the ordinance establishing the program to DEO within 20 days after the ordinance is enacted.	Section 163.3252(1)(a) and (b) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	A local government ordinance adopted before the effective date of this act establishes a local manufacturing development program if it satisfies the minimum criteria established in subsection (3) and if the local government submits a copy of the ordinance to DEO on or before September 1, 2013.				
19	Requires DEO to develop a model ordinance to guide local governments that intend to establish a local manufacturing development program by December 1, 2013. Requires the model ordinance, which need not be adopted by a local government, to include the elements set forth in sections 163.3252(2)(a)-(k), and sets forth certain requirements for the model ordinance.	Section 163.3252(2) [New]	Not Applicable	N/A	N/A
2014: [Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida]					
1	Deletes the provision that an initiative or referendum in regards to a comprehensive plan amendment or map amendment is only allowed if it affects more than five parcels of land.	Section 163.3167(8)(b)	Not Applicable	N/A	N/A
2	Deletes the provision that an initiative or referendum in regards to a comprehensive plan amendment or map amendment is only allowed if it affects more than five parcels of land.	Section 163.3167(8)(c)	Not Applicable	N/A	N/A
3	Changes “rural areas of critical economic concern” to “rural areas of opportunity”	Section 163.3177(7)(a)2. [Revised]	Not Applicable	N/A	N/A
4	Changes “rural area of critical economic concern” to “rural area of opportunity”	Section 163.3177(7)(a)3.b.	Not Applicable	N/A	N/A
5	Provides general re-wording and changes “rural area of critical economic concern” to “rural area of opportunity”	Section 163.3177(7)(e) [Revised]	Not Applicable	N/A	N/A
6	Changes “rural area of critical economic concern” to “rural area of opportunity”	Section 163.3187(3) [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
7	Requires that local governments must adopt, amend, and enforce land development regulations that are consistent with and implement the comprehensive plan within one year after submission of the comprehensive plan or amended comprehensive plan pursuant to section 163.3191, Florida Statutes (evaluation and appraisal process), instead of section 163.3167(2), Florida Statutes (requirement that each local government maintain a comprehensive plan).	Section 163.3202(1) [New]	Applicable	Not Addressed	Change to LDC
8	Provides legislative intent related to the importance of fuel terminals.	Section 163.3206(1) [New]	Not Applicable	N/A	N/A
9	Provides a definition of fuel with cross references	Section 163.3206(2)(a)1.-9. [New]	Not Applicable	N/A	N/A
10	Provides a definition of fuel terminal	Section 163.3206(2)(b) [New]	Not Applicable	N/A	N/A
11	Provides that after July 1, 2014, a local government may not amend its comprehensive plan, land use map, zoning districts, or land use regulations to conflict with a fuel terminal's classification as a permitted and allowable use, including an amendment that causes a fuel terminal to be a nonconforming use, structure, or development.	Section 163.3206(3) [New]	Not Applicable	N/A	N/A
12	Provides that if a fuel terminal is damaged or destroyed due to a natural disaster or other catastrophe, a local government must allow the timely repair of the fuel terminal to its capacity before the natural disaster or catastrophe.	Section 163.3206(4) [New]	Not Applicable	N/A	N/A
13	Provides that the section does not limit the authority of a local government to adopt, implement, modify, and enforce applicable state and federal requirements for fuel terminals, including safety and building	Section 163.3206(5) [New]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	standards. Local authority may not conflict with federal or state safety and security requirements.				
14	Changes "rural area of critical economic concern" to "rural area of opportunity"	Section 163.3246(10) [Revised]	Not Applicable	N/A	N/A
2015: [Chapter 2015-30, sections 1-6, Laws of Florida, effective May 15, 2015; Chapter 2015-69, section 1, Laws of Florida, effective July 1, 2015.]					
1	Adds requirements for the redevelopment component of the Coastal Management Element to: • Reduce the flood risk in coastal areas that result from high tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea level rise. • Remove coastal real property from FEMA flood zone designations. • Be consistent with or more stringent than the flood resistant construction requirements in the Florida Building Code and federal flood plain management regulations. • Require construction seaward of the coastal construction control line to be consistent with chapter 161, Florida Statutes. • Encourage local governments to participate in the National Flood Insurance Program Community Rating System to achieve flood insurance premium discounts for their residents.	Section 163.3178, Coastal Management Element (Chapter 2015-69, section 1, Laws of Florida) [New]	Not Applicable	N/A	N/A
2	Deletes obsolete provisions establishing 2012 deadlines for a local government to adopt plan amendments related to military base compatibility.	Section 163.3175(9), Compatibility of Development with Military Installations (Chapter 2015-30, section 1, Laws of Florida)	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
3	Provides that a local government that does not own, operate, or maintain its own water supply facilities and is served by a public water utility with a permitted allocation of greater than 300 million gallons per day is not required to amend its comprehensive plan in response to an updated regional water supply plan or maintain a work plan if the local government's usage of water is less than 1 percent of the public water utility's total permitted allocation. The local government must cooperate with any local government or utility provider that provides service within its jurisdiction.	Section 163.3177(6)(c)4., Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (Chapter 2015-30, section 2, Laws of Florida)	Not Applicable	N/A	N/A
4	The list of plan amendments subject to the coordinated state review process is expanded to include plan amendments that propose an amendment to an adopted sector plan and plan amendments that propose a development that qualifies as a development of regional impact pursuant to section 380.06, Florida Statutes.	Section 163.3184(2), Comprehensive Plan/Plan Amendment Procedures (Chapter 2015-30, section 3, Laws of Florida)	Not Applicable	N/A	N/A
5	For both the long-term master plan and detailed specific area plans, provisions in the Community Planning Act that are inconsistent with or are superseded by the planning standards in sections 163.3245(3)(a) and (b) do not apply. Additional provisions regarding the implementation of master plans and specific area plans.	Section 163.3245, Sector Plans (Chapter 2015-30, section 4, Laws of Florida)	Not Applicable	N/A	N/A
6	Deletes requirements for notice to and coordination by regional planning councils in connection with developments of regional impact within a certified local government. Creates a connected-city corridor plan amendment pilot program.	Section 163.3246(11) and (14) Local Government Comprehensive Planning Certification	Not Applicable	N/A	N/A

	Changes to Chapter 163, F.S.	Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	Expresses legislative intent to encourage growth of high-technology industry and innovation through a locally controlled comprehensive plan amendment process. • Establishes Pasco County as a pilot community for connected-city corridor plan amendments for a period of 10 years. • Requires the state land planning agency to issue a written notice of certification to Pasco County by July 15, 2015 that includes the geographic boundary of the connected city corridor and a requirement for annual or biennial monitoring reports. • Provides that the notice of certification is subject to challenge under section 120.569. • Establishes criteria for connected-city corridor plan amendments. • Provides that except for site-specific access management requirements, development in the certification area is deemed to satisfy concurrency if the County adopts a long-term transportation network plan and financial feasibility plan. • Provides an exemption from development of regional impact review. • Requires that the Office of Program Policy Analysis and Government Accountability provide a report and recommendations for implementing a statewide program to the Governor, President of the Senate, and Speaker of the House by December 1, 2024.	Program – Connected-City Corridor Pilot Program (Chapter 2015-30, section 5, Laws of Florida)			
7	Deletes regional planning councils as entities that provide assistance and participate in	Section 163.3248(4), Rural Land Stewardships	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	developing a plan for the rural land stewardship area.	(Chapter 2015-30, section 6, Laws of Florida)			
2016: [Chapter 2016-10, section 13, Laws of Florida, effective May 10, 2016; Chapter 2016-148, sections 2-4, Laws of Florida, effective July 1, 2016]					
1	Deletes this obsolete subsection which required local governments to transmit comprehensive plan updates or amendments to address compatibility of lands adjacent or closely proximate to existing military installations or lands adjacent to an airport to the state land planning agency by June 30, 2012.	Section 163.3177(6)(a)11,	Not Applicable [Plan does not contain administration/procedures section]	N/A	N/A
2	Modifies this section to state that a representative of a military installation is not required to file a statement of financial interest pursuant to section 112.3145, F.S., solely due to his or her service on the local government's land planning or zoning board.	Section 163.3175(7), [Revised]	Not Applicable	N/A	N/A
3	Amends section 163.3184(2)(c) to modify the language pursuant to changes in section 380.06, F.S., to require state coordinated review of plan amendments that approve DRI-sized proposed developments; no substantive change. Adds subsection 163.3184(5)(e)3 to provide that when an administrative law judge issues an order recommending that a plan amendment be found in compliance, the recommended order becomes the final order 90 days after issuance unless the state land planning agency issues a final order finding the amendment in compliance, refers the recommended order to the Administration Commission, or all parties consent in writing to an extension of the 90-day period. Amends section 163.3184(7)(d), for plan amendment challenges that are subject to mediation or expeditious resolution, to	Section 163.3184, [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	provide that when an administrative law judge issues a recommended order finding an amendment in compliance, except where the parties agree or there are exceptional circumstances, the state land planning agency must issue a final order within 45 days after issuance of a recommended order; and if the final order is not issued in 45 days, the recommended order finding the amendment in compliance becomes the final order.				
4	Modifies this section to reduce the minimum amount of total land area required for a sector plan from 15,000 acres to 5,000 acres.	Section 163.3245(1) [Revised]	Not Applicable	N/A	N/A
2018 [Chapter 2018-34, section 1, Laws of Florida, Effective March 19, 2018; Chapter 2018-158, section 8, Laws of Florida, Effective April 6,2018.]					
1	Amends the definition of "development" to exclude work by electric utility providers on utility infrastructure on certain rights-of-way or corridors and the creation or termination of distribution and transmission corridors.	Sections 163.3221(4)(b)(2) and (4)(b)(8) [Revised]	Applicable	Not Addressed	Update in Definitions
2	Sector Plans, updated statutory cross references.	Sections 163.3245(3)(e), (3)(e)6., and (3)(e)12	Not Applicable	N/A	N/A
3	Local Government Comprehensive Planning Certification Program updated to delete references to Development of Regional Impact Review.	Sections 163.3246 (11), (12), and (14)	Not Applicable	N/A	N/A
4	Definitions, added a new definition of "master development plan" or "master plan" as subsection (31) and renumbered subsequent sections.	Section 163.3164	Applicable	Not addressed	Add to Definitions
2019 [Chapter 2018-34, section 1, Laws of Florida, Effective March 19, 2018; Chapter 2018-158, section 8, Laws of Florida, Effective April 6,2018.]					
1	Required and Optional Elements of Comprehensive Plan; Studies and Surveys - Updates statutory reference related to affordable workforce housing within subsection (6)(f)	Section 163.3177, F.S.	Applicable	Not addressed	Future Land Use Element, Traffic Circulation Element, Housing Element, Infrastructure Element, Conservation Element, Recreation and Open Space

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
					Element, Intergovernmental Coordination Element
2	Impact Fees; Short Title; Intent; Minimum Requirements; Audits; Challenges • Revises the section's title. • Amends language of paragraphs (a) through (d) of subsection (3) to clarify the local government responsibilities related to impact fees. • Adds new paragraphs (e) through (i) to subsection (3) to amend the minimum requirements for the adoption of impact fees by specified local governments and note restrictions to the allowable uses of those impact fees. • Adds a new subsection (6), which exempts water and sewer connection fees from the Florida Impact Fee Act.	Section 163.31801, F.S	Applicable	Not addressed	Future Land Use Element, Traffic Circulation Element, Capital Improvements Element, Concurrency Management Element
3	Paragraph organization edits; Adds new paragraphs (i) and (p) to subsection (2) to specify additional local governments that must coordinate with certain military installations regarding the compatibility of land development	Section 163.3175, F.S	Not Applicable	N/A	N/A
4	Removes language the requiring local government approval of a property owner's request for electric utilities to perform certain right-of-way vegetation and tree maintenance	Section 163.3209, F.S.	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
5	Removes subsection (1)(b), which specified the cumulative annual acreage maximum of adopted small-scale comprehensive plan amendments	Section 163.3187, F.S.,	Not Applicable	N/A	N/A
6	Amends subjection (3) to require local governments that have adopted comprehensive plans after January 1, 2019 to incorporate into their comprehensive plans development orders that existed before the comprehensive plan's effective date	Section 163.3167, F.S.	Not Applicable	N/A	N/A
7	Amends subsection (5)(i) to clarify compliance requirements for a mobility fee-based funding system.; to require a local government to credit certain contributions, constructions, expansions, or payments toward any other impact fee or exaction imposed by local ordinance for public educational facilities.	Section 163.3180, F.S.	Not Applicable	N/A	N/A
8	• Amends subsection (3) to add minimum conditions that certain impact fees must satisfy. • Renumbers existing subsections (4) and (5) as subsections (6) and (7). • Adds a new subsection (4) to require local governments to credit against the collection of an impact fee any contribution related to public education facilities. • Adds subsection (5) so that if a local government increases its impact fee rates then the holder of impact fee credits is entitled to the full benefit of the intensity or density of the credit balance as of the date it was established and renumbers subsequent subsections. • Amends renumbered subsection (7) to provide that in certain actions, the local government	Section 163.31801, F.S [Revised]	Applicable	Not Addressed	Concurrency Management Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	has the burden of proving by a preponderance of the evidence that the imposition or amount of certain required dollar-for-dollar credits for the payment of impact fees meets certain requirements and prohibits the court from using a deferential standard for the benefit of the government. • Adds subsection (8) to authorize a local government to provide an exception or waiver for an impact fee for the development or construction of affordable housing, and in doing such is not required to use any revenues to offset the impact. • Adds subsection (9) to clarify that this section does not apply to water and sewer connection fees.				
9	Adds paragraph (j) to subsection (2) to require preexisting development orders to be incorporated into local land development regulations	Section 163.3202, F.S	Not Applicable	N/A	N/A
10	Amends subsection (8)(a) to provide that either party is entitled to a certain summary procedure in certain court proceedings. • Adds subsection (8)(b) clarifying how a court may find a summary procedure does not apply. • Adds subsection (8)(c), which provides that a prevailing party in a challenge to certain development orders can be entitled to recover certain fees and costs.	Section 163.3215, F.S	Not Applicable	N/A	N/A
2020: [Chapter 2020-2, section 27, Laws of Florida, Effective May 18, 2020; Chapter 2020-27, sections 4 and 5, Laws of Florida, Effective July 1, 2020; Chapter 2020-58, section 1, Laws of Florida, Effective July 1, 2020; Chapter 2020-122, section 2, Laws of Florida, Effective July 1, 2020; Chapter 2020-150, section 28, Laws of Florida, Effective July 1, 2021]					
1	Coastal Management - Amends subsection (2)(k) to update statutory references;	Section 163.3178, F.S [Revised]	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	paragraph edits to remove outdated deadlines				
2	Allows a local government to adopt an ordinance allowing accessory dwelling units to be located in any area zoned for single family residential use; removes the requirement that the ordinance be conditioned upon a finding that there is a shortage of affordable rentals within the jurisdiction	Section 163.31771, F.S	Applicable	Not addressed	Future Land Use Element, Housing Element
3	Adds subsection (10) and supporting paragraphs (a) through (e) to address the data on impact fee charges that must be reported in an annual financial report by a county, municipality, or special district	Section 163.31801, F.S	Applicable	Not addressed	Concurrency Management Element
4	Amends subsection (3)(d) to specify that a new or increased impact fee may not be charged to current or pending permit applications submitted before the effective date of an ordinance or resolution imposing such an impact fee unless the result is to reduce the total mitigation costs or impact fees imposed on an applicant. • Amends subsection (4) to clarify that a local government must provide credit against the collection of an impact fee of any contribution related to public education facilities regardless of any charter provision, comprehensive plan policy, ordinance, or resolution. • Renumbers existing subsections (8) and (9) as subsections (9) and (10). • Adds a new subsection (8) that sets forth the provisions by which impact fee credits are assignable and transferable and renumbers subsequent subsections	Section 163.31801, F.S [Revised]	Applicable	Not Addressed	Concurrency Management Element
5	Provides guidance to the state land planning agency when selecting applications for	Section 163.3168, F.S	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	technical assistance funding to give preference to counties with a population of 200,000 or less,				
6	To alter the governmental entity that approves onsite sewage treatment and disposal systems from the DOH to DOEP	Section 163.3180, F.S., [Revised]	Not Applicable	N/A	N/A
2021: Chapter 2021-7, sections 6 and 7, Laws of Florida, Effective July 1, 2021; Chapter 2021-63 section 1, Laws of Florida, Effective June 4, 2021; Chapter 2021-16, Chapter 2021-178, Chapter 2021-186, Chapter 2021-201, Laws of Florida, Effective July 1, 2021; Chapter 2021-195, sections 1-3, Laws of Florida, Effective July 1, 2021; Chapter 2021-206, sections 1 and 3, Laws of Florida, Effective July 1, 2021]					
1	Provides a definition for "Farm operation." to subsection (2)(B)	Section 163.3162, F.S	Applicable	Not Addressed	Update in Definitions
2	Provides a definition for "Farm operation." to subsection (3)(B)	Section 163.3163, F.S	Applicable	Not Addressed	Update in Definitions
3	Definitions, added a new definition of "Infrastructure" and "Public facilities"; reorganization of paragraphs; provide additional regulations pertaining to impact fee credits; new section - impact fees may be increased, sets forth limitations	Section 163.31801, F.S.	Applicable	Not Addressed	Update in Definitions, Concurrency Management Element
4	State land planning agency to give preference when selecting applications for funding for technical assistance to counties with a population of 200,000 or less and to municipalities within those counties, for assistance in determining whether the area in and around a proposed multiuse corridor interchange contains appropriate land uses and natural resource protections and amending a comprehensive plan to provide for such land uses and protections.	Section 163.3168, F.S.	Not Applicable	N/A	N/A
5	Solar Facility Approval Process,- applies to sites that are subject to an application to construct a solar facility submitted to a local government on, or after, July 1, 2021	Section 163.3205, F.S.	Not Applicable	N/A	N/A
6	Clarify that requirements pertaining to development orders with comprehensive plans related to plans after January 1, 2016	Section 163.3167, F.S.	Not Applicable	N/A	N/A
7	Required and Optional Elements of Comprehensive Plan; Studies and Surveys - requires each local government to include in	Section 163.3177, F.S	Applicable	Private Property Rights Element adopted per Ordinance 21-13	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	its comprehensive plan a property rights element				
8	Amendment or Cancellation of a Development Agreement - allow a party to a development agreement and a local government to amend or cancel a development agreement without consent of other affected property owners	Section 163.3237, F.S	Applicable	Not addressed	Capital Improvements Element, Concurrency Management Element
9	Land Development Regulations - Adds new subsection (5) to specify that land development regulations relating to building design elements may not be applied to a single-family or two-family dwelling except under certain listed conditions	Section 163.3202, F.S	Applicable	Not addressed	Future Land Use Element, Housing Element
10	Allows landowners with a development order approved before the municipality was incorporated to abandon said development order and develop the order's vested density and intensity as long as the vested uses, density, and intensity are consistent with the municipality's comprehensive plan and all existing concurrency obligations in the development order remain in effect.	Section 163.3167, F.S	Applicable	Not addressed	Future Land Use Element
11	Process for Adoption of Small-Scale Comprehensive Plan Amendment – changes to 50 acres or fewer	Section 163.3187, F.S	Applicable	Not Addressed	Can be addressed in an Administrative Section
2022: [Chapter 2022-83, Chapter 2022-122, section 1, Laws of Florida, Effective July 1, 2022; Chapter 2022-183, section 5, Laws of Florida, Effective July 1, 2022; Chapter 2022-204, section 2, Laws of Florida, Effective July 1, 2022]					
1	Floating Solar Facilities	Section 163.32051, F.S.	Not Applicable	N/A	N/A
2	Amending Concurrency Amends subsection (6)(h)2. to revise provisions specifying when school concurrency is deemed satisfied. • Requires the district school board to notify the local government that capacity is available for development within 30 days after receipt of the developer's legally binding commitment. • Specifies that any proportionate-share	Section 163.3180, F.S.	Not Applicable	Not Addressed	Public School Facilities Element

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	mitigation directed toward a school capacity improvement not identified in the 5-year school board educational facilities plan must be set aside and not spent until such an improvement has been identified				
3	Updating Military Base Names: update two military base names to Patrick Space Force Base and Cape Canaveral Space Force Station, associated with Brevard County and Satellite Beach.	Section 163.3175, F.S.	Not Applicable	N/A	N/A
4	Coastal Management, adding Putnam County to the Florida Seaport Transportation and Economic Development Council	Section 163.3178, F.S.	Not Applicable	N/A	N/A
2023: [Chapter 2023-17, section 2, Laws of Florida, Effective July 1, 2023; Chapter 2023-115, section 1, Laws of Florida, Effective July 1, 2023; Chapter 2023-31, section 2, Laws of Florida, Effective July 1, 2023]					
1	Introduces the "Live Local Act", that makes various changes and additions to affordable housing programs at the state and local levels.	Section 125.01055, F.S.	Applicable	Not Addressed	Future Land Use Element
2	Local Government Comprehensive Plans; Providing that the prevailing party in a challenge to a plan or plan amendment is entitled to recover attorney fees and costs; providing that the prevailing party in a challenge to the compliance of a small-scale development order is entitled to recover attorney fees and costs, etc.	Section 163.3184, F.S.	Not Applicable	N/A	N/A
3	Revising the planning periods that must be included in a comprehensive plan; requiring local governments to determine if plan amendments are necessary to reflect a certain minimum planning period; requiring, rather than encouraging, a local government to comprehensively evaluate and update its comprehensive plan to reflect changes in local conditions; requiring the state land planning agency to provide population projections if a local government fails to update its comprehensive plan, etc.	Section 163.3191, F.S.	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
2024: [Chapter 2024-118, section 1, Laws of Florida, Effective May 16, 2024; Chapter 2024-266, sections 1 & 2, Laws of Florida, Effective October 1, 2024; Chapter 2024-22, section 1, Laws of Florida, Effective July 1, 2024; Chapter 2024-136, sections 1 & 2, Laws of Florida, Effective July 1, 2024]					
1	Amends provisions of the Live Local Act, prohibiting counties and municipalities, respectively, from restricting the floor area ratio of certain proposed developments under certain circumstances; authorizing counties and municipalities, respectively, to restrict the height of proposed developments under certain circumstances; requiring counties and municipalities, respectively, to maintain a certain policy on their websites; revising conditions for when multifamily projects are considered property used for a charitable purpose and are eligible to receive an ad valorem property tax exemption, etc. APPROPRIATION: $100,000,000	Section 125.01055, F.S.	Applicable	Not Addressed	Future Land Use Element
2	Defines mobility fee, mobility plan	Section 163.3164, F.S.	Applicable	Not Addressed	Add to Definitions
3	Creates an Alternative Mobility Funding Systems and Impact Fees; Authorizes local governments to adopt alternative mobility plan & fee system; provides requirements for application of adopted alternative system; prohibits alternative system from imposing responsibility for funding existing transportation deficiency upon new development; prohibits local governments that do not issue building permits from charging for transportation impacts associated with development; requires local governments that issue building permits to collect for extra jurisdictional impacts; prohibits local governments from assessing multiple charges for same transportation impact; revises requirements for calculation of impact fees by local governments & special districts.	Section 163.3180, F.S.	Applicable	Not Addressed	Traffic Circulation Element, Capital Improvements Element, Concurrency Management Element
4	Requires local governments to cooperate with certain major military installations and	Section 163.3175, F.S.	Not Applicable	N/A	N/A

Changes to Chapter 163, F.S.		Chapter 163, F.S. Citations	F.S. Change Applicability to LaBelle	F.S. Change Addressed in Current Plan (where/how)	Amendment Required and Affected Element
	ranges to encourage compatible land use in associated areas, etc.				
5	Repeals provisions relating to inactive community redevelopment agencies	Section 163.3756, F.S. (Repealed)	Not Applicable	N/A	N/A
6	Prohibits the creation of new neighborhood improvement districts after a date certain	Section 163.504, F.S.	Not Applicable	N/A	N/A

APPENDIX B: ELEMENT BY ELEMENT REVIEW

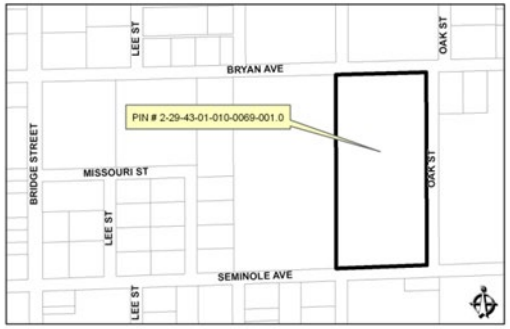
The following tables are intended as summary of observations of the Comprehensive Plan to date related to consistency with the significant changes to Florida Statutes since the last update to the LaBelle Comprehensive Plan.

Chapter 1: Future Land Use Element Review

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
GOAL 1: ENSURE THAT LAND USES AND DEVELOPMENT ARE GUIDED IN A MANNER TO PRODUCE SUSTAINED AND PLANNED GROWTH WITHIN THE CAPABILITIES OF THE NATURAL, PHYSICAL AND HUMAN RESOURCES OF THE CITY.	Acceptable, but consider broadening to connect land uses and development to goals of maintaining and enhancing quality of life for residents & visitors.			X
OBJECTIVE 1.1: Efficient Management of Land Resources.	Acceptable.	X		
POLICY 1.1.1 The City will establish compatibility as one of the criteria in the review of development proposals.	Acceptable.	X		
POLICY 1.1.2 The City will protect and enhance the fabric and character of neighborhoods by maintaining zoning regulations that are consistent with the Comprehensive Plan, by enforcing code provisions and by fostering redevelopment through a comprehensive process of economic facilitation.	Acceptable generally but does not account for large vacant land area within South LaBelle. Can be revised to discuss redevelopment goals for historic LaBelle and the master planning vision for South Labelle.			X
POLICY 1.1.3 The City will protect and enhance resources and amenities through careful evaluation of impacts during the development review process and by coordinating review efforts with other pertinent agencies.	Acceptable. Further analysis recommended to list specific resources and amenities to be protected/enhanced, as well as agencies to be coordinated with. This will allow for successful implementation of this policy.			X
POLICY 1.1.4 The City will assure that services and facilities are provided at the adopted level of service concurrent with existing and future demand.	Acceptable.	X		
POLICY 1.1.5 The City will regulate development to mitigate potential flood-related hazards in flood prone areas through compliance review during building permit application review.	Revise to require regulation to mitigate potential flood-related hazards throughout the development review process (not limit to building permit application review)			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
POLICY 1.1.6 The City will require the availability of water and sewer and other facilities and services for which there are level of service standards.	Acceptable.			X
OBJECTIVE 1.2: Balanced Urban Growth. Facilitate a compact urban development pattern that provides opportunities to more efficiently use and develop infrastructure, land and other resources and services by concentrating more intensive growth in mixed-use land use designations.	Acceptable.			X
POLICY 1.2.1 The City will promote varied and balanced growth to enhance the community both fiscally and physically, providing for housing and employment needs.	Acceptable.			X
POLICY 1.2.2 The City will maximize the use of available public facilities and minimize the need for new facilities by directing new development to infill and redevelopment locations, particularly focusing on redevelopment of the Downtown.	Needs to be modified to account for South Labelle expansion, where public facilities must be expanded.			X
POLICY 1.2.3 Existing agricultural uses may continue until issuance of a building permit is completed.	Acceptable			X
POLICY 1.2.4 The Future Land Use Map will specify the desired development pattern for the City through a land use category system that provides for the location, type, density and intensity of development and redevelopment.	Acceptable.			X
OBJECTIVE 1.3: Land Use Categories. Continue to promote LaBelle as a desirable place to live, work and play, by establishing land use categories that promote economic development while retaining the character and quality of life of the community.	Acceptable generally but does not account for development opportunities within South LaBelle. Can be revised to emphasize future growth opportunities in South LaBelle in addition to managing growth within historic LaBelle. Consider adding Tables of FLU categories with density/intensity allowances			X
POLICY 1.3.1 Residential Land Use Category.	Update to allow for densities higher than 3 DU/AC, where vested under existing zoning.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
Residential lands are those areas of the City that are used predominantly for housing and are comprised mostly of existing single-family, duplex, or quadraplex development. These areas are largely defined by their linear street pattern and average lot size of .45 acres. Other uses that are consistent with residential character may be permitted subject to the requirements of the land development regulations. Examples of potentially compatible uses include, but are not limited to, houses of worship, community group homes, parks, golf courses, libraries, schools, and day care centers. The maximum residential density for this land use category is three (3) dwelling units per gross acre. Residential equivalent uses will not exceed four (4) beds per dwelling unit. Non-residential uses allowed by the land development regulations will not exceed a floor area ratio (FAR) of .30. An exception to the residential density allocation of three (3) units per acre will apply to property known as "The "Mathew Kutty Property", identified as PIN #2-29-43-01-010-0069-001.0. This property is comprised of approximately 7.5 acres and has a current land use designation of Residential-Suburban, allowing a maximum residential density of six (6) units per acre. In good faith, the property owner has moved forward with rezoning and development planning based on the current density of six units per acre. Therefore, density allocation for this property will remain unchanged.	The Matthew Kutty property could fall under this allowance. Consider removing an average lot size requirement, it is difficult to track/enforce. Minimum lot size can be considered, but should account for all types of residential units permitted. Consider allowance of accessory dwelling units to enhance affordability, as permitted per F.S.			

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
				
POLICY 1.3.2 Outlying Mixed Use Land Use Category. The Outlying Mixed Use Category is established to provide for integrated planned developments where a mixture of land uses are permitted and encouraged. The most appropriate land uses for this area will continue to be residential with neighborhood and general commercial uses permitted at locations that meet the sub-category standards as described herein. No more than 30% of the total area of the Category will be used for single use commercial development, and no more than 70% will be used for single use residential development. This classification is intended to ensure development of distinctive centers or “main streets” that provide a focus to surrounding neighborhoods. It encourages the development of commercial and employment related uses and a variety of housing types in locations appropriate to serve as a buffer or transition to lower density residential areas. All developments located within this land use designation are encouraged to embrace the mixed-use concept, integrating some, if not all of the residential, office, hotel, institutional and recreational elements.	Consider moving more detailed requirements around the bonus-density program, PUD rezone etc. to the LDC. Consider if the densities offered are too high. Calculations of density & intensity for mixed use projects must be defined in the Comprehensive Plan.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
…				
POLICY 1.3.3 Downtown District. This land use district is primarily intended to encourage, support, and enhance Downtown LaBelle as the most high-intensity office and employment area of LaBelle. The Downtown District supports mixed-use (office combined with hotel, residential, and other uses) development as important components of the area's vitality. Emphasis is on the integration of commercial, residential, entertainment, civic, institutional and public spaces. A broad array of compatible uses, including retail, restaurants and cafes, residential, office, cultural, educational and indoor recreation is permitted, with active ground floor uses. The Caloosahatchee River and Barron Park will serve as the key focal points of the Downtown, essentially becoming the downtown's front porch. Building intensities will support small town urban design as well as provide livability goals such as walkability and community gathering places and will build upon the natural features and historic assets of LaBelle to promote richness and diversity. …	Update to reference Downtown LaBelle Form-Based Code. Calculations of density & intensity for mixed use projects must be defined in the Comprehensive Plan.			X
POLICY 1.3.4 Commercial Land Use Category. The Commercial Land Use Category applies predominantly to lands located along the street frontages of State Roads 80 and 29 South. This land use category accommodates commercial, retail and office uses that are more auto-oriented due to scale and typology, while respecting the pedestrian and alternative transportation modes through land development code design standards.	Calculations of density & intensity for mixed use projects must be defined in the Comprehensive Plan.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
The Commercial Land Use Category will have a maximum Floor Area Ratio (FAR) of 1.0, to encourage a greater use of the site within an urban setting. Residential development is only allowed within a mixed-use project in the Business Professional (B-1) and Business General (B-2) zoning districts as described in the Land Development Code, or through the PUD rezoning process. Density will not exceed 6 dwelling units per acre. New development of single-family detached units is not permitted in the Commercial category. Single-family homes in existence on Commercial designated parcels as of February 14, 2019 are vested as legal non-conforming uses and may be improved and/or reconstructed in accordance with the Land Development Code. For the purposes of this category, residential density will be calculated based on the total project acreage. Development will provide access management plans that utilize frontage roads, alleyways, shared ingress and egress and parking.				
POLICY 1.3.5 Industrial Land Use Category. The Industrial Land Use Category is designated for facilities which assemble, market and distribute products, engage in research and development or commercial uses. Multi-tenant industrial uses as well as office space that is accessory to a primary industrial use is allowed. Heavy industrial uses that have significant nuisance or hazardous effects are excluded from this category. Specifically, the City finds mining to be a significant nuisance and therefore is not a permitted use in the Industrial Land Use Category. Commercial retail and residential uses are not permitted within this Category.	Acceptable	X		

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
The maximum Floor Area Ratio (FAR) in this Category is limited to 1.0.				
POLICY 1.3.6 Employment Village Category. This land use category is envisioned as a zone for employment-generating industries and businesses that co-exist with existing and limited new residential development. This category targets a mix of uses with emphasis on industrial development, and builds upon the goal of strengthening the overall economic viability of the City. The residential units in this category are primary, multi-family dwellings, such as condominiums, apartments or live/work units. …	Consider moving more detailed requirements around the bonus-density program, PUD rezone etc. to the LDC. Implementation of use thresholds Citywide is difficult. Consider incentives for employment-generating uses and tying residential allowances to non-residential development via mixed use projects.			X
Sub Policy 1.3.6.1 Old Groves Mixed-Use Subdistrict. The purpose of this sub-district is to produce a more integrated representation of housing structure types that reach across economic ranges of affordability. The land within this Category comprises an area of approximately 335 acres and is located immediately south of Cowboy Road and immediately east of S.R. 80. This juxtaposition places the land immediately adjacent to the original boundary of the city and an area of the city in which urban levels of development has occurred.	Acceptable.	X		
POLICY 1.3.7 Agriculture Use Category. Agriculture lands are designated for properties that have recently been annexed into the City of LaBelle and are in current use for agricultural activities. Agricultural lands may not exceed a maximum residential density of one (1) dwelling unit per five (5) acres. Uses on land designated as Agriculture include: single-family residential dwelling units, ranching, crop farming	There are no lands under this designation, may be excluded.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
including citriculture, silviculture, aquaculture, row crops and resource extraction industries.				
POLICY 1.3.8 Public Use Category. Lands in the Public Use Category are characterized by public ownership or by private ownership of facilities that accommodate the general public. The Floor Area Ratio (FAR) for public uses will be limited to 0.5.	Acceptable.	X		
POLICY 1.3.8.1 The City adopts by reference, the 2003 Edition of the International Property Maintenance Code as amended, to insure that existing development is not be allowed to deteriorate.	Review/Update reference as needed.			X
POLICY 1.3.8.2 Future development shall be coordinated with topography, soil conditions, and availability of facilities and services as established in the comprehensive plan.	Update to reference requirements of Future Land Use Amendments per F.S.		X	
POLICY 1.3.9 South LaBelle Community Land Use Category. This land use category will provide for a mix of housing, employment, educational, recreational and civic uses that will accommodate anticipated growth within Western Hendry County, while implementing innovative planning and environmental strategies that result in a strong economic base for the City of Labelle. Development in the South LaBelle Village Land Use Category will be guided by Exhibit A, Figure 1-1 (Conceptual Land Use Overlay Map), and will be subject to the following minimum standards to ensure a wide array of land uses are developed in a manner that is financially feasible and promotes compact development patterns.	Acceptable.	X		
POLICY 1.3.9.1 Development in the South LaBelle Community Land Use Category will comply with the minimum and maximum densities and intensities set forth in Table 1-1 below.	Acceptable.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
Table 1-1: South LaBelle Community Development Summary Land Use | Minimum development at build-out | Maximum development at build-out Residential | 5,280 du | 15,840 du Retail | 200,000 square feet | 1,000,000 square feet Office (general and medical) | 100,000 square feet | 500,000 square feet Light Industrial | N/A | 3,000,000 square feet				
POLICY 1.3.9.2 Conceptual Land Use Framework. In order to provide guidance on the appropriate mix and location of land uses within the South LaBelle Community, and to update the City of LaBelle Comprehensive Plan Traffic Circulation Map, a generalized Land Use Overlay is established as Future Land Use Map, Exhibit A, Figure 1.1. Figure 1-1 projects generalized locations for land use areas to be implemented through the Planned Unit Development zoning district. The designations contained in this overlay are defined below. The land use areas are conceptual in nature and may be modified through the Planned Unit Development rezoning process subject to compliance with the Policy 1.3.9 and sub-policies contained herein. 1) Village Residential - will define areas that are primarily for residential uses. Village Residential uses may be developed at a density no greater than 2.5 dwelling units per gross acre. Clustering will be achieved as a result of a requirement for a minimum of 30% open space. Uses in the Village Residential category include both single and multi-family units, as well as town house, duplex and any other similar unit types, as well as public or private recreational facilities, and civic uses like schools, libraries, etc.	Acceptable.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
Commercial uses up to a FAR of .25 are permitted to meet the needs of the adjacent neighborhoods. An area equal to 2% of the net residential acreage within the Village Residential category must be used for civic or active and passive recreational facilities, and will be interconnected with the remainder of the community via pedestrian connections. 2) Urban Residential – will define areas that are primarily for higher density residential neighborhoods, mix-used development, and supportive commercial uses, which are within proximity to other non-residential uses or arterial roadway corridors. Urban Residential areas may be developed at a gross density no greater than 10 dwelling units per gross acre. A minimum of 25% open space must be provided within this area. Uses include both single and multi-family units, as well as town house, duplex and any other similar unit type. In order to ensure a variety of lifestyle choices and price ranges, a minimum of 30% of the total units within the Urban Village shall be multi-family or townhome dwelling types. Non-residential uses are permitted in Urban Residential areas, limited to civic, active and passive recreation, and commercial uses to serve the needs of the adjacent neighborhoods. Commercial uses may be				

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
developed at a maximum Floor Area Ratio of 0.5. An area equal to 2% of the net residential acreage of the Urban Village category must be used for civic or active and passive recreational facilities, and will be interconnected with the remainder of the community via pedestrian connections. 3) Commercial Activity Center - defines areas that are intended to meet the shopping, business and entertainment demands of the local and regional population. Commercial Activity Centers are required to have direct access to an arterial or major collector road. Development shall be limited to a maximum floor area ratio of 0.5, and must provide a minimum of 20% open space. 4) Resource Protection – defines areas that generally contain jurisdictional wetlands, or indigenous areas required for preservation of protected species, or other areas that have been set aside for the protection of natural resources. These areas are shown conceptually on Figure 1-1, and subject to verification and permitted by the appropriate state and federal agencies. Where possible, pedestrian connections shall be encouraged between the Resource Protection Areas and the developed areas within SLCLUC.				

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
5) Civic uses, including but not limited to churches, institutional uses, public and quasi-public facilities and recreational uses may be permitted in any of the SLC land use categories, except Resource Protection, which is limited to passive recreational uses subject to state and federal permit approval. 6) Continued agricultural uses. Agricultural uses will be a permitted use in any land use category in the South LaBelle Community when zoned Agriculture (AG), or approved on an interim basis as part of a Planned Unit Development. Excavation and mining activities are also permitted subject to the AG zoning district requirements and regulations.				
POLICY 1.3.9.2 Performance Standards. In order to ensure quality development, all development within the South LaBelle Community must comply with the following minimum standards and requirements. 1) **Planned Unit Development rezoning required.** All development within the South LaBelle Community, except for those uses permitted by the underlying Agriculture zoning district, must be rezoned to the Planned Unit Development zoning district. 2) **Timing of adequate public facilities and infrastructure.** All development with the exception of agricultural uses and interim public facilities and uses must connect to centralized water and sewer service. Prior to the issuance of building permits, the	Acceptable.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
developer must demonstrate adequate public services and facilities to serve proposed development are available via written verification from Sheriff, the Fire District, EMS, Hendry County School District, or via interlocal agreement(s), special districts, community development districts, or other appropriate funding mechanisms. 3) **Phasing of non-residential and residential uses.** In order to ensure that a mix of uses is achieved, the following minimum non-residential square footages must be constructed within the South LaBelle Community prior to obtaining a certificate of occupancy for the corresponding number of residential units. Maximum No. of Residential Units — Minimum Required Non-Residential S.F. (Building Floor Area) 1,000 Units — 10,000 S.F. 2,000 Units — 30,000 S.F. 3,000 Units — 60,000 S.F.[1] Note: 1. The residential and non-residential figures listed above are totals, and are not to be treated as cumulative numbers. 2. The following uses may be counted towards the completion of the non-residential requirement: a. any commercial use (office or retail) b. any active public recreational building (including recreational center and YMCA's) c. any civic use building (including but not limited to: church, community hall, meeting room, government offices) 4) **Development monitoring requirements.** The developer will be required to monitor all development occurring within the South LaBelle Community to ensure compliance with the minimum performance standards contained in Policy 1.3.9 and sub-policies. The PUD zoning ordinance shall contain appropriate conditions requiring the submittal of biennial reports, or other form of monitoring				

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
acceptable to the City, through project build-out. The monitoring reports shall demonstrate the amount of residential and non-residential development constructed within the South LaBelle Community as of the date of the report, and compliance with other minimum requirements including, but not limited to: open space, civic space, minimum and maximum densities and intensities, and the provisions of public services and infrastructure. 5) **Pedestrian and Bicycle Facilities.** All development shall be served by an internal transportation system that includes pedestrian and bicycle facilities, as evaluated through the PUD process.				
OBJECTIVE 1.4: Energy Efficient Land Uses. Encourage and manage land use patterns in conjunction with innovative transportation strategies that serve to optimize energy conservation with sound economic, environmental, and social principles.	Acceptable.			X
POLICY 1.4.1 The City will encourage land use projects and patterns in LaBelle that result in reduced energy consumption.	Acceptable.			X
POLICY 1.4.2 The City will make energy sustainability a primary consideration in decisions about land use, density, and design by: • Analyzing existing policies, and developing new policies, rules and standards that create incentives to emphasize energy sustainability; • Locating land uses to encourage walking, biking, and transit and to encourage greater accessibility to jobs and businesses;	Acceptable.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
• Designing density with amenities that encourage and reward the use of green criteria in the designs; and • Applying ecological best practices to achieve green, safe, accessible, adaptable and engaging streets, parks, and public places.				
POLICY 1.4.3 New development will be encouraged to provide vehicular, bicycle and pedestrian connections to adjacent commercial development and to adjacent residential development, except when such connections are precluded by physical layout or environmental features.	Acceptable.			X
POLICY 1.4.4 The City will encourage clustered residential growth and higher densities, proximate to employment centers with multi-modal opportunities.	Acceptable.			X
OBJECTIVE 1.5: Energy Generation. Encourage energy production from renewable resources where feasible.	Acceptable, however, since energy production at scale is not an active industry in LaBelle, can be updated to promote low-impact development and sustainability in design.			X
POLICY 1.5.1 In coordination with energy suppliers, the City will investigate options for public/private partnerships in the generation of electricity from renewable sources such as roof top solar facilities	Acceptable.			X
OBJECTIVE 1.6: Compatibility and Neighborhood Protection. The City of LaBelle's future land use map is comprised of a range of densities, all of which can be accommodated in the appropriate areas when the following policies and standards are met. All new development and redevelopment must be compatible with existing and planned surrounding development in order to protect the City's established residential neighborhoods and ensure a high quality of life for its residents. For the purposes of this objective, compatibility is defined as the characteristics of different uses or activities or design which allow them to be located near or adjacent to each other in	Acceptable. Review against state definition of compatibility.			X

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
harmony. Some elements affecting compatibility include the following: height, scale, mass and bulk of structures, pedestrian or vehicular traffic, circulation, access and parking impacts, landscaping, lighting, noise, odor and architecture. Compatibility does not mean "the same as." Rather, it refers to the sensitivity of development proposals in maintaining the character of existing development.				
POLICY 1.6.1 Locational Standards. The density ranges set forth in this Element provide the general range of appropriate densities in each future land use category. Densities in the upper limits of the allowable density range will be evaluated as to the availability and proximity of the road network; centralized sewer and water services; community facilities and services such as schools, EMS, fire and police protection, and other public facilities; compatibility with neighboring land uses; and any other relevant facts affecting the public health, safety, and welfare.	Consider detailing locational standards for higher density and non-residential development.			X
POLICY 1.6.2 Higher Density and Intensity Land Uses. Higher density and intensity development shall occur in urbanized areas of the City, generally near Downtown and the arterial roadway network. These developments are intended to provide for greater housing diversity, employment opportunities and a compact, mixed-use and multi-modal built environment.	This is contrast to ideas expressed at the Community Workshop. Residents expressed a desire to maintain the low-density character of the downtown.			X
POLICY 1.6.3 Sensitive Site Design. Projects must demonstrate sensitive site design to address compatibility with the surrounding neighborhood. Such design may include but is not limited to: spatial separation between existing low-density uses and proposed higher-density uses through the use of open space, buffers, setbacks; consistent lot sizes and lot coverage requirements that align with abutting developed lots; limitations on building heights; performance standards; and other appropriate conditions of approval. Projects must demonstrate the transition of proposed densities within the project to the	Acceptable.	X		

2010 Comprehensive Plan Reference: Future Land Use Element	Analysis/Recommendations	No Comment	State Required	Recommendations
external boundaries, where proximate to established low-density residential neighborhoods.				

2010 Comprehensive Plan Reference: Traffic Circulation Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 2: PROVIDE AND MAINTAIN A SAFE, COORDINATED, EFFICIENT, AND COST EFFECTIVE TRANSPORTATION SYSTEM FOR THE MOVEMENT OF PEOPLE AND GOODS THROUGHOUT LABELLE WHILE MAINTAINING COMPATABILITY WITH EXISTING AND POTENTIAL FUTURE LAND USES.	As a response to interest in pedestrian-oriented circulation options, consider rebranding from “traffic circulation” to “mobility”.	X		
OBJECTIVE 2.1: Level of Service Standards. The City shall continue to maintain a safe, convenient, efficient, and diverse transportation system through the maintenance of level of service standards for all aspects of the system.	Expand to “multimodal” transportation	X		
POLICY 2.1.1 The City adopts the following peak hour level of service standards: 1) for SR 80, level of service "C", 2) for SR 29, level of service "D", 3) for CR 80A, level of service "D", and 4) for all other streets within the City, level of service "D".	Acceptable.			X
POLICY 2.1.2 Representatives of the City will work with representatives of Hendry County and FDOT to continue the traffic count program to determine the existing conditions and the need for improvements.	Acceptable.			X
POLICY 2.1.3 The City will work with Hendry County and FDOT to maintain the appropriate levels of service on county and state roads within the City.	Acceptable.			X
POLICY 2.1.4 Improvements to the traffic circulation system will be made so as to reduce negative impacts, especially during periods of heavy usage.	Acceptable.			X

2010 Comprehensive Plan Reference: Traffic Circulation Element	Analysis/Recommendations	No Comment	State Required	Recommended
OBJECTIVE 2.2: Protection of Right-of-Way. The City shall protect the existing and future rights-of-way from building encroachment by enforcement of its right-of-way setback requirements for all structures along new or realigned arterial roadways outside of the Historic Downtown District.	Acceptable.	X		
POLICY 2.2.1 The City will establish standards for the donation/dedication of right-of-way by developers.	Acceptable.			X
POLICY 2.2.2 The City will allow donation/dedications of right-of-way by developers to be applied as credit against any future transportation concurrency requirements, if the contribution expands a state transportation facility.	Update requirements for transportation concurrency per F.S.		X	
POLICY 2.2.3 The City will require developers to provide access management plans adequate to meet the needs of their project, as determined by the City or any other applicable agency.	Acceptable.	X		
POLICY 2.2.4 Applications for vacating of public right-of-way will consider the impacts on overall traffic circulation and delivering of essential services, including but not limited to Fire/EMS, police, waste management, school bus routes, and emergency evacuation routes.	Acceptable.	X		
OBJECTIVE 2.3: Maintenance of Transportation Infrastructure. Prepare and update a five-year priority listing and a budget for needed improvement or construction of City streets.	Acceptable.			X
POLICY 2.3.1 The City will maintain existing roadways, consistent with the level of service standards adopted in this element.	Acceptable.			X
POLICY 2.3.2 The City will annually examine the five-year maintenance needs of the City roadways.	Acceptable.			X
POLICY 2.3.3 The City will maintain the existing public street system.	Acceptable.			X

2010 Comprehensive Plan Reference: Traffic Circulation Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 2.3.4 The City will permit multi-use Developments of Regional Impact (DRIs) to satisfy the transportation concurrency requirements by payment of a proportionate share contribution, however this mitigation cannot be used to address backlogs.	Remove as there are no DRIs active in the City of LaBelle, and the DRI framework is no longer used by the State.			X
OBJECTIVE 2.4: Provision of Multi-Modal Transportation. Ensure that sidewalks and bicycle paths are constructed as needed throughout the City, to provide a variety of transportation opportunities for residents.	Acceptable.	X		
POLICY 2.4.1 The City will implement the Hendry County Pathway Plan to provide for an integrated bicycle and walkway system.	Update reference.			X
POLICY 2.4.2 The City will annually review sidewalk and bicycle needs.	Acceptable.			X
POLICY 2.4.3 To the extent possible, the City will provide for bicycle and pedestrian facilities in proposed transportation improvement projects.	Acceptable.			X
POLICY 2.4.4 By 2012, the City will modify the Land Development Code to address the provision of bicycle circulation and pedestrian facilities within new developments and existing development undergoing substantial improvements.	Update to require the LDC to maintain such policies.			X
POLICY 2.4.5 The City will examine, and where appropriate implement, the Safe Routes to School Program as a funding mechanism for sidewalk improvement projects in proximity to elementary and middle schools.	Consider updating to address mobility options and multi-modal solutions.			X
OBJECTIVE 2.5: Future Land Use Map Coordination. Coordinate the traffic circulation system with the land uses shown on the future land use map.	Acceptable.			X
POLICY 2.5.1 Applications for future land use or zoning amendments to more intense or dense designations will be considered in conjunction with existing, undeveloped land densities and platted	Acceptable, but consider rewording as transportation concurrency is no longer required per F.S.		X	

2010 Comprehensive Plan Reference: Traffic Circulation Element	Analysis/Recommendations	No Comment	State Required	Recommended
lots of record in the context of long range planning for improvements to the City's transportation system.				
POLICY 2.5.2 The Transportation Element will be reviewed and updated as needed with each amendment to the Future Land Use Element.	Acceptable, but correct element name reference.	X		
POLICY 2.5.3 The City shall, as part of its Land Development Code, encourage interconnectivity of adjacent development in order to minimize access points to major roadways, particularly SR 80 and SR 29.	Acceptable.			X
POLICY 2.5.4 The City will uphold the access management standards established by the Florida Department of Transportation for SR 80 and SR 29.	Combine with policy as above.	X		
POLICY 2.5.5 The City will require all transportation facilities needed to support new development to be in place or under construction within three (3) years after approval of building permit.	Remove as transportation concurrency is longer required for project approval per F.S.		X	X
POLICY 2.5.6 The City shall require all development proposals to provide safe and convenient on-site traffic flow and adequate parking for both motorized and non-motorized vehicles.	Acceptable. Consider adding language to put surface parking maximums in place to reduce impervious surface area.			X
POLICY 2.5.7 The City shall review the parking requirements in its codes and ordinances and shall revise these as needed at least once every three years.	Remove as revisions every 3 years is difficult to implement. Consider adding flexibility to use alternate parking calculation standards in the LDC to support evolving standards.			X
OBJECTIVE 2.6: Intergovernmental Coordination. The City shall annually coordinate its traffic circulation planning efforts with the Florida Department of Transportation for consistency with its Five-year Transportation Plan, and with the plans and programs of other agencies.	Acceptable but considering merging with policies within the Intergovernmental Coordination Element to avoid repetition.	X		
POLICY 2.6.1 Representatives of the City will meet with representatives of Hendry County, FDOT, and other agencies to maintain and improve the traffic circulation system within LaBelle.	Remove – duplicate with Policy 2.1.3.			X

2010 Comprehensive Plan Reference: Traffic Circulation Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 2.6.2 The City will annually notify Hendry County and the Florida Department of Transportation of the needs of the state and county road system in LaBelle.	Remove – duplicate with Policy 2.1.3.			X
POLICY 2.6.3 Representatives of the City will meet quarterly with representatives of the Florida Department of Transportation, Hendry County, and the Hendry County School Board to discuss roads, sidewalks, and bicycle paths and to review City transportation needs.	Remove – duplicate with Policy 2.1.3. Also, time constraints may be difficult to implement.			X
POLICY 2.6.4 The City will adopt by reference the Hendry County Transportation Needs Assessment Study, prepared by the Florida Department of Transportation, 2010.	Remove or update reference to more recent study, if applicable.	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 3: PROVIDE A REGULATORY SYSTEM AND A PLAN THAT PROVIDES AN OPPORTUNITY FOR SANITARY, AND AFFORDABLE HOUSING AND A SUITABLE ENVIRONMENT FOR ALL RESIDENTS OF LABELLE.	Acceptable, but consider tying it back to quality of life.	X		
OBJECTIVE 3.1: Housing Diversity. To encourage the development of a variety of housing choices by type and location within the economic reach of all residents of LaBelle.	Acceptable.	X		
POLICY 3.1.1 The City will encourage and promote development controls that provide flexibility and innovation in residential design and permit a range of housing types, sizes, styles, and price ranges.	Acceptable.	X		
POLICY 3.1.2 The City will evaluate and modify, as necessary, all zoning and subdivision regulations and building and development codes to encourage the use of proven, innovative techniques and materials as may be suggested by the Area Housing Commission. The City of LaBelle participates with and has representation on the Area Housing Commission of Clewiston, LaBelle, and Hendry County.	Acceptable	X		
POLICY 3.1.3 The City will continue to permit mobile homes in all areas designated as "mobile home and mobile home subdivision" in the zoning code.	Revise zoning district reference to Residential mobile home park zone (MHP)			X
OBJECTIVE 3.2: Affordable Housing. The City will provide adequate locations for housing for extremely-low, very-low, low and moderate-income persons to meet their housing needs. The City, in cooperation with appropriate agencies, will continue actions to make affordable housing available through housing implementation programs, specifically suited to meet the needs of low income households.	Acceptable	X		X

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 3.2.1 The City will review the Land Development Code to identify and eliminate unnecessary impediments to the development of extremely-low, very-low, low and moderate-income housing projects, where such constraints are not supported by a valid concern for the health, safety, or welfare of the community.	Acceptable	X		
POLICY 3.2.2 The City will amend the Land Development Code to permit accessory dwelling units within certain residential zoning districts to promote a range of housing opportunities, particularly for extremely-low income persons.	Acceptable			X
POLICY 3.2.3 The City will permit accessory dwelling units intended for very-low, low-income, and moderate-income persons to apply towards the City's affordable housing component, in accordance with Policy 3.2.2.	Acceptable			X
POLICY 3.2.4 The City will provide technical assistance to non-profit agencies to plan and develop low-cost housing.	Acceptable	X		
POLICY 3.2.5 The City will make available subsidy, in the form of low interest loans or grants to include, but not limited to, CDBG, SHIP, and HOME dollars where appropriate and feasible.	Review and update references of available loans/grants as applicable.			X
OBJECTIVE 3.3: Housing Assistance. Promote public and private programs that will meet the special housing needs of low and moderate income families (both owners and renters), the elderly, and the handicapped.	Consider also encouraging public-private partnerships for housing assistance.			X
POLICY 3.3.1 The City should will work closely with the U.S. Department of Agriculture Rural Development and other appropriate agencies to obtain assistance for homeowners and renters.	Acceptable	X		
POLICY 3.3.2 The City will annually request local lending institutions and the Area Housing Commission to assist in	Acceptable			X

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
the promotion of low interest loan programs for house maintenance, rehabilitation, and construction through such actions as the provision of information for display in City Hall.				
POLICY 3.3.3 The City will continue to cooperate with the Area Housing Commission to address the special housing needs of very low, low, and moderate income families in LaBelle.	Acceptable.			X
POLICY 3.3.4 The City will work with Hendry County, the Area Housing Commission, or similar groups to achieve that achieve equivalency through cooperative efforts that may result in dwelling units located outside the city limits.	Acceptable.			X
OBJECTIVE 3.4: Special Needs Housing. To encourage the provision of adequate sites for community residential homes and foster care facilities to ensure the benefits of living in normal residential communities for elderly, dependent children, physically disabled, individuals with developmental disabilities.	Broaden to encourage other types of facilities including group homes, assisted living facilities, etc.	X		
POLICY 3.4.1 The City will provide consistency in placement of community residential homes in compliance with F.S. 419.001, (2010).	Update F.S. reference to 419.001, as amended.			X
POLICY 3.4.2 The City shall notify permitting agencies for community residential homes and similar facilities of the need for City permits prior to the establishment of such facilities within the City.	Acceptable.	X		
POLICY 3.4.3 The City shall request permitting agencies for community residential homes and similar facilities to notify the City prior to the issuance of permits for such facilities within the City.	Acceptable.	X		
OBJECTIVE 3.5: Agency Coordination. Encourage coordination among the city, county, and other	Acceptable	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
agencies in the implementation of housing plans and programs.				
POLICY 3.5.1 The City will review the need for coordination agreements for housing planning with Hendry County and other agencies that provide, license, or fund housing.	Acceptable	X		
POLICY 3.5.2 The City should review housing proposals outside of the City limits which impact LaBelle through the Intergovernmental Coordination and Review process and Development of Regional Impact review process.	Acceptable	X		
POLICY 3.5.3 The City will continue to cooperate with the Area Housing Commission to address the special housing needs of low income families by having a designated representative on the commission.	Acceptable	X		
OBJECTIVE 3.6: Equitable Access to Housing. Encourage equal access to an open housing market for all persons at each income level, regardless of religion, sex, or ethnic background.	Acceptable	X		
OBJECTIVE 3.7: Adequate Housing Supply. The City will ensure that sufficient land is designated for residential growth.	Update to ensure sufficient land as well as development framework (higher density, mixed use etc.) are in place to support residential growth			X
POLICY 3.7.1 Every five years, the City will review and update the data and analysis of need and expected demand for residential land.	Consider modifying time limits based on current practice			X
POLICY 3.7.2 The Future Land Use Map and the official zoning map will be revised and this plan amended, as needed, to reflect the results of that annual analysis to ensure that the amount of land designated for residential use is approximately consistent with the results of the analysis of need determined at that time.	Update consistent with changes to policies above.			X
OBJECTIVE 3.8: Maintain Housing Stock. To encourage the conservation and rehabilitation of existing residential areas and protect both new and existing areas from deterioration.	Acceptable	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 3.8.1 The City will maintain an effective housing code with realistic and humane minimum housing standards, as well as an enforcement program.	Acceptable	X		
OBJECTIVE 3.9: Historical Preservation. The City will preserve and protect historically and archaeologically significant structures.	Acceptable	X		
POLICY 3.9.1 The City will continue its efforts to identify and protect historically significant housing via the Historic Preservation Board and adopt a Historic Preservation Ordinance.	Update to exclude the requirement of adopting a Historic Preservation Ordinance, as it is already adopted. Consider wording it as “update it, as needed.”			X
POLICY 3.9.2 The City will encourage property owners to rehabilitate and renovate their historically significant structures by supplying them with technical assistance and information regarding any available state and federal grants.	Acceptable	X		
POLICY 3.9.3 The City will apply for available grants and alternative funding to expand the local knowledge and awareness of existing historic and archaeological sites and structures.	Acceptable	X		
POLICY 3.9.4 The City will assist property owners of historically significant housing in submitting their properties for inclusion in State or National Register of Historic Places.	Acceptable	X		
POLICY 3.9.5 Developers will be required to provide a historical resource assessment as part of the development approval process. Where found, the development of such property will include protection and/or proper treatment of such historic/archeological assets.	Acceptable	X		
OBJECTIVE 3.10: Housing Stabilization. Promote housing opportunities for new households in already established neighborhoods and ensure the stabilization of all neighborhoods through the following policies, when applicable.	Acceptable	X		
POLICY 3.10.1 The City will identify neighborhoods that are in need of rehabilitation or are experiencing	Acceptable	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
instability based on any and all of, but not limited to, the following criteria: 1) Proliferation of crime. 2) A large percentage of substandard housing units. 3) Poor or deteriorating infrastructure, including water, drainage, traffic and pedestrian systems.				
POLICY 3.10.2 The City will assist and cooperate with residents, neighborhood improvement groups and representatives from education, law enforcement and other governmental agencies to promote programs to protect and improve residential areas.	Acceptable	X		
POLICY 3.10.3 The City will ensure a high level of resident and owner participation in any plan or program implemented for the purpose of improving and/or stabilizing neighborhoods.	Acceptable	X		
POLICY 3.10.4 City facilities will be available for public meetings of residents, neighborhood improvement groups, City officials, city staff, school board, law enforcement and others interested in crime prevention, neighborhood improvement, community redevelopment or similar issues.	Acceptable	X		
POLICY 3.10.5 The City will continue enforcing the regulations prohibiting the expansion of non-conforming and incompatible uses within residential neighborhoods.	Acceptable	X		
POLICY 3.10.6 The City will continue to require buffering and screening of residential neighborhoods from nearby incompatible uses by using landscape buffer yards or other creative methods.	Acceptable	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
OBJECTIVE 3.11: New Housing Developments. To promote new housing developments that are consistent with the orderly and economical growth of LaBelle.	Consider expanding to also include mixed use developments, note requirements to be compatible with existing requirements.			X
POLICY 3.11.1 The City will require that all new residential developments be consistent with the comprehensive plan.	Acceptable	X		
POLICY 3.11.2 The City will require all housing developments, on a fair and consistent basis, to provide adequate and necessary public facilities and services, or funds (fee-in-lieu) to provide for their proportionate share of such facilities and services. In order to prepare the infrastructure for the future needs, the City will annually evaluate the need for impact fees or suitable alternatives.	Acceptable	X		
POLICY 3.11.3 The City will encourage residential development and redevelopment in areas within, or adjacent to, established growth areas.	Acceptable	X		
OBJECTIVE 3.12 Sustainable Housing Stock. To encourage environmentally responsible and energy-efficient residential development that will not adversely affect natural systems.	Acceptable	X		
POLICY 3.12.1 The City will encourage new residential developments to alleviate possible negative impacts on the air, water, and adjacent land area.	Acceptable	X		
POLICY 3.12.2 Environmentally sensitive areas shall be mapped and necessary special regulations shall be developed and maintained by the City to manage such areas.	Acceptable	X		
POLICY 3.12.3 The City will encourage energy-efficient home siting, landscaping, and design.	Acceptable	X		
POLICY 3.12.4 The City will establish energy efficiency as one of the criteria in the review of new development proposals.	Acceptable	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
OBJECTIVE 3.13: Safe Housing. To protect the residents of LaBelle from the effects of natural disasters.	Acceptable	X		
POLICY 3.13.1 The City will require that adequate precautions against storm damage be implemented in all residential developments.	Acceptable	X		
POLICY 3.13.2 The City shall will cooperate with Hendry County to maintain a emergency management program providing adequate shelters, provisions, evacuation routes, emergency equipment, and personnel to assist City residents in emergencies.	Acceptable	X		
POLICY 3.13.3 The City shall require future mobile home parks to design on-site support buildings (such as laundry and recreational facilities) to function as windstorm shelters for park residents.	Acceptable	X		
POLICY 3.13.4 The City shall require all residential development to comply with the standards of the National Flood Insurance Program.	Acceptable	X		
POLICY 3.13.5 The City shall cooperate in any approved regional hurricane evacuation plan developed for Southwest Florida.	Acceptable	X		
OBJECTIVE 3.14: Displacement. The City will treat persons displaced from their homes by governmental action on a uniform and equitable basis in accordance with the provisions of the Anti-displacement and Relocation Policy Adopted by the City on September 11, 1990, as required by participation in the Community Development Block Grant Program, under the Department of Housing and Urban Development Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended, found at 24 CFR Part II.	Update all references, as policies cited are no longer effective			X
POLICY 3.14.1 The City will protect occupied housing units from government redevelopment until suitable	Acceptable	X		

2010 Comprehensive Plan Reference: Housing Element	Analysis/Recommendations	No Comment	State Required	Recommended
replacement housing is provided.				

<table>
<tr><th>2010 Comprehensive Plan
Reference: Infrastructure Element</th><th>Analysis/Recommendations</th><th>No Comment</th><th>State Required</th><th>Recommended</th></tr>
<tr><td>GOAL 4: ENSURE THAT THE SANITARY SEWER, SOLID WASTE, DRAINAGE, POTABLE WATER, AND NATURAL GROUNDWATER AQUIFER RECHARGE NEEDS OF THE RESIDENTS OF LABELLE ARE MET AND THAT THE NATURAL RESOURCES AND ENVIRONMENTAL QUALITY OF THE CITY ARE PROTECTED.</td><td>Acceptable</td><td>X</td><td></td><td></td></tr>
<tr><td>OBJECTIVE 4.1: Level of Service Standards. To achieve and maintain acceptable levels of service standards for water quality and availability through both short-term periods of strain and long-term increases in demand.</td><td>Acceptable</td><td>X</td><td></td><td></td></tr>
<tr><td>POLICY 4.1.1 The following Level of Service standards shall be used to determine the demand generated by a new development and the availability of facility capacity:
<table>
<tr><th>Facility Type</th><th>Level of Service Standard</th></tr>
<tr><td>Wastewater Treatment Facilities</td><td>250 gpERC</td></tr>
<tr><td>Potable Water Facilities</td><td>275 gpERC</td></tr>
<tr><td>Solid Waste Facilities</td><td>3.5 pounds per capita per day</td></tr>
<tr><td>Drainage Facilities System Capacity</td><td>Historic discharge for 25 year-3 day storm event</td></tr>
<tr><td>Flood Protection for Buildings</td><td>100-year storm event</td></tr>
</table></td><td>Review with utilities</td><td></td><td></td><td>X</td></tr>
<tr><td>POLICY 4.1.2 All improvements for replacement, expansion, or increase in capacity of facilities shall be compatible with the adopted level of service standards for the facilities.</td><td>Acceptable</td><td>X</td><td></td><td></td></tr>
<tr><td>POLICY 4.1.3 The City will coordinate with the Future Land Use map to ensure that development and building permits are issued based on adequate potable water availability and an adopted level of service standard.</td><td>Acceptable</td><td>X</td><td></td><td></td></tr>
</table>

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 4.1.4 Review all land use amendments, zoning changes, or utility service area extensions to determine the availability of utility system capacity.	Acceptable	X		
POLICY 4.1.5 Prior to approving a building permit or its functional equivalent for new development, the City shall consult with the applicable water supplier to ensure that adequate water supply will be available by the anticipated date of issuance of a certificate of occupancy or its functional equivalent.	Consider updating policy to reserve capacity of potable water supply prior to building permit.			X
POLICY 4.1.6 Deny the issuance of Certificates of Occupancy or its functional equivalent for new development that would result in exceeding the adopted potable water level of service standards.	Consider updating consistent with policy above.			X
OBJECTIVE 4.2: Capital Improvements Coordination. A five-year schedule of capital improvement needs for public facilities shall be annually updated and maintained, in conformance with the review of the Capital Improvements Element.	Acceptable	X		
POLICY 4.2.1 The City hereby adopts by reference the 2019 Water Supply Facilities Work Plan Updated into the City's Comprehensive Plan, adopted December 2019, for the planning period of not less than 10 years. The Work Plan Update addresses issues that pertain to water supply facilities and requirements needed to serve current and future development within the City. Plan, as applicable.	Update to the latest Water Master Plan, adopted in 2023.			X
POLICY 4.2.2 The City will review and update the Water Supply Plan every five years to meet present and projected needs of the planning period established by the Comprehensive Plan.	Acceptable	X		
POLICY 4.2.3 Projects needed to correct existing deficiencies shall be given priority in the formulation and implementation of the annual work programs of the City.	Acceptable	X		

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 4.2.4 Proposed capital improvement projects shall be evaluated and ranked according to the following priority level guidelines: 1) Level One: The project is needed to protect public health and safety, to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities. 2) Level Two: The project increases the efficiency of existing facilities, prevents or reduces future improvement costs, provides service to developed areas lacking full service, or promotes in-fill development. 3) Level Three: The project represents a logical extension of facilities and services within a designated service area.	Acceptable	X		
OBJECTIVE 4.3: Water Supply. Provide potable water supplies for the residents of LaBelle.	Acceptable	X		
POLICY 4.3.1 The City will protect or improve the quality of raw water supply sources.	Acceptable.	X		
POLICY 4.3.2 The City will not approve development proposals which will result in the deterioration of public surface or groundwater supply sources.	Acceptable	X		
POLICY 4.3.3 The City will review its regulations to determine their adequacy to protect its current and future potable water wellfields and related facilities.	Acceptable	X		
POLICY 4.3.4 The City will provide adequate water supply facilities for the future population and associated growth of LaBelle.	Acceptable	X		
POLICY 4.3.5 The City will continue to require development proposals to meet City level of service	Acceptable	X		

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
standards for potable water as specified in this Comprehensive Plan.				
POLICY 4.3.6 Potable water facilities will be in place and available to serve new developments consistent with the requirements of Section 163.3180(2), F.S.	Acceptable	X		
POLICY 4.3.7 The City will improve the operation of the entire potable water system.	Acceptable	X		
POLICY 4.3.8 The City will maintain a water supply facilities work plan that is coordinated with SFWMD's District Water Supply Plan by updating its own work plan within 18 months of an update to SFWMD's Water Supply Plan that affects the City.	Acceptable	X		
POLICY 4.3.9 The City shall seek the assistance and cooperation of the Florida Department of Environmental Protection, the South Florida Water Management District, and other appropriate public and private agencies and groups to accomplish Policy 4.3.6.	Acceptable	X		
POLICY 4.3.10 Efforts to improve the operation of the potable water system shall include the identification and correction of all system deficiencies and equipment problems with emphasis on the reduction of unexplained water loss.	Acceptable	X		
POLICY 4.3.11 The City of LaBelle will develop conservation measures to assist in decreasing water consumption on a on a per capita basis.	Acceptable	X		
ACTION 4.3.11.1 Through utility flushing automation, the City will reduce the amount of water used for system flushing by an estimated .40 million gallons per year.	Review with Utilities. Action and expected results are stated, update to provide actions and requirements to measure results over time.			X
ACTION 4.3.11.2 Through an automatic water meter reading system, the City will save an estimated 1.5 million gallons per year of potable water by increasing its ability to profile data and	Review with Utilities. Action and expected results are stated, update to provide actions and requirements to measure results over time.			X

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
leak detection and notification of such to its customers.				
ACTION 4.3.11.3 Through established landscape standards, the City will promote the use of native vegetation and the preservation of existing natural areas in order to reduce the need for irrigation.	Acceptable	X		
ACTION 4.3.11.4 The City will require installation of fixtures and equipment that comply with today's building codes as a pre-condition to water service.	Acceptable	X		
ACTION 4.3.11.5 The City will use its website to educate the community on water supply and water shortage notifications.	Acceptable	X		
POLICY 4.3.12 The City will adhere to the following planning principles regarding utility extensions. 1) Continue to plan for the delivery of potable water services to facilitate a compact and contiguous urban growth pattern. 2) Utility extension over the next planning period will involve consideration of proximity to existing urbanized areas for the effect on the efficient use of existing and planned utilities infrastructure, the City's future land use needs, and the desire to encourage compact and contiguous growth. 3) Water and sewer line extension proposals will be reviewed for compact and contiguous development and provision of services to land uses encouraging or increasing economic development efforts. 4) Deny the issuance of permits for new development that would result in exceeding	Consider provisions for service to South LaBelle, which may not be contiguous to existing service areas.			X

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
the adopted water level of service standards.				
POLICY 4.3.13 The City of LaBelle will continue to evaluate and implement conservation measures to decrease per capita demand.	Acceptable	X		
ACTION 4.3.13.1 The City will provide efforts in public education and outreach to raise the awareness of its residents on the importance of water conservation and will provide special educational programs for high water use customers.	Acceptable	X		
ACTION 4.3.13.2 The City will implement regulation that requires water conserving architecture and landscaping.	Acceptable	X		
ACTION 4.3.13.3 The City will seek out plumbing and fixture rebates and retrofits that will aid in the conservation of water.	Acceptable	X		
POLICY 4.3.14 At the time that a proposed development demonstrates a potable water demand of a minimum of 365 ERC's, the City will evaluate the technical, financial, and regulatory feasibility of a water reuse system to offset demands on the potable water system.	Update policy to consider adoption of a Citywide reclaim water system based on introduction of a large development within the City.			X
POLICY 4.3.15 By 2012, the City will adopt provisions to require all new residential subdivision and commercial/industrial developments to include reuse transmission lines that meet City standards.	Update to remove time constraint and generally provide that all new development should include provisions for reuse water for irrigation and other secondary uses.			X
POLICY 4.3.16 The City will identify sources for reuse, such as City landscape areas and parks and other future public improvements, where appropriate.	Update examples of reuse sources			X
POLICY 4.3.17 The City will modify existing Land Development Regulations to encourage water conservation and Florida friendly landscaping.	Acceptable	X		

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 4.3.18 The City will continue to educate residents of water conservation use by providing updates in City communications.	Acceptable	X		
OBJECTIVE 4.4: Sanitary Sewer. Ensure adequate sanitary sewer or on-site disposal service for the residents of LaBelle, in accordance with state standards.	Acceptable	X		
POLICY 4.4.1 The City will require properly permitted and approved wastewater treatment systems.	Acceptable	X		
POLICY 4.4.2 The City will require efficient and effective sewage treatment collection and treatment systems.	Consider merging with the above policy to remove redundancy			X
POLICY 4.4.3 The City will not approve any development proposal unless adequate sewage disposal capacity is available.	Acceptable	X		
POLIYC 4.4.4 The City will support efforts to coordinate and connect sewage treatment systems for the purpose of increasing efficiency and improving operation and maintenance of systems.	Consider merging with the Policies 4.4.1 and 4.4.2 to remove redundancy			X
POLICY 4.4.5 The City will promote innovation in sewage disposal.	Consider merging with above policies to remove redundancy			X
POLICY 4.4.6 The City will support innovative methods in the disposal of sewage wastes, consistent with public health and environmental quality.	Acceptable	X		
POLICY 4.4.7 The City will cooperate with the South Florida Water Management District and other appropriate public and private agencies and groups to examine the feasibility of providing treated effluent for irrigation purposes for agriculture and other uses.	Acceptable	X		
OBJECTIVE 4.5: Storm Drainage. Provide adequate drainage of stormwater runoff to protect the public health, safety and welfare.	Acceptable	X		

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 4.5.1 The City will require storm drainage practices to be consistent with the natural resources and environmental quality needs of the City.	Acceptable	X		
POLICY 4.5.2 The City will coordinate with the South Florida Water Management District to require redevelopment and new developments to: 1) Integrate natural storage areas and drainage systems into drainage plans, 2) Maintain natural hydrological conditions for downstream receivers, 3) Prohibit the construction or alteration of drainage projects which would endanger wetlands as depicted on maps within this comprehensive plan; and 4) Apply Best Management Practices to control runoff, maintain or improve water quality and groundwater recharge, minimize erosion, and to promote water conservation.	Acceptable	X		
POLICY 4.5.3 The City will protect wetlands by means such as clustering structures on upland portions of building sites, maintenance of upland buffers adjacent to wetlands, reducing densities for development in or adjacent to wetlands, prohibitions against the generation, use, or storage of hazardous materials or waste within or adjacent to wetlands, and protection of vegetation within wetlands.	Acceptable	X		
POLICY 4.5.4 The City will require redevelopment and new developments to have adequate stormwater drainage systems.	Acceptable	X		
POLICY 4.5.5 The City will not approve any development which does not meet the drainage	Update references to the Florida Administrative Code		X	

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
system standards required for that project by SFWMD and as stated in Chapter 40E-4, Florida Administrative Code. For any project that does not require a permit from the water management district, stormwater runoff must meet the water quality standards required by Rule 40E-4.053(8), F.A.C. and post-development runoff volume must not exceed pre-development runoff volume.				
POLICY 4.5.6 Stormwater discharge facilities must be designed so as not to degrade the receiving water body below the minimum conditions necessary to assure the suitability of water for the designated use of its classification as established in Chapter 17-302, F.A.C.	Update references to the Florida Administrative Code		X	
POLICY 4.5.7 For any parcel that was recorded on or before the date of plan adoption and which does not contain sufficient uplands to permit development, one residential structure will be allowed, consistent with the regulations applicable to the land use category for that parcel, provided that the direction and rate of historical surface water flows are maintained.	Acceptable	X		
OBJECTIVE 4.6: Solid Waste. Provide adequate solid waste collection, transportation, and disposal.	Acceptable	X		
POLICY 4.6.1 The City will promote mechanisms to improve solid waste collection.	Acceptable	X		
POLICY 4.6.2 The City will work with the franchised solid waste hauler to improve solid waste collection.	Acceptable	X		
POLICY 4.6.3 The City will coordinate with Hendry County and other appropriate agencies and bodies to reduce the amount of solid waste generated per capita in LaBelle.	Acceptable	X		
POLICY 4.6.4 The City will cooperate with Hendry County and other appropriate agencies and bodies to develop and implement programs to increase recycling and resource recovery.	Acceptable	X		

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 4.6.5 The City will work to eliminate illegal dumping and littering. The city has mandatory garbage pickup in order to eliminate illegal dumping.	Acceptable	X		
POLICY 4.6.6 The City will examine mechanisms for increasing the detection of violators, including stricter ordinances and prosecution of violators.	Acceptable	X		
POLICY 4.6.7 The City will continue to cooperate with Hendry County to implement a hazardous waste management program to ensure that collection, storage, and transfer operations comply with the provisions of Section 403.7265, F.S.	Update F.S. reference			X
POLICY 4.6.8 The City will continue to cooperate with Hendry County to implement a program that will reduce the volume of solid waste generated per capita in LaBelle and requiring disposal by 30 percent from the level of 1991.	Update target or remove policy			X
OBJECTIVE 4.7: Groundwater Aquifer. Protect groundwater aquifer recharge areas needed to support and provide water resources.	Acceptable	X		
POLICY 4.7.1 The City, within three years of adoption of the Evaluation and Appraisal Report, shall request the assistance of the South Florida Water Management District to review the City's plan to identify and map areas of groundwater aquifer recharge, including high recharge and prime recharge areas, to determine those land uses to be permitted, restricted, or prohibited in such areas in order to protect existing and planned public wellfields.	This policy is no longer relevant. Update to promote continued collaboration with SFWMD for conservation and protection of the City's groundwater resources			X
POLICY 4.7.2 Until a wellfield protection ordinance is adopted by the City, the City shall designate an area of 200 feet in diameter around each public well as an interim wellfield protection zone.	Remove as Wellfield Protection provisions are included in the Code of Ordinances			X
POLICY 4.7.3 The City will review its land use development regulations to protect natural drainage	Acceptable	X		

2010 Comprehensive Plan Reference: Infrastructure Element	Analysis/Recommendations	No Comment	State Required	Recommended
features and aquifer recharge areas at least once every five years.				
POLICY 4.7.4 The City will request the assistance of the South Florida Water Management District in this review	Consider merging with above policy to remove redundancy			X

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 5: **CONSERVE, PROTECT AND MANAGE THE NATURAL RESOURCES OF THE CITY OF LABELLE.**	Acceptable	X		
OBJECTIVE 5.1: Water Resource Protection. Manage and protect the quantity and quality of the City's water resources.	Acceptable	X		
POLICY 5.1.1 The City will ensure that future development does not degrade the quality of groundwater resources or prevent aquifer recharge.	Acceptable	X		
POLICY 5.1.2 The City will establish the following water conservation measures and practices to achieve Policy 5.1.1: 1) The City will require the use of low volume plumbing fixtures for all new construction, to be implemented as part of the City's building code and Land Development Code. 2) The City will encourage the use of water-efficient irrigation and xeriscape landscaping techniques for new development. 3) The City will require all new developments to connect to water reuse systems, when available. 4) The City will evaluate the feasibility and effectiveness of using inverted water rates to increase consumer water conservation and achieve its overall water conservation goals.	Acceptable	X		
POLICY 5.1.3 The City will cooperate with emergency water conservation measures of the	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
South Florida Water Management District (SFWMD).				
POLICY 5.1.4 The City will meet annually with the SFWMD, Southwest Florida Regional Planning Council (SWFRPC) and Hendry County to cooperatively develop measures or programs to protect and conserve water sources. Such measures or programs may include, but are not limited to: coordination of land development regulations to ensure consistent and adequate protection; coordination of planning and development activities through reciprocal notification of proposed activities; and agreement on utility service areas.	Acceptable	X		
POLICY 5.1.5 The City will adopt by reference the Water Supply Facilities Work Plan. The City will continue to maintain and update the Water Supply Plan every five (5) years.	Consider merging with Policy 4.3.8. This policy is more relevant for utilities than conservation.			X
POLICY 5.1.6 The City will continue to ensure that adequate water supplies and facilities are available to serve new development prior to issuance of a building permit.	Move to Chapter 4, Infrastructure Element			X
POLICY 5.1.7 The City will continue to ensure that new development proposals are reviewed to ensure that potential impacts of the proposed development do not degrade water quality and/or the quantity of groundwater resources.	Acceptable	X		
OBJECTIVE 5.2: Wetland Protection. Conserve, protect and restore the natural functions of wetlands within the City of LaBelle to ensure the adequate filtration of water to enhance water quality, provision of flood control, maintenance of wildlife habitat, and the provision of recreational opportunities.	Acceptable	X		
POLICY 5.2.1 The City, as part of its development review process, will require the coordination of development plans with the SFWMD and other	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
appropriate regulatory agencies, to assist in monitoring land uses which may impact potential wetlands. In order to properly identify and delineate wetlands, the City will rely on the delineation of wetlands by the SFWMD or the Florida Department of Environmental Protection (FDEP), as applicable.				
POLICY 5.2.2 The City will prohibit any development within designated wetland areas, unless the appropriate permit(s) have been obtained through the appropriate agency(ies).	Acceptable	X		
POLICY 5.2.3 The City will examine the need for a program to protect wetlands, including consideration of use as flood storage.	Wetland protection regulations have been implemented in the LDC. Update to provide for continual review and maintenance of these regulations.			X
POLICY 5.2.4 The City will develop and implement a stormwater master plan that includes wetland restoration, if necessary.	Acceptable.	X		
POLICY 5.2.5 Publicly owned wetlands are limited to resource-based passive recreation and open space uses such as walkways, piers and docks elevated on pilings; however, existing public facilities shall continue as conforming uses.	Acceptable.	X		
POLICY 5.2.6 The generation, storage, or use of hazardous materials and waste shall be prohibited within wetlands.	Acceptable	X		
POLICY 5.2.7 The City maintains generalized wetlands and floodplains maps.	Update language to require the City to maintain such maps.			X
POLICY 5.2.8 The City will identify and assess the environmental quality and habitat value of wetland areas depicted on the Floodways Map and additional wetland areas that should be included on the City's generalized wetlands map. In assessing, the City will consider the following:	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
1) whether the wetlands are of regional significance. In making this determination, the City will be guided by the designation of regionally significant wetlands prepared by the Southwest Florida Regional Planning Council 2) whether the wetlands are part of a larger interconnected system 3) whether the wetlands are small, isolated, and degraded. 4) whether the wetlands contain important habitat or perform important water quality functions. 5) the type, value, function, condition, and location of the wetlands. 6) whether the wetlands are a good candidate for restoration;				
POLICY 5.2.9 The City will identify actions for the expenditures of City funds or available grant resources to acquire, conserve or restore wetland areas depicted on the City's Floodways Map and maximize the recreation and educational aspects of the City's natural resources.	Acceptable	X		
POLICY 5.2.10 Development may incorporate isolated wetlands into stormwater management systems, provided that the stormwater runoff is treated prior to entering the wetland system, so that the wetland is used for nutrient or volume attenuation. The City shall encourage stormwater system designs which maintain the existing natural vegetation in retained wetlands, except where permitting agencies agree that the imposition of conditions which favor different plant communities is more desirable for the purpose of providing	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
habitat improving water quality or enhancing wetland values.				
OBJECTIVE 5.3: Flood Plain & Floodway Protection. Protect water quality and the natural flood-water carrying and storage capacity of one hundred-year floodplains and protect structures from flood damage.	Acceptable	X		
POLICY 5.3.1 Publicly owned lands that lie within the one-hundred-year floodplain are limited to resource based Passive recreation and open space uses such as walkways, piers, and docks; however, existing public Facilities shall continue as conforming uses.	Acceptable	X		
POLICY 5.3.2 The natural functions of the one-hundred-year floodplain on privately owned lands shall be preserved so that flood-carrying and flood-storage capacities are maintained.	Acceptable	X		
POLICY 5.3.3 The City will discourage increased density within the one-hundred-year floodplain	Consider allowing for transfer of development rights from properties within the 100-Year floodplain			X
POLICY 5.3.4 For lots of record that existed on June 12, 1991 and that lie entirely within the one-hundred-year floodplain, one single-family residential unit or one, two-family residential unit shall be allowed if the lot is smaller than one-eighth (1/8) acre.	Acceptable	X		
POLICY 5.3.5 For any site within the one-hundred-year floodplain--other than sites in previously platted are that have streets and water lines and for lots of record that existed on June 12, 1991 to the maximum extent feasible consistent with sound community planning standards, development shall be directed to the non-floodplain portion of the site. If the lot does not contain sufficient non-floodplain areas to permit construction of the dwelling, the minimum amount of encroachment into the floodplain	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
necessary to permit construction of the residential structure shall be allowed.				
POLICY 5.3.6 The lowest floor elevation of all residences in the one-hundred-year floodplain shall will be elevated above the one-hundred-year flood height.	Acceptable	X		
POLICY 5.3.7 The City will prohibit land uses requiring the generation, storage or use of hazardous or toxic materials and waste within the one-hundred-year floodplain.	Acceptable	X		
POLICY 5.3.8 A property owner whose land is depicted on the Flood Insurance Rate Map of the Federal Emergency Management Agency as lying within the one-hundred-year floodplain may appeal such flood zone designation. The property owner shall provide adequate supporting engineering data to the City to justify the request for a map amendment or revision to rebut the presumption that the property lies within the one-hundred-year floodplain.	Update to defer appeals to FEMA. FEMA has processes for LOMA, LOMR-F.			X
OBJECTIVE 5.4: Preservation of Native Vegetation and Wildlife Communities. Encourage the preservation and restoration of native vegetation communities to protect wildlife habitat, scenic beauty, and the overall quality of life within the City.	Acceptable	X		
POLICY 5.4.1 By 2013, the City, will adopt a local ordinance for the protection of wildlife, wildlife habitat, and native vegetative communities, by requiring a protected species survey on projects over twenty-five acres in size, where a threatened or endangered species habitat is known to exist or has the potential to exist.	Update language to remove time limits. Required regulations are in the LDC, update to require continued review and maintenance.			X
POLICY 5.4.2 By 2012, the City will implement land development regulations to ensure the protection of native vegetative communities from destruction by development activities. Regulations will address the on-site and off-site preservation of native	Required regulations are in the LDC, update to require continued review and maintenance.			X

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
vegetative communities, and the utilization of native plant species for landscaping.				
POLICY 5.4.3 The City will give preference to native plant species for use in the City's landscape ordinance	Remove reference to the City's Landscape Ordinance. Consider referencing LDC instead			X
POLICY 5.4.4 The City will enforce the most current list of invasive, non-native plants, as as established by the Florida Exotic Pest Plant Council.	Acceptable	X		
POLICY 5.4.5 The City will continue to conserve, and protect endangered and threatened wildlife, and their habitat through the development review process and coordination with applicable agencies.	Acceptable	X		
POLICY 5.4.6 The City will encourage the public acquisition or formal protection of the City's rare and unique habitat.	Acceptable	X		
POLICY 5.4.7 By 2013, the City, with the cooperation of FWC, the SFWMD, and/or the FDEP, will conduct at least one (1) public workshop to: 1) review the inventory of natural resources, 2) determine whether natural areas within the City should receive greater protection, 3) promote manatee awareness, 4) protect the natural functions of the Caloosahatchee River, 5) review efforts by the City to assist in the protection of endangered and threatened wildlife in areas within city jurisdiction, and 6) if needed, initiate the amendment of this Plan.	Update to require periodic review of the City's natural resources			X
POLICY 5.4.8 The City will utilize the current "Florida Endangered and Threatened Species" of the Florida Fish and Wildlife Conservation	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
Commission to consider areas for acquisition or protection.				
OBJECTIVE 5.5: Mining/Excavation. Protect the City's quality of air, water, land, and wildlife resources from mining/excavation activities.	Acceptable	X		
POLICY 5.5.1 The City will prohibit mining/excavation activities within the City.	Acceptable	X		
POLICY 5.5.2 The City will review any applications for new mining/excavation projects adjacent to the City limits to ensure adequate protection of the City's resource and quality of life.	Acceptable. Add to Chapter 7, Intergovernmental Coordination Element for additional protection.			X
OBJECTIVE 5.6: Air Quality. Protect and improve air quality within the City.	Acceptable	X		
POLICY 5.6.1 The City will not permit development, which will violate state air quality standards.	Acceptable	X		
POLICY 5.6.2 The City shall require necessary federal and state air quality permits to be reviewed by the appropriate agencies, prior to site plan approval.	Acceptable	X		
POLICY 5.6.3 The City will encourage a compact development pattern and alternative forms of transportation through the provision of bicycle paths and pedestrian sidewalks pattern as long-term strategies to protect air quality	Acceptable	X		
POLICY 5.6.4 The City will continue to reduce the potential for automotive air pollution by requiring vegetative buffers along rights-of-way, and by assuring the continued operation of roadways at established Levels of Service.	Acceptable	X		
POLICY 5.6.5 The City will report suspected air-quality violations to the FDEP.	Acceptable	X		
OBJECTIVE 5.7: Protection of the Caloosahatchee River. The City will encourage the use of open space along the Caloosahatchee River to protect the River and natural resources development.	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 5.7.1 The City will encourage open space in areas adjacent to the Caloosahatchee River will to minimize intrusive activities and impacts of development such as trespass, pets, visual impacts, vehicles, noise, lights and stormwater runoff.	Update to encourage public space along the Caloosahatchee River for enjoyment of residents			X
POLICY 5.7.2 The City will promote utilization of the City's scenic areas, particularly along the Caloosahatchee River.	Acceptable	X		
POLICY 5.7.3 By 2013, the City shall review the official zoning map to ensure lands along the Caloosahatchee River are appropriately zoned to provide adequate protection.	Update to require continuous review and maintenance of appropriate zoning			X
POLICY 5.7.4 The City shall examine the feasibility of developing new recreational facilities, which complement and protect the Caloosahatchee River.	Also expand to encourage public-private partnerships for development of the riverfront			X
OBJECTIVE 5.8: Historical, Archaeological and Cultural Protection. Protect and preserve significant historical, archaeological and cultural resources.	Acceptable	X		
POLICY 5.8.1 The City shall require development proposals of five (5) acres or more to perform a cultural resource survey prior to development approval.	Remove the acreage thresholds to allow for such review to occur for smaller infill sites as needed			X
POLICY 5.8.2 The City will continue to utilize the Comprehensive Plan, the Historic Preservation Ordinance and the assistance of the state and local historical preservation societies, the Florida Department of State, and others to identify and protect historic and archaeological resources.	Acceptable	X		
POLICY 5.8.3 The City has adopted the City of LaBelle Historical Preservation Ordinance, which encourages the preservation of historic and archaeological resources through designation as a historic building or site and tax benefits.	This is not a policy. Change language to require continual review and updates as needed, or require measures like designation of historic importance, and tax benefits			X

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 5.8.4 The City will allow the destruction of a designated building or site only after a determination by the Historic Preservation Board that the renovation, development, or other change desired by the owner of the designated building or site cannot be otherwise achieved, as by adaptive reuse.	Acceptable	X		
OBJECTIVE 5.9: Public Education. Generate public awareness of the natural environment and the benefits of integrated planning for: 1) water resource management 2) conservation 3) recreation 4) redevelopment and long range community planning	Acceptable	X		
POLICY 5.9.1 The City will endeavor to educate the public regarding natural resources through the use of signage, brochures, press releases, and community meetings	Update to expand on communication measures, including but not limited to social media			X
POLICY 5.9.2 The City will continue to cooperate with the SFWMD, County Extension office, and SWFRPC to provide citizen education.	Acceptable	X		
OBJECTIVE 5.10: Energy Conservation. Recognize the importance of public preservation lands and other areas of native vegetation and the roles it plays in the reduction of green house gases.	Acceptable	X		
POLICY 5.10.1 The City will maintain the integrity of existing vegetative areas that contribute to carbon sequestering and improve air quality through improved proper habitat management practices.	Acceptable. Update to require maintenance of tree protection regulations in the LDC.			X
POLICY 5.10.2 The City will continue to promote and enforce landscaping techniques that require low maintenance and reduce water usage, such as encouraged by the Florida Yards and	Acceptable	X		

2010 Comprehensive Plan Reference: Conservation Element	Analysis/Recommendations	No Comment	State Required	Recommended
Neighborhood Program. Incorporation of landscaping into Low Impact Development (L.I.D.) design of stormwater systems is encouraged.				
POLICY 5.10.3 The City will promote opportunities for acquisition of natural areas that provide regional ecological benefits and benefits based on existing vegetation or opportunities for re-vegetation.	Acceptable	X		

2010 Comprehensive Plan Reference: Recreation and Open Space Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 6: PROMOTE THE PHYSICAL, MENTAL, AND SOCIAL DEVELOPMENT OF THE RESIDENTS OF LABELLE THROUGH THE DEVELOPMENT OF A COMPREHENSIVE OPEN SPACE SYSTEM THAT PROVIDES A DIVERSE RANGE OF OUTDOOR OPPORTUNITIES FOR RESIDENTS, WORKERS AND VISITORS.	Update to also encourage development of park space as a driver of economic development in the City			X
OBJECTIVE 6.1: Park Standards. Provide diversified recreational opportunities through continual review, improvement, and management of existing and potential recreational resources.	Acceptable	X		
POLICY 6.1.1 The City will provide a balanced and varied program to meet the recreational, cultural, and social needs of the citizens of LaBelle.	Acceptable	X		
POLICY 6.1.2 The City will ensure that its park system will provide a range of recreational facilities and programs that serve all segments of the City's population through its participation with the Hendry LaBelle Recreation Board.	Acceptable	X		
POLICY 6.1.3 Through community participation and design excellence, will maintain existing and create new public parks and plazas that are harmonious, inspirational, and sources of community pride and character.	Acceptable	X		
POLICY 6.1.4 The City will continue its efforts to work with the Hendry County School Board and Hendry County to address the problems of liability and vandalism of public recreational facilities.	Acceptable	X		
OBJECTIVE 6.2: Level of Service Standards for Parks. To ensure adequate lands are provided for parks, the City will adopt the National Recreation Park Association Level of Service Standards as further described in the Capital Improvements Element.	Acceptable	X		

2010 Comprehensive Plan Reference: Recreation and Open Space Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 6.2.1 The City will require common open space as part of all new residential developments.	Acceptable	X		
POLICY 6.2.2 The City will utilize the level of service review standards to recommend recreation improvements located within private development.	Acceptable	X		
OBJECTIVE 6.3: Equitable Access to Recreation. Recreational opportunities will be available to all City residents, including the elderly, handicapped, and disadvantaged.	Consider rewording to expand disadvantaged groups listed.			X
POLICY 6.3.1 Every five years, the City will review existing park and recreational facilities to ensure access for all City residents.	Acceptable	X		
POLICY 6.3.2 For those facilities determined to have inadequate access, such access shall be improved within one year of that determination.	Acceptable	X		
OBJECTIVE 6.4: Historical and Archaeological Resources. Promote the identification and preservation of the City's historic, archaeological, and other cultural resources.	Remove from the Recreation & Open Space Element. It is covered under Chapter 5, Conservation Element.			X
OJBECTIVE 6.5: Access to the Caloosahatchee River. Increase access to the Caloosahatchee River for the enjoyment of the City's residents and visitors.	Acceptable	X		
POLICY 6.5.1 The City will preserve and protect its ownership in riverfront property and in river access locations.	Acceptable	X		
POLICY 6.5.2 The City will periodically review and identify suitable areas to provide access to the River in such a way as to minimize disturbance to adjacent property owners.	Make policy more generalized			X
POLICY 6.5.3 Within one two years of identifying suitable areas for river access, the City, acting either alone or with other local governments or agencies, will initiate steps to obtain such access.	Make policy more generalized			X

2010 Comprehensive Plan Reference: Recreation and Open Space Element	Analysis/Recommendations	No Comment	State Required	Recommended
OBJECTIVE 6.6: Loss of Park Space. Prevent the loss of potential parks and open space lands to urban development and preserve sufficient open space for existing and future recreational activities and outdoor enjoyment.	Acceptable	X		
POLICY 6.6.1 The City will pursue the acquisition of new smaller open spaces – including public plazas and places, fountains and pocket parks – on portions of blocks throughout downtown to supplement the larger public open spaces, provide focal points and diversify the built environment.	Acceptable	X		
POLICY 6.6.2 The City will encourage the position of outdoor seating and/or cafes where appropriate.	Make policy more generalized to allow for outdoor seating and economic development activities adjacent to recreation areas.			X
POLICY 6.6.3 The City, with the Hendry LaBelle Recreation Board will continue to identify suitable lands for parks and open space development.	Acceptable	X		
OBJECTIVE 6.7: Private Parks and Recreation Facilities. Encourage the dedication of open space for recreational and leisure activities within private developments, for the betterment of the community, and the enhancement of the environment.	Acceptable	X		
POLICY 6.7.1 The City will encourage developments to set aside any environmentally valuable or sensitive areas as open space.	Consider also adding a similar policy to Chapter 5, Conservation Element			X
POLICY 6.7.2 All residential developments will be required to set aside areas for recreation and open space, based upon the Level of Service standards developed within this plan and open space requirements of the Land Development Code.	Acceptable	X		
POLICY 6.7.3 The City will continue to promote landscaping in new developments, as well as in City parks, for aesthetic and energy conservation purposes.	Acceptable	X		
OBJECTIVE 6.8: Joint Use of Facilities. Expand and develop shared use programs and agreements for	Acceptable	X		

2010 Comprehensive Plan Reference: Recreation and Open Space Element	Analysis/Recommendations	No Comment	State Required	Recommended
recreation and open space for purposes of acquisition, development and maintenance.				
POLICY 6.8.1 The City will work with landowners, developers, schools, other governmental agencies, and community organizations to further its inventory of accessible recreational and open space areas.	Acceptable	X		
POLICY 6.8.2 The City, through its participation on the Hendry LaBelle Recreation Board, will cooperate with Hendry County and the Hendry County School Board in the joint provision and use of facilities and activities for LaBelle area residents.	Acceptable	X		
OBJECTIVE 6.9: Funding Sources. Pursue funding sources for the acquisition, development, and maintenance of open space, recreation areas, and natural reservations.	Acceptable	X		
POLICY 6.9.1 The City will continue to evaluate the recreation and open space needs as part of any capital improvements program for recreation and open space.	Consider updates, appears outdated			X
POLICY 6.9.2 The City will utilize funds obtained from developers (as payment in lieu of dedication) for open space and recreation needs.	Consider updates if this has been achieved			X
POLICY 6.9.3 The City will broaden the funding base for City recreation and open space, while also participating in federal, state, county, or district recreational programs.	Add provisions for encouraging public-private partnerships and private investment for development of public park facilities.	X		
POLICY 6.9.4 The City will continue to evaluate its use of special assessments as well as consider the implementation of user fees and charges (set at the minimum feasible level), returning all funds raised to the respective activity or facility.	Acceptable	X		
POLICY 6.9.5 The City will seek the assistance of federal, state, county, and other agencies in the development of City facilities. and promote the development of federal, state, county, and district parks and recreation areas within the City limits.	Acceptable	X		

Chapter 7: Intergovernmental Coordination Element Review

2010 Comprehensive Plan Reference: Intergovernmental Coordination Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 7: TO DEVELOP A COORDINATED AND COOPERATIVE PLANNING PROCESS THAT MAINTAINS INTERNAL CONSISTENCY AND CONFORMS WITH STATE AND REGIONAL GOALS AND OBJECTIVES.	Acceptable	X		
OBJECTIVE 7.1: Coordination of Plans. Ensure consistency with the comprehensive plans of other adjacent governmental jurisdictions.	Acceptable	X		
POLICY 7.1.1 As part of the preparation of an evaluation and appraisal report, the comprehensive plan will be provided to appropriate agencies for review and comment as required by section 163.3184, Florida Statutes.	Consider updates based upon existing staff constraints and how the program currently functions			X
POLICY 7.1.2 Comprehensive plans of Hendry County, Glades County, the Southwest Florida Regional Planning Council, and the State (Ch. 187, Florida Statutes) will be reviewed as part of the evaluation and appraisal process for the City's Comprehensive Plan to ensure coordination and reduce possible conflicts.	Acceptable	X		
POLICY 7.1.3 The City will review copies of proposed comprehensive plan amendments and other items received from adjacent local governments that might affect the City of LaBelle.	Acceptable	X		
POLICY 7.1.4 LaBelle shall continue to participate in the Regional Planning Council.	Acceptable	X		

2010 Comprehensive Plan Reference: Intergovernmental Coordination Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 7.1.5 For any public facility within LaBelle for which the City does not have responsibility, the City will adopt the level of service standard that is established by the entity that has operational and maintenance responsibility for that facility.	Acceptable	X		
OBJECTIVE 7.2 Intergovernmental Coordination. LaBelle shall maintain effective and efficient communication and working relationships with Hendry and Glades Counties and with other nearby units of governments.	Acceptable	X		
POLICY 7.2.1 Participants in the planning process at Hendry and Glades Counties and the Southwest Regional Planning Council will be identified and their roles and responsibilities determined	Acceptable	X		
POLICY 7.2.2 The City will keep a current mailing list of all relevant adjacent governments, state and federal agencies, and private organizations.	Acceptable	X		
POLICY 7.2.3 Where necessary, the City Commission will execute memorandums of understanding or other interlocal agreements with adjacent jurisdictions or other agencies in order to ensure coordination.	Acceptable	X		
POLICY 7.2.4 The City shall review the Comprehensive Plan to determine if memorandums of understanding or other interlocal agreements are needed with adjacent jurisdictions or other agencies.	This is repetitive, consider eliminating	X		
POLICY 7.2.5 The City shall coordinate with Hendry County and the regional water supply authorities to protect City potable water facilities.	Acceptable	X		
OBJECTIVE 7.3: Annexations. Proposals for annexation shall be coordinated with Hendry County.	Acceptable	X		
POLICY 7.3.1 The City will forward to the Hendry County Commission a copy of any received	Acceptable	X		

2010 Comprehensive Plan Reference: Intergovernmental Coordination Element	Analysis/Recommendations	No Comment	State Required	Recommended
proposal for annexation prior to final action by the City Commission regarding such proposal.				
POLICY 7.3.2 The City will request the assistance of the Southwest Florida Regional Planning Council for intergovernmental mediation when intergovernmental issues cannot otherwise be resolved.	Acceptable	X		
OBJECTIVE 7.4: Emergency Management. The City shall coordinate with other local governments and agencies to protect the residents of LaBelle from the effects of natural disasters, fires, and similar emergencies.	Acceptable	X		
POLICY 7.4.1 The City shall cooperate with Hendry County and other agencies in the development and implementation of plans and programs to prevent and address natural disasters, fires, and similar emergencies.	Acceptable	X		
POLICY 7.4.2 The City shall continue to examine the need for interlocal agreements and other means to prepare for and deal with such emergencies.	Acceptable	X		
POLICY 7.4.3 The City shall cooperate with the County to maintain a current emergency management program providing adequate shelters, provisions, evacuation routes, emergency equipment, and personnel to assist City residents in emergencies.	Acceptable	X		
OBJECTIVE 7.5 The Division of Emergency Management will be responsible for preparation of the updated regional hurricane evacuation plan. The City shall cooperate in any approved regional hurricane evacuation plan for Southwest Florida.	Acceptable	X		
POLICY 7.5.1 The City of LaBelle shall encourage citizen participation in the implementation of the approved regional hurricane evacuation plan.	Acceptable	X		

2010 Comprehensive Plan Reference: Intergovernmental Coordination Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 7.5.2 The City will continue to follow the guidelines established in its adopted public participation procedures to ensure ongoing citizen participation, as outlined in Resolution No. 90-1, adopted March 8, 1990.	Update to the latest available public participation plan or consider rewording to require ongoing citizen participation and communications on the City's hurricane evacuation plan.			X
POLICY 7.5.3 The City will provide, based on its determination of need, the programs and employees necessary for adequate operation and maintenance of public facilities and infrastructure as well as those other programs necessary to support the programs, public facilities, and infrastructure set out in this Comprehensive Plan.	Acceptable	X		

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 8: THE CITY OF LABELLE SHALL UNDERTAKE ACTIONS NECESSARY TO PROVIDE ADEQUATE PUBLIC FACILITIES IN A MANNER THAT PROTECTS INVESTMENTS IN EXISTING FACILITIES, MAXIMIZES THE USE OF EXISTING FACILITIES, AND PROVIDES FOR NEEDED EXPANSIONS CONCURRENT WITH AN ORDERLY AND COMPACT GROWTH PATTERN.	Consider updating the goal to focus on timely and efficient provision of public facilities to support growth, consistent with the financial resources of the City			X
OBJECTIVE 8.1: Capital Improvement Schedule. Guide the provision of public facilities for the purpose of accommodating desired future growth, replacing facilities that have exceeded their useful lifespan and correcting existing deficiencies.	Make reference to provision of facilities consistent with adopted level of service standards set forth in this Comprehensive Plan.			X
POLICY 8.1.1 The City will adopt by reference a 5-year Capital Improvement Schedule to ensure that the necessary public facilities will be in place to meet Levels of Service established within the Comprehensive Plan.	Acceptable	X		
POLICY 8.1.2 The Capital Improvements Schedule shall be reviewed and updated annually to reflect any applicable changes to goals, objectives and policies or capital improvement needs set forth in all elements of the Comprehensive Plan.	Acceptable	X		
POLICY 8.1.3 Capital Projects for the following facilities and infrastructure will be included and funded as part of the City's Capital Improvement Schedule: 1) Potable Water 2) Sanitary Sewer 3) Stormwater Management (Drainage) 4) Recreation 5) Roads	Expand categories as follows: 1. Potable Water 2. Sanitary Sewer 3. Stormwater Management & Drainage 4. Parks, Recreation & Open Space 5. Transportation & Mobility 6. Schools 7. Facilities To provide more room for public projects to be included in the CIP Schedule			X

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
6) Schools				
POLICY 8.1.2 5 The City shall schedule and fund, as a first priority, those capital facilities needed to correct existing deficiencies.	Review Policy numbering			X
POLICY 8.1.6 The City shall annually evaluate the impacts on public facilities created by new development permitted within the preceding twelve months.	Review Policy numbering			X
POLICY 8.1.7 The City will maximize public facilities and services in currently developed areas that promote infill development or redevelopment of existing neighborhoods and commercial areas.	Broaden redevelopment target areas beyond "neighborhoods and commercial areas"			X
POLICY 8.1.8 The City shall annually determine which public facilities or services operate at or below adopted levels of service.	Acceptable	X		
POLICY 8.1.9 The City shall annually identify the improvements, expansions, or new construction needed to ensure that public facilities that meet or exceed adopted level of service standards are available concurrent with the impacts of development prior to the issuance of future development orders or permits.	Acceptable			X
POLICY 8.1.10 Proposed capital improvement projects will be evaluated and ranked as follows: 1) Projects needed to protect public health and safety, to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities. 2) Projects that increases the efficiency of existing facilities, prevents or reduces future improvement costs, provides service	Acceptable	X		

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
to developed areas lacking full service, or promotes in-fill development. 3) Projects that represents a logical extension of facilities and services within a designated service area.				
POLICY 8.1.11 The City of LaBelle shall adopt by reference, the Hendry County School District's annually updated financially feasible Five-Year Work Plan, as approved by the Hendry County School Board on August 26, 2008 for years 2008/2009 through 2012/2013, and subsequent annual updates thereto, as part of its Schedule of Capital Improvements.	Update dates and references as needed			X
POLICY 8.1.12 The City of LaBelle, in coordination with the School Board of Hendry County shall annually update its tracking of public facilities capital improvements by using the adopted School District Facilities Work Program including the School District of Hendry County Capital Improvements Schedule to ensure maintenance of a financially feasible capital improvements schedule and to ensure the level of service standards will be achieved and maintained during the five-year planning period. Annual program amendments shall include the addition of a fifth year to the capital improvements element.	Remove last sentence as a 5-year planning period is previously stated.			X
POLICY 8.1.13 The City and the School Board shall coordinate to ensure that schools are adequately and efficiently provided commensurate with growth. Key coordinating mechanisms shall include: 1) Promotion of joint infrastructure park/school facilities when feasible; 2) Consideration of the adequacy and availability of educational infrastructure	Acceptable	X		

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
during appropriate review of development order applications; 3) Ensuring the provision of adequate infrastructure, on and off site, normally associated with new or expanded schools where consistent with state law restrictions on expenditures by the School Board; 4) Consideration of future inclusion of the School Board's Educational Plant Survey and Capital Improvement Program in the Comprehensive Plan Technical Support Documents (Data and Analysis) to provide the public with accessible information and effective coordination regarding educational infrastructure; 5) Seeking that any new major residential development or redevelopment applicant submit information regarding projected school enrollments from the project; and 6) Request that the School Board submit site plan information for all timely new schools.				
OBJECTIVE 8.2 Future Development. Future development shall bear a proportionate cost of facility improvements necessitated by development to maintain adopted levels of service standards.	Acceptable	X		
POLICY 8.2.1 The City shall provide the option of using development agreements to provide public facilities to accommodate future development.	Acceptable	X		
POLICY 8.2.2 The City shall annually review the use of impact fees, user fees, or other mechanisms for development proposals to fund improvements needed to maintain level of service standards for necessary public facilities.	Acceptable	X		

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 8.2.3 The City will provide public facilities in a manner that promotes an orderly compact urban growth pattern, which is compatible with both existing land uses, and with the natural environment	Acceptable	X		
POLICY 8.2.4 The City will permit multi-use developments of regional impact to satisfy the transportation concurrency requirements by payment of a proportionate share contribution.	Remove as there are no DRIs existing with the City, and the DRI framework is no longer used by the State.			X
OBJECTIVE 8.3 Coordination of Land Use Decisions. Land use decisions and development approvals shall be coordinated with the Capital Improvements Element to maintain adopted level of service standards.	Acceptable	X		
POLICY 8.3.1 The City shall not approve any development that is inconsistent with the Capital Improvements Element, does not provide needed capital improvement facilities, or would cause a public facility to operate below an adopted level of service.	Review for consistency with Transportation Concurrency regulations per F.S.		X	
OBJECTIVE 8.4: Funding of Public Facilities. Public facilities that are within the City's ability to fund or within the City's authority to require others to provide, on a fair and consistent basis shall be provided.	Acceptable	X		
POLICY 8.4.1 The estimated capital expenditures for all needed public facilities shall not exceed the expected revenues from sources that are available to the City pursuant to law.	Acceptable	X		
POLICY 8.4.2 The City shall continue to investigate other funding sources and strategies for the design, permitting, construction, operation and maintenance of built and proposed capital improvements.	Acceptable	X		

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
OBJECTIVE 8.5: Level of Service Standards. The following level of service standards shall be used to plan, maintain, and expand needed public capital facilities: Facility/service — Level of Service Standard (LOS) Roads SR 80 — LOS "C," per FDOT SR 29 — LOS "C" per FDOT CR 80A — LOS "C" per Hendry County All others — LOS "D" Wastewater — 250gpERC within core city; 275gpERC outside core city (see Infrastructure Element) Solid Waste — 3.5 pounds per capita per day Drainage — Historic discharge for a storm of 25-year frequency and 3-day duration Flood Protection for Buildings — 100-year storm event Potable Water — 275gpERC within core city; 300gpERC outside core city (see Infrastructure Element) Schools Elementary/Middle/High School — 100% of permanent FISH capacity Note: the LOS standard may increase up to 120% of FISH capacity if the District Facilities Work Plan provides appropriate capital projects, or other strategies, to reduce the LOS back to 100% of permanent FISH capacity within one 3-year cycle. Recreation* Parks - Acres/Persons Pocket Parks/Tot Lots 0.5 ac/1,000 Neighborhood Parks 1-2 ac/1,000 Community Parks 5-8 ac/1,000 City Parks 5-10 ac/1,000 Facilities* — Quantity/Persons Baseball 1/5,000 Multi-use Fields 1/10,000 Softball 1/5,000 Swimming Pools /20,000 Tennis Courts 1/2,000 Volleyball, Sand or Grass 1/5,000 Soccer 1/10,000 *Source: National Recreation Park Association Level of Service Standards	Review for updated per secondary sources (FDOT, Hendry County, Hendry County School Board, NRPA)		X	
POLICY 8.5.1 The City will evaluate Level of Service standards and progress in improving service deficiencies as part of the Evaluation and Appraisal Report process.	Acceptable	X		

2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
OBJECTIVE 8.6: Debt Management. The City will adopt policies and procedures which address the management and utilization of debt for the purposes of capital project financing in a discerning and efficient manner.	Acceptable	X		
POLICY 8.6.1 Public facilities financed by the City (potable water, wastewater/sanitary sewer) will have their debt repaid by user fees and charges for services for current revenues (reserves, surpluses or current revenues).	Acceptable	X		
POLICY 8.6.2 The term of any debt issue will not exceed the projected life expectancy of the capital improvements it is financing.	Acceptable	X		
POLICY 8.6.3 Development orders and permits issued by the City which require public facilities that will be financed by debt must be guaranteed in the form of a development agreement or interlocal agreement. Development agreements will not exceed 20 years in duration.	Acceptable	X		
POLICY 8.6.4 The City will not commit to the provision of a public facility, nor will it accept the provision of a public facility by others, if the City is unable to pay for the subsequent annual operating and maintenance costs of these additional facilities.	Acceptable	X		
POLICY 8.6.5 By 2012, the City will develop methods for additional oversight and penalty provisions for failure to comply with this Element.	Update to remove time constraints and reword as a continuous policy for operations			X

2010 Comprehensive Plan Reference: Concurrency Management Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 9: THE ADOPTED LEVEL OF SERVICE STANDARDS REQUIRED WITHIN THIS COMPREHENSIVE PLAN FOR ROADS, POTABLE WATER, SANITARY SEWER, SOLID WASTE, DRAINAGE, AND RECREATION AND OPEN SPACE WILL BE MAINTAINED.	Update to replace "Roads" with a broader concept of "Transportation Facilities". Review provisions of optional concurrency standards per State Statutes.			X
OBJECTIVE 8.1 The service area shall include the service area of the public facility or service as specified in the Plan. If not included in the Plan, the service area shall be determined by the Superintendent of Public Works.	Acceptable	X		
Objective 8.2 Levels of service and capacities of public facilities will be reviewed and determined concurrently with the annual monitoring and evaluation of the Capital Improvements Element. The review and determination will be performed by the Superintendent of Public Works for the City of LaBelle.	Acceptable	X		
Policy 8.2.1 Previously issued development orders for which development has not begun must be considered in the determination of the availability of capacity.	Acceptable	X		
Policy 8.2.2 The annual determination of capacity for a public facility shall be determined by the following steps: 1. Measure the current capacity of the existing facility. 2. Subtract the current demand of existing development on that facility. 3. Add any additional capacity from planned improvements, additions, or expansions to that facility. 4. Subtract the estimated demand on that facility of planned but not yet built development. 5. The result is the available capacity of that facility.	Acceptable	X		
Policy 8.2.3	Acceptable	X		

2010 Comprehensive Plan Reference: Concurrency Management Element	Analysis/Recommendations	No Comment	State Required	Recommended
The minimum requirements for concurrency within this management system for roads, potable water, sewer, solid waste, drainage and recreation and open space are as follows: a. the necessary facilities and services are in place at the time a development permit is issued; or; b. a development permit is issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or c. the necessary facilities are under construction at the time a permit is issued; or d. the necessary facilities and services are guaranteed in an enforceable development agreement.				
Objective 8.3 An enforceable development agreement may include, but is not limited to development agreements pursuant to Chapter 163.3220, Florida Statutes, as amended, or an agreement or development order issued pursuant to Chapter 380, Florida Statutes. Minimum requirements are as follows: 1. Building Permits Building permits shall be issued only when the necessary facilities and services are in place, with the following exceptions: a. At the time of Certificate of Occupancy for water/sewer facilities; b. Shall be in place no later than 1 year following Certificate of Occupancy for park facilities; c. Shall be in place no later than 3 years from the time of issuance of building permit for roads. The determination that the necessary facilities and services are in place shall be based on the estimates made by the Local Planning Agency, or its staff designee, as part of the most recent monitoring and evaluation of the Capital Improvements Element. 2. Other Types of Development Orders	Update F.S. reference, as needed.		X	

2010 Comprehensive Plan Reference: Concurrency Management Element	Analysis/Recommendations	No Comment	State Required	Recommended
Other types of development orders include, but are not limited to, approval of subdivisions, re-zoning, special permits, and site plan approval. These other types of development orders have less immediate impact on public facilities and services than do building permits. Therefore, even if it has been determined that the necessary facilities or services are in place and that the adopted levels of service are being maintained, the following requirement shall apply for the issuance of such development orders: a. The development order shall contain provisions that require: i. the developer to provide the additional public facility capacity needed to maintain the adopted levels of service due to the impacts of the proposed development and ii. the necessary facilities and services to be in place when the impacts of the development occur; or b. The development order shall contain provisions that require: i. the necessary public facilities be constructed by the public or private entity having jurisdictional authority over the facility to the level of service identified in and in conformance with the Five year Schedule of Improvements in the City. ii. the facilities and services will be provided consistent with the City's adopted level of services and will be in place when the impacts of the development occur.				
Policy 8.3.1 If there are competing applications for public facility capacity, the following order of priority shall apply: 1. Issuance of a building permit based upon a previously approved development order permitting redevelopment;	Acceptable	X		

2010 Comprehensive Plan Reference: Concurrency Management Element	Analysis/Recommendations	No Comment	State Required	Recommended
2. Issuance of a building permit based upon a previously approved development order permitting new development; 3. Issuance of a new development order permitting redevelopment; and 4. Issuance of a new development order permitting new development.				
Policy 8.3.2 No development order shall be issued which would require the City Commission to delay or suspend construction of any of the capital improvements on the Five-year Schedule of in the Capital Improvements Element.	Acceptable	X		
Policy 8.3.3 If, by issuance of a development order, a substitution of a comparable project on the Five-year Schedule is proposed, the applicant may request the City to consider an amendment to the Five-year Schedule.	Acceptable	X		
Policy 8.3.4 The result of any development not meeting adopted level of service standards for public facilities shall be cessation of the affected development or the reduction of the standard for level of service (which requires an amendment to the Comprehensive Plan).	Consider whether a reduction to the level of service standard should be expressly noted in a Policy			X

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 9: COLLABORATE AND COORDINATE WITH THE HENDRY COUNTY SCHOOL BOARD TO ENSURE HIGH QUALITY PUBLIC SCHOOL, WHICH MEET THE NEEDS OF HENDRY COUNTY'S EXISTING AND FUTURE POPULATION.	Update to make the goal specific to City of Labelle's needs			X
Objective 9.1 Coordination and Consistency. The City shall implement and maintain mechanisms designed to closely coordinate with the School Board and Hendry County in order to provide consistency between their respective comprehensive plan and public school facilities programs, such as: 1) Greater efficiency for the School Board, the County, and the Cities by the placement of schools to take advantage of existing and planned roads, water, sewer, parks, and drainage systems; 2) Improved student access and safety by coordinating the construction of new and expanded schools with roads, signalization, turn lanes, bike lanes, bicycle paths, and sidewalk construction programs; 3) The location and design of schools with parks, ball fields, libraries, and other community facilities to take advantage of shared use opportunities; and, 4) The expansion and rehabilitation of existing schools to support neighborhoods.	Acceptable	X		
POLICY 9.1.1 The City shall manage the timing of new development to coordinate with adequate school capacity. Where capacity will not be available to serve students from the property seeking a change, the City may use the lack of school capacity as a basis for	Update to also expand policy to mixed use development including residential			X

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
denial of petitions for final subdivisions or site plans for residential development.				
POLICY 9.1.2 In cooperation with the School Board and Hendry County, the City will implement the Interlocal Agreement for Public School Facility Planning for Hendry County, Florida between Hendry County, and all legislative bodies of the Cities, as required by Section 1013.33, Florida Statutes, includes procedures for: 1) Joint meetings; 2) Student enrollment and population projections; 3) Coordinating and sharing of information; 4) School site analysis, including site acquisition permitting process and procedures per Section of the Interlocal Agreement; 5) Supporting infrastructure; 6) Comprehensive plan amendments, rezonings, and development approvals, coordination of the long range public school facility map with the comprehensive plan including future land use map; 7) Education Plant Survey and Five-Year District Facilities Work program (aka Work Plan), annual updates to coordinate documents as required by law and rule; 8) Co-location and shared use which will enhance community design; 9) Implementation of school concurrency, including levels of service standards, concurrency service areas, and proportionate-share mitigation; 10) Oversight process; and,	Check and update F.S. reference as needed.			X

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
11) Resolution of disputes.				
POLICY 9.1.3 The City shall include a representative of the school district, appointed by the School Board, as a voting member of the local planning agency, as required by Section 163.3174, Florida Statutes.	Check and update F.S. reference as needed.			X
POLICY 9.1.4 The City shall coordinate with the School Board regarding annual review of school enrollment projections, and procedures for annual update and review of school board and local government plans consistent with the Interlocal Agreement.	Acceptable	X		
OBJECTIVE 9.2 Enhance Community Design. Enhance community/neighborhood design through effective school facility design and siting standards by the siting of school facilities so they serve as community focal points and so that they are compatible with surrounding land uses.	Acceptable	X		
POLICY 9.2.1 The City will continue to coordinate with the School Board to assure that proposed public school facility sites are consistent with the land use categories and policies of the City Comprehensive Plan, pursuant to the Interlocal Agreement for Public School Facility Planning.	Acceptable	X		
POLICY 9.2.2: Consistent with the City of LaBelle Future Land Use Element, the City shall allow schools in the Public, Residential-Suburban, Residential-Urban, Outlying Mixed Use, Downtown District, South LaBelle Community and Old Groves Mixed Use Sub-District land use categories, consistent with the following criteria: 1) Schools shall be located in a coordinated manner ensuring that the planning, construction, and opening of educational facilities are coordinated in time and location, concurrent with both need and necessary	Review against FLU categories for appropriate siting considerations.	X		

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
services and infrastructure, and to ensure compatibility with the Comprehensive Plan. 2) The proposed location is compatible with present and projected uses of adjacent property. 3) The proposed location is well drained and soils are suitable for development or are adaptable for development and outdoor educational purposes with drainage improvements. 4) The proposed location is not within a velocity flood zone or floodway. 5) Proposed school sites should be located away from industrial uses, railroads, airports, and similar land uses to avoid noise, odor, dust, and traffic impacts and hazards. 6) Disrupting influences caused by school yard noises and traffic shall be sufficiently buffered from hospitals, adult communities, and nursing homes. 7) In the planning, siting, land acquisition and development of the facility, evaluation shall include consideration of the student population density of the area (such as sufficient student population of existing rural communities), and public safety. 8) There are no significant environmental constraints that would preclude development of a public educational facility on the site. 9) The City of LaBelle shall advise the School Board of all Plan amendments that may affect the location of new schools and proposed improvements.				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 9.2.3 When considering the acquisition of land for schools, to the greatest extent possible, a location will be selected that collocates the public school, parks, libraries and community centers, which is consistent with Objective 2.3 of the Hendry County Future Land Use Element “School Siting”. The City of LaBelle shall continue to coordinate with the Hendry County School Board on the siting of new schools, ensuring the schools are located in close proximity to urban residential areas and other public facilities such as parks, libraries and community centers.	Review and update reference to Hendry County Comp Plan as needed.			X
POLICY 9.2.4 Consistent with Section 163.3177, Florida Statutes, the City will include sufficient allowable land use designations for schools approximate to residential development to meet the projected needs for schools.	Check and update F.S. reference as needed.			X
POLICY 9.2.5 All public schools shall provide bicycle and pedestrian access consistent with Florida Statutes. Bicycle access to public schools should be incorporated in the countywide bicycle plan. Parking at public schools will be provided consistent with the Florida Building Code and State Requirements for Educational Facilities.	Update to broaden policy on multimodal access to schools and similar facilities to support schools (libraries, parks, etc.)			X
POLICY 9.2.6 The City, in coordination with the School Board, shall implement the following strategies: 1) New developments adjacent to school properties shall be required to provide a right-of-way and a direct access path for pedestrian travel to existing and planned school sites, and shall connect to the neighborhood’s existing pedestrian network; 2) For new development and redevelopment within 2 miles of an existing or planned	Check and update F.S. reference as needed.			X

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
school, the City shall require sidewalks (complete, unobstructed, continuous with a minimum width of 5 feet) along the corridor that directly serves the school, or qualifies as an acceptable designed walk or bicycle route to the school; 3) In order to ensure continuous pedestrian access to public schools, priority will be given to cases of hazardous walking conditions pursuant to Section 1006.23, Florida Statutes, and specific provisions for constructing such facilities will be included in the schedule of capital improvements adopted each fiscal year; 4) Evaluate school zones to consider safe crossing of children along major roadways, including prioritized areas for sidewalk improvements including: schools with a high number of pedestrian and bicycle injuries or fatalities, schools requiring courtesy busing for hazardous walking conditions, schools with significant walking populations, but poor pedestrian and bicycle access, and needed Coordination with the MPO Long Range Transportation Plans to ensure funding for safe access to schools including: development of sidewalk inventories and list of priority projects coordinated with the School Board recommendations are addressed safety improvements; and 5) Coordination with the MPO Long Range Transportation Plans to ensure funding for safe				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
access to schools including: development of sidewalk inventories and list of priority projects coordinated with the School Board recommendations are addressed.				
OBJECTIVE 9.3 Sustainable Design. Encourage sustainable design and development for educational facilities.	Acceptable	X		
POLICY 9.3.1 The City will coordinate with the School Board to continue to permit the shared-use and co-location of school sites with County and or City facilities with similar facility needs, according to the Interlocal Agreement for Public School Facility Planning for the Hendry County, and the Cities of LaBelle and Clewiston, as it may be amended. Coordinate in the location, phasing, and design of future school sites to enhance the potential of schools as recreation areas.	Acceptable	X		
POLICY 9.3.2 The City will encourage the School Board to use sustainable design and performance standards, such as using energy efficient and recycled materials, to reduce lifetime costs as referenced in Florida Statutes section 1013.451 Life-cycle costs comparison.	Check and update F.S. reference as needed.			X
POLICY 9.3.3 The City will continue to work with the School Board to coordinate efforts to build new school facilities, and facility rehabilitation and expansions, to be designed to serve as and provide emergency shelters as required by Section 163.3177, Florida Statutes, and shall coordinate with the School Board regarding emergency preparedness issues and plans.	Check and update F.S. reference as needed.			X
OBJECTIVE 9.4 School Capacity. Coordinate petitions for changes to future land use, zoning, subdivision and site plans for residential development with adequate school capacity. This objective will be accomplished recognizing the School Board's	Acceptable	X		

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
statutory and constitutional responsibility to provide a uniform system of free and adequate public schools, and the City's authority for land use, including the authority to approve or deny petitions for comprehensive plan amendments, re-zonings or final subdivision and site plans that generate students and impact the school system. Manage the timing of comprehensive plan amendments and other land use decisions to coordinate with adequate school capacity.				
POLICY 9.4.1 The City shall coordinate anticipated students growth based on future land use map projections of housing units with the School Board's long range facilities needs over the 5-year, 10-year and 20-year periods.	Acceptable	X		
POLICY 9.4.2 The City shall take into consideration the School Board comments and findings on the availability of adequate school capacity when considering the decision to approve comprehensive plan amendment and other land use decisions as provided for in Section 163.3177(6)(a), Florida Statutes.	Check and update F.S. reference as needed.			X
POLICY 9.4.3 The City shall give priority consideration to petitions for land uses, zoning and final subdivision and site plans for residential development in areas with adequate school capacity or where school sites adequate to serve potential growth have been donated to or set aside for purchase by the School Board at raw land (pre-development approval) prices reflected in written agreement approved by the School Board.	Acceptable	X		
POLICY 9.4.4 Where capacity will not be available to serve students from the property seeking a land use change, the City will coordinate with the School Board to ensure adequate capacity is planned and funded. Where feasible, in conjunction with the plan amendment early dedications of school sites shall be encouraged. To ensure adequate capacity is planned	Acceptable	X		

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
and funded, the School Board's long range facilities plans over the 5-year, 10-year and 20-year periods shall be amended to reflect the needs created by the land use plan amendment.				
POLICY 9.4.5 In reviewing petitions for future land use, rezoning, or final subdivision and site plans for residential development, which may affect student enrollment or school facilities, the City will consider the following issues: 1) Providing school sites and facilities within planned neighborhoods; 2) Insuring the compatibility of land uses adjacent to existing schools and reserved school sites; 3) The co-location of parks, recreation and community facilities with school sites 4) The linkage of schools, parks, libraries and other public facilities with bikeways, trails, and sidewalks; 5) Insuring the development of traffic circulation plans to serve schools and the surrounding neighborhood; 6) Providing off-site signalization, signage, access improvements and sidewalks to serve all schools; 7) The inclusion of school bus stops and turnarounds in new developments; 8) Encouraging the private sector to identify and implement creative solutions to developing adequate school facilities in residential developments; 9) School Board staff comments and findings of available school capacity for comprehensive	Acceptable	X		

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
plan amendments and other land-use decisions; 10) Available school capacity or planned improvements to increase school capacity, correct existing deficiencies; and, 11) Whether the proposed location is consistent with school design and planning policies.				
OBJECTIVE 9.5 Implement School Concurrency. Manage the timing of residential subdivision approvals, site plans or their functional equivalent to ensure adequate school capacity is available consistent with adopted level of service standards for public school concurrency, and the School Board's 5-10-20 Year Work Program. The Work Program includes a financially feasible short term and long term capital plan for new schools and the repair, renovation and remodeling, of existing schools.	Acceptable	X		
POLICY 9.5.1 Consistent with the Interlocal Agreement, the City agrees to the following standards for school concurrency: 1) Level of Service Standard Consistent with the Interlocal Agreement, the uniform, district-wide level-of service standards are initially set as follows herein, and are hereby adopted in the City's Public School Facilities Elements and Capital Improvements Element: A) Elementary: 100% of permanent FISH capacity as adjusted by the school board annually to account for measurable programmatic changes. The Level of Service may increase up to 120% of permanent FISH capacity if the District	Review and revise per updates from the School Board on LOS.			X

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
Facilities Work Program" (aka '5-Year Facilities Work Plan') provides appropriate capital projects, or other strategies, to reduce the LOS back to the 100% of permanent FISH capacity within one 3 year cycle. B) Middle: 100% of permanent FISH capacity as adjusted by the school board annually to account for measurable programmatic changes. The Level of Service may increase up to 120% of permanent FISH capacity if the District Facilities Work Program" (aka '5-Year Facilities Work Plan') provides appropriate capital projects, or other strategies, to reduce the LOS back to the 100% of permanent FISH capacity within one 3 year cycle. C) High: 100% of permanent FISH capacity as adjusted by the school board annually to account for measurable programmatic changes. The Level of Service may increase up to 120% of permanent FISH capacity if the District Facilities Work Program" (aka '5-Year Facilities Work Plan') provides appropriate capital projects, or other strategies, to reduce the LOS back to the 100% of permanent FISH capacity within one 3 year cycle. Potential amendments to the level of service standards shall be considered at least annually at the staff working group meeting to take place each year as				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
established in the Interlocal Agreement. If an amendment is proposed by the School Board, it shall be accomplished by the execution of an amendment to the Interlocal Agreement by all parties and the adoption of amendments to the comprehensive plans. The amended level of service shall not be effective until all plan amendments are effective and the amended Interlocal Agreement is fully executed. No level of service shall be amended without a showing that the amended level of service is financially feasible, supported by adequate data and analysis, and can be achieved and maintained within the period covered by the first five years of the Capital Facilities Plan. After the first 5-year schedule of capital improvements, capacity shall be maintained within each year of subsequent 5-year schedules of capital improvements. 2) Concurrency Service Areas The concurrency service areas shall be as shown in Map PSFE Exhibit 31. Potential amendments to the concurrency service areas shall be considered annually at the staff working group meeting to take place each year as established by the Interlocal Agreement. If an amendment is proposed by the School Board, it shall be accomplished by the execution of an amendment to the Interlocal Agreement by all parties and the				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
adoption of amendments to the comprehensive plan. The amended concurrency service area shall not be effective until all plan amendments and the amended Interlocal Agreement are all fully executed. No concurrency service area shall be amended without a showing that the amended concurrency service area boundaries are financially feasible. 3) Maximizing Concurrency Service Areas Concurrency service areas shall maximize capacity utilization, taking into account transportation costs, limiting maximum student travel times, the effect of court-approved desegregation plans, achieving social and economic, racial and cultural diversity objectives, and other relevant factors as determined by the School Board's policy on maximization of capacity. Other considerations for amending concurrency service areas may include safe access (including factors such as the presence of sidewalks, bicycle paths, turn lanes and signalization, general "walkability"), diversity and geographic or man-made constraints to travel. The types of adjustments to school operations that will be considered in the City shall be determined by the School Board's policies on maximization of capacity. 4) Student Generation Rates Consistent with the Interlocal Agreement, the School Board staff, working with the staff of				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
the County and the Cities, will develop and apply student generation multipliers for residential units by type and projected price for schools of each type, considering past trends in student enrollment in order to project school enrollment. The student generation rates shall be determined by the School Board in accordance with professionally accepted methodologies, shall be updated at least every two years and shall be adopted into the City comprehensive plan. 5) School Capacity and Enrollments The Department of Education permanent Florida Inventory of School Houses (FISH) capacity is adopted as the uniform methodology to determine the capacity of each school. Relocatables (portable classrooms) are not considered permanent capacity. School enrollment shall be based on the annual enrollment of each school based on actual counts reported to the Department of Education in October of each year. 6) Concurrency Availability Standard The County and the Cities shall amend the concurrency management systems in their land development regulations to require that all new residential units be reviewed for school concurrency at the time of final subdivision or site plan. The County shall not deny a final subdivision or site plan for residential development due to a failure to				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
achieve and maintain the adopted level of service for public school capacity where: A) Adequate school facilities will be in place or under actual construction within three years after the issuance of the final subdivision or site plan; or, B) Adequate school facilities are available in an adjacent concurrency service area and the impacts of development can be shifted to that area; or, C) The developer executes a legally binding commitment to provide mitigation proportionate to the demand for public school facilities to be created by the actual development of the property subject to the final subdivision or site plan (or functional equivalent) as provided in the Interlocal Agreement. In evaluating a subdivision plat or site plan for concurrency, any relevant programmed improvements in the current year and years 2 or 3 of the 5-year schedule of improvements shall be considered available capacity for the project and factored into the level of service analysis. Any relevant programmed improvements in years 4 or 5 of the 5-year schedule of improvements shall not be considered available capacity for the project unless funding for the improvement is assured through School Board funding to accelerate the project, through proportionate share mitigation, or some				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
other means of assuring adequate capacity will be available within 3 years. Relocatable classrooms may provide temporary capacity while funded schools or school expansions are being constructed. 7) Subdivision and Site Plan Standards In the event that the School Board comments that there is not sufficient capacity in the affected concurrency service area to address the impacts of a proposed development, the following standards shall will apply. Either A) The School Board will provide a draft plan to the local governments for review and comment prior to adoption, as required by Florida Statute. B) The City will respond and work with the School Board to achieve financially feasible coordinated planning strategies to achieve stated goals and objectives.				
POLICY 9.5.2 Options for providing proportionate share mitigation for any approval of additional residential dwelling units that triggers a failure of level of service for public school capacity shall include the following: 1) Contribution of, or payment for, acquisition of new or expanded school sites pursuant to the following formula established by the Florida Department of Education:	Acceptable	X		

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
(4) **Recommended Usable Acreage.** The board should ensure that each site contains at least the minimum usable acreage necessary to meet the needs of the anticipated program as follows: (a) **Elementary School.** A minimum of four (4) acres for the first two hundred (200) student capacity plus one (1) acre for each additional one hundred (100) students. (b) **Middle or Junior High School.** A minimum of six (6) acres for the first three hundred (300) student capacity plus one (1) acre for each additional one hundred (100) students. (c) **Senior High School.** A minimum of seven (7) acres for the first three hundred (300) student capacity plus one (1) acre for each additional fifty (50) students up to one thousand (1,000) students, plus one (1) acre for each additional one hundred (100) students thereafter. (d) **Area Vocational-Technical School.** A minimum of twenty (20) acres for the first five hundred (500) student capacity plus one (1) acre for each additional fifty (50) students up to one thousand (1,000) students. (e) **Community College.** A main campus site shall be a minimum of one hundred (100) acres. Each separate center site shall contain a minimum of forty (40) acres for the first five hundred (500) student capacity plus two (2) acres for each additional one hundred (100) students. Special-purpose center site acreage shall be appropriate to contain the functions identified in the program. 2) Construction or expansion of permanent school facilities; 3) The creation of mitigation banking within designated areas based on the construction of a public school facility in exchange for the right to sell capacity credits. Capacity credits shall will be sold only to developments within the same concurrency service area or an adjacent concurrency service area; and, 4) Educational Facility Benefit Districts. Mitigation shall be directed to projects on the School Board's Five-Year Capital Facilities Plan that the School Board agrees will satisfy the demand created by that development approval, and shall be assured by a legally binding development agreement between the School Board, the City, and the applicant executed prior to the issuance of the final subdivision, site plan or functional equivalent. If the school agrees to the mitigation, then the school board must commit in the agreement to placing the improvement required for mitigation on its Five-Year Capital Facilities Plan. This development agreement shall include the landowner's commitment to				

2010 Comprehensive Plan Reference: Public School Facilities Element	Analysis/Recommendations	No Comment	State Required	Recommended
continuing renewal of the development agreement upon its expiration. The amount of mitigation required shall be determined by calculating the number of student Stations for each school type for which there is not sufficient capacity using the student generation rates applicable to a particular type of development and multiplying by the local costs per student station for each school type applicable to Hendry County, as determined by the School Board, in addition to any land costs for new or expanded school sites, if applicable.				
OBJECTIVE 9.6 Monitoring and Evaluation. The City shall strive to continually monitor and evaluate the Public Schools Facilities Element in order to assure the best practices of the joint planning processes and procedures for coordination of planning and decision-making.	Acceptable	X		
POLICY 9.6.1 The County, the Cities and the School Board will coordinate during updates or amendments to the Comprehensive Plan and updates or amendments for long-range plans for School Board facilities.	Acceptable	X		
OBJECTIVE 9.8 Schedule of Capital Improvements to Meet Future Needs. Ensure the inclusion of the Five-Year Schedule of capital improvements of those projects necessary to address existing deficiencies and to meet future needs based upon achieving and maintaining the adopted level of service standards by the end of the 5 year planning period.	Acceptable	X		
POLICY 9.8.1 The City shall incorporate by reference the Hendry County School Board's 5-Year Work Program (aka Work Plan) for deficiencies in existing school facilities, for school facilities required to meet future needs, and for consistency with County and City planning.	Acceptable	X		

2010 Comprehensive Plan Reference: Economic Development Element	Analysis/Recommendations	No Comment	State Required	Recommended
GOAL 10: DEVELOP AND MAINTAIN A HEALTHY AND VIBRANT ECONOMY CONSISTENT WITH A SUSTAINABLE NATURAL ENVIRONMENT TO ENSURE THE CONTINUATION OF LABELLE'S HIGH QUALITY OF LIFE BY: 1) Fostering an innovative and predictable business climate; 2) Investing in infrastructure to support the development and expansion of local business; 3) Creating a skilled and educated workforce; 4) Targeting core industries that build on local and regional strengths.	Consider expanding goals to include a diversified tax base, opportunities to live, work and play in close proximity. Tie to housing affordability to retain workforce.			X
OBJECTIVE 10.1 Business Development & Retention. Encourage the retention and expansion of existing businesses within the City.	Acceptable	X		
POLICY 10.1.1 The City will promote a ratio balance of new commercial and industrial development to new residential development which maintains the fiscal health of the City.	Reword to expand on the idea of mixed use, and targeted ratios between residential and non-residential			X
POLICY 10.1.2 The City will support improvement of infrastructure in areas designated for commercial or industrial development.	Acceptable	X		
POLICY 10.1.3 The City will facilitate strategic governmental meetings that specifically address business growth along the SR 80 and SR 29 Business Corridors, the Downtown, and within the Employment Village Future Land Use Category.	Acceptable	X		
POLICY 10.1.4 The City will maintain an efficient and consistent regulatory environment, including a predictable permitting process to support the expansion of existing businesses and attract a diverse employment base.	Acceptable	X		

2010 Comprehensive Plan Reference: Economic Development Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 10.1.5 The City will support municipal and county efforts to enhance the overall appearance of LaBelle as a means of creating an attractive community to increase property values and enhance the tax base.	Acceptable	X		
POLICY 10.1.6 The City will facilitate the collection, analysis and dissemination of information that contributes to economic development.	Acceptable	X		
OBJECTIVE 10.2 Workforce Development & Retention. Develop and expand educational and training options for City residents to ensure a well-qualified workforce and to retain local talent.	Acceptable	X		
POLICY 10.2.1 The City will encourage the provision of a high quality primary, secondary and post-secondary public education system within the City.	Acceptable	X		
POLICY 10.2.2 The City will facilitate the establishment of higher education facilities in the City, including Edison College and other technical education or trade school facilities.	Acceptable	X		
Policy 10.2.3 The City will coordinate with existing and new businesses located in the City to match training opportunities with existing and planned job requirements.	Acceptable	X		
Policy 10.2.4 The City will improve the jobs-housing balance and maintain the fiscal health of the City.	Expand on encouraging affordable/attainable housing to retain workforce.			X
OBJECTIVE 10.3 Community and Infrastructure Investment. Assist the community and its industries in becoming more productive, leverage private investment and help direct investment to areas with the greatest needs or potential benefits.	Acceptable	X		
POLICY 10.3.1 Encourage community revitalization through the identification of regional and national sources of private and public funding.	Acceptable	X		
POLICY 10.3.2 Invest in public infrastructure that supports and leverages private investment in industries that generate jobs with good wages,	Acceptable	X		

2010 Comprehensive Plan Reference: Economic Development Element	Analysis/Recommendations	No Comment	State Required	Recommended
benefits and opportunities for employee advancement.				
OBJECTIVE 10.4 Target Industries. Encourage continued expansion of tourism opportunities within the City in order to provide economic benefits and showcase the City's rural character, scenic and natural beauty, and abundance of recreational opportunities.	Reconsider what industries should be target industries for LaBelle. Expand Objectives and Policies beyond tourism – Tourism and Target Industries should be separate Objectives.			X
Policy 10.4.1 The City will partner with local and regional agencies to promote the City regionally, nationally and internationally as a tourist destination.	Acceptable	X		
POLICY 10.4.2 The City will encourage and promote nature-based tourism, agricultural-based tourism, and outdoor recreational tourism through the identification of key sites, locations, and activities, which draw tourists.	Acceptable	X		
POLICY 10.4.3 The City will encourage and promote coordination amongst neighboring jurisdictions, such as Hendry County, Glades County and the City of Clewiston, in order to facilitate regional partnerships for the purposes of promoting and building the tourism industry.	Acceptable	X		
POLICY 10.4.4 The City will identify, promote and protect the historic and cultural resources within the City which are used by tourists, including historic landmarks, scenic areas, and natural resources.	Acceptable	X		
POLICY 10.4.5 The City will develop interpretive and educational activities centered on these resources.	Acceptable	X		
OBJECTIVE 10.5 Commercial Land Uses. Encourage economically healthy neighborhood and community commercial areas that are easily accessible to residents.	Acceptable	X		
POLICY 10.5.1 The City will support new commercial development that contributes positively to the economic vitality of the community and provides opportunity for new business development.	Acceptable	X		

2010 Comprehensive Plan Reference: Economic Development Element	Analysis/Recommendations	No Comment	State Required	Recommended
POLICY 10.5.2 The City will provide land appropriately designated to sustain a robust commercial base.	Acceptable	X		
POLICY 10.5.3 The City will encourage a variety of uses (such as hotel, office, entertainment, recreational and residential uses) to locate in designated mixed use areas to ensure a vibrant and sustainable local economy.	Acceptable	X		
OBJECTIVE 10.6 Industrial Land Use. Diversify the economy with a focus on providing quality employment opportunities and sufficient land capacity to sustain a strong economic base.	Acceptable	X		
POLICY 10.6.1 The City will encourage large regional employers to locate in the Employment Village Land Use designated areas.	Expand to South LaBelle			X
POLICY 10.6.2 The City will maintain the existing industrial area for smaller emerging industrial uses and accommodate the expansion of existing industrial uses to facilitate their retention in the area in which they are located.	Acceptable	X		
POLICY 10.6.3 The City will ensure industrial land uses are adequately served by existing and planned infrastructure.	Acceptable	X		

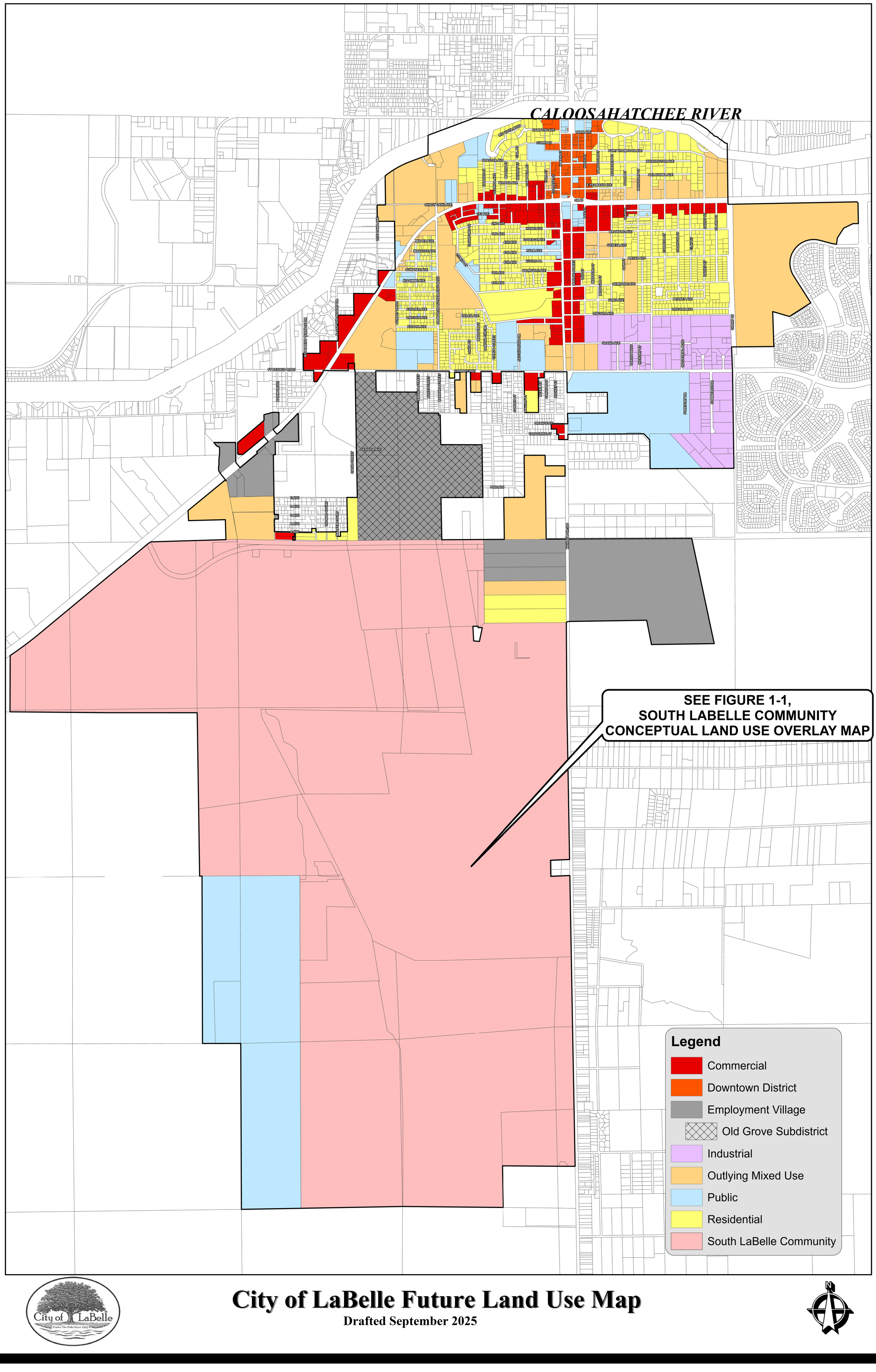
2010 Comprehensive Plan Reference: Capital Improvements Element	Analysis/Recommendations	No Comment	State Required	Recommended
Goal 11: CONSIDER PRIVATE PROPERTY RIGHTS IN LOCAL DECISION MAKING.	Acceptable	X		
Objective 11.1 Implementation. The City shall continue to consider private property rights when evaluating all local decision making in accordance with Section 163.3177(6)(i)1.	Check and update F.S. reference as needed.			X
Policy 11.1.1 The City shall consider the right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.	Acceptable	X		
Policy 11.1.2 The City shall consider the right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances. Policy 11.1.3 The City shall consider the right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.	Acceptable	X		
Policy 11.1.4 The City shall consider the right of a property owner to dispose of his or her property through sale or gift.	Acceptable	X		

APPENDIX C: PUBLIC WORKSHOP SUMMARY

- Meeting Details
  - May 1, 2025, at 6:00PM
  - LaBelle Civic Center located at 481 W Hickpochee Ave, LaBelle, FL 33935

- Attendance Statistics
  - 32 Attendees
  - 22 Surveys Completed

- Key Takeaways of Break-Out Session Discussion
  - Future Land Use
    - Strategic allowance of higher densities
    - Concerns of compatibility with existing established residential neighborhoods as the City grows
    - Unlocking the potential of the river via incentives for commercial, recreational, and mixed use along the riverfront
  - Infrastructure
    - Emphasis on multimodal connectivity and alternate modes of transportation
    - Expand infrastructure to accommodate new growth
    - Increase central water and sewer coverage across the City
  - Housing
    - Lack of workforce/affordable housing
    - Lack of rental/diverse housing opportunities
    - Impacts of growing seasonal population changes
  - Economic Development
    - Focus on attraction of targeted industries to increase employment opportunities as well as quality of life
    - Need to increase opportunities for entertainment/recreation, hospitality and healthcare, technology industries
    - Incentivize mixed use development to diversify the tax base



City of LaBelle Future Land Use Map

Drafted September 2025



Sewer Master Plan

FOUR WATERS ENGINEERING






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1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

The City of LaBelle Public Works Department (City) has set a goal to provide wastewater treatment and collection that meets the health and safety needs of the community. To this end, the City commissioned Four Waters Engineering, Inc. (4Waters) to prepare a Sewer Master Plan (Master Plan) to assess the status of the existing system and to plan for capital improvements that meet the current and projected service area needs.

A Wastewater Collection System Expansion Analysis was prepared for the City in 2006, however since that time much of the system routing has been modified or expanded and the City requires an up-to-date assessment to understand the current system hydraulics and to ensure the current level of service is being met and projected service needs are identified. Currently, the City is having a Sewer Facility Plan developed for near term grant applications, which will additionally support the Sewer Master Plan.

The general scope of this project involved a thorough analysis of the City's sewer pumping and collection systems and as part of the Sewer Master Plan, 4Waters completed the following tasks:

- Assessment of sewer lift stations including draw down testing
- Population projections and associated sewer generation rates
- Assessment of septic to sewer projects
- Inflow and Infiltration (I&I)
- Development of hydraulic sewer model
- Compilation of rehabilitation and expansion capital improvement plans (CIPs) which addresses the need for renovation of existing sewer facilities and for expanded or upgraded sewer collection, pump and transmission facilities for a planning period of 20 years
- Rate Study prepared by Raftelis (Revenue Sufficiency Analysis, Monthly User Rate Design Analysis and Impact Fee Analysis)

The resulting 2023 Sewer Master Plan provides a concise guide for the City to utilize for planning near-term and long-term sewer system improvements with a focus on feasible solutions to sewer problems which balance the desired level of service to be provided with environmental, funding, and regulatory constraints.

1.2 SERVICE AREA AND TOPOGRAPHY

The City of LaBelle is located on the northern border of Hendry County, approximately 32 miles east of Fort Myers (the closest metropolitan area and located in Lee County), 50 miles east of the Gulf of Mexico and approximately 92 miles west of Palm Beach (Palm Beach County). LaBelle is bounded by Glades County to the north, Palm Beach Count to the east, Collier County to the south and Lee County to the west and encompasses approximately 12 square miles. It is the site of the county seat of Hendry County and the only urban area of any size in western Hendry County and southern Glades County. As such, LaBelle provides the commercial base for an area that reaches beyond the corporate limits of the City into surrounding Hendry and Glades Counties.

Two major state roads, State Road (SR) 80 and State Road 29, bisect the City. SR 80 (Hickpochee Avenue) connects the east and west sides of Southern Florida (Fort Myers to West Palm Beach) while SR 29 connects travelers north and south from SR 27 to Everglades City. Figure 1.1 provides a map of the City of LaBelle with the Sewer Master Plan evaluation area delineated.

According to the United States Geological Survey (USGS), the topographical elevations of the evaluation area range from a high of approximately 30 feet to a low of 5 feet, North American Datum of 1983 (NAD83). The higher areas are typically found in the middle of the City with the topography of the area gently sloping downward from the high areas towards the Caloosahatchee River. Figure 1.2 depicts the topography of the area.

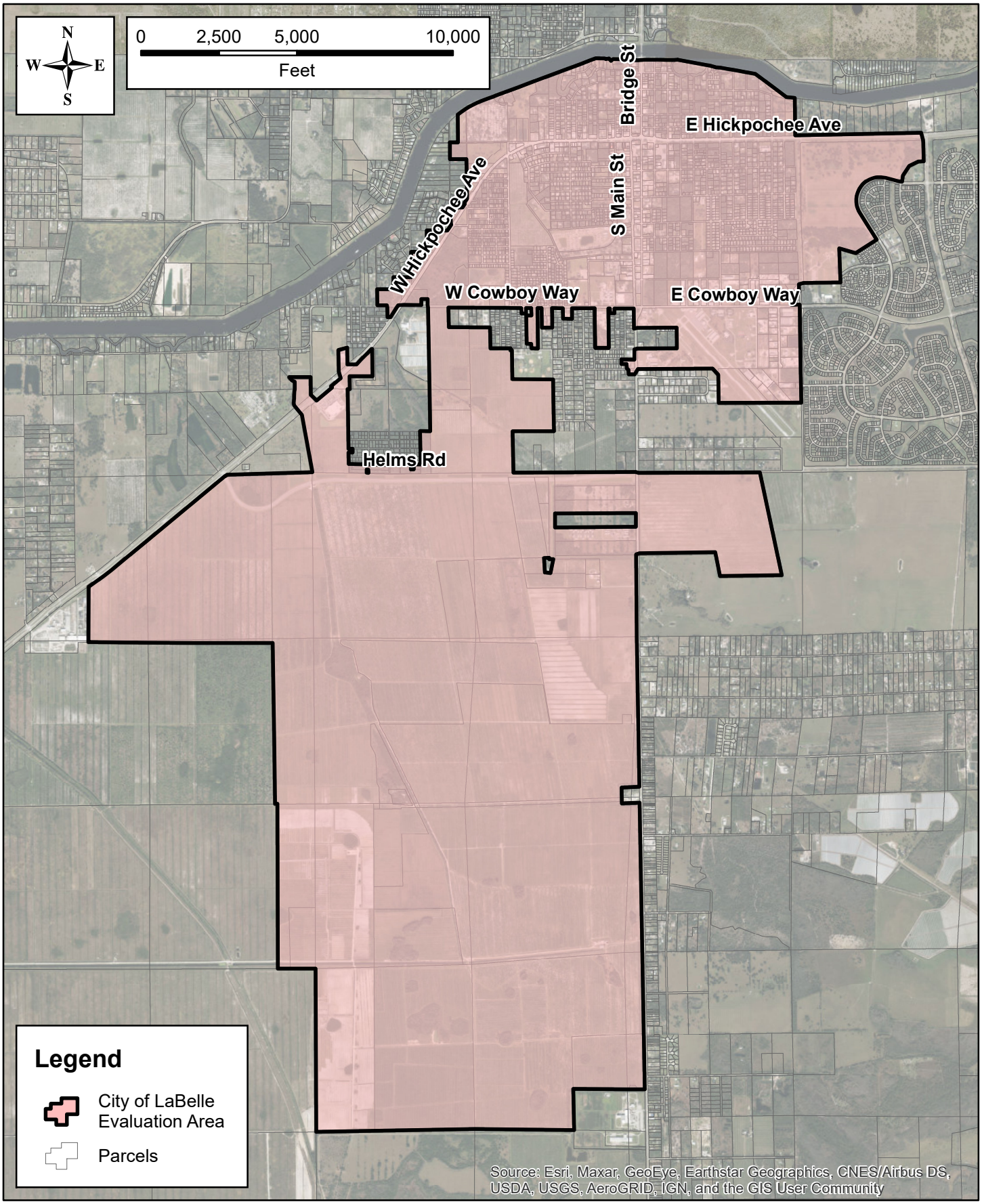


Figure 1.1: Sewer Master Plan Evaluation Area

LaBelle, FL

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

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Revision Date: 9/1/2022 Path: P:\22-1012 LaBelle Sewer Master Plan\16.0 GIS\Map Document\Report Figure Maps\Figure 1.1 - Sewer Master Plan Evaluation Area.mxd

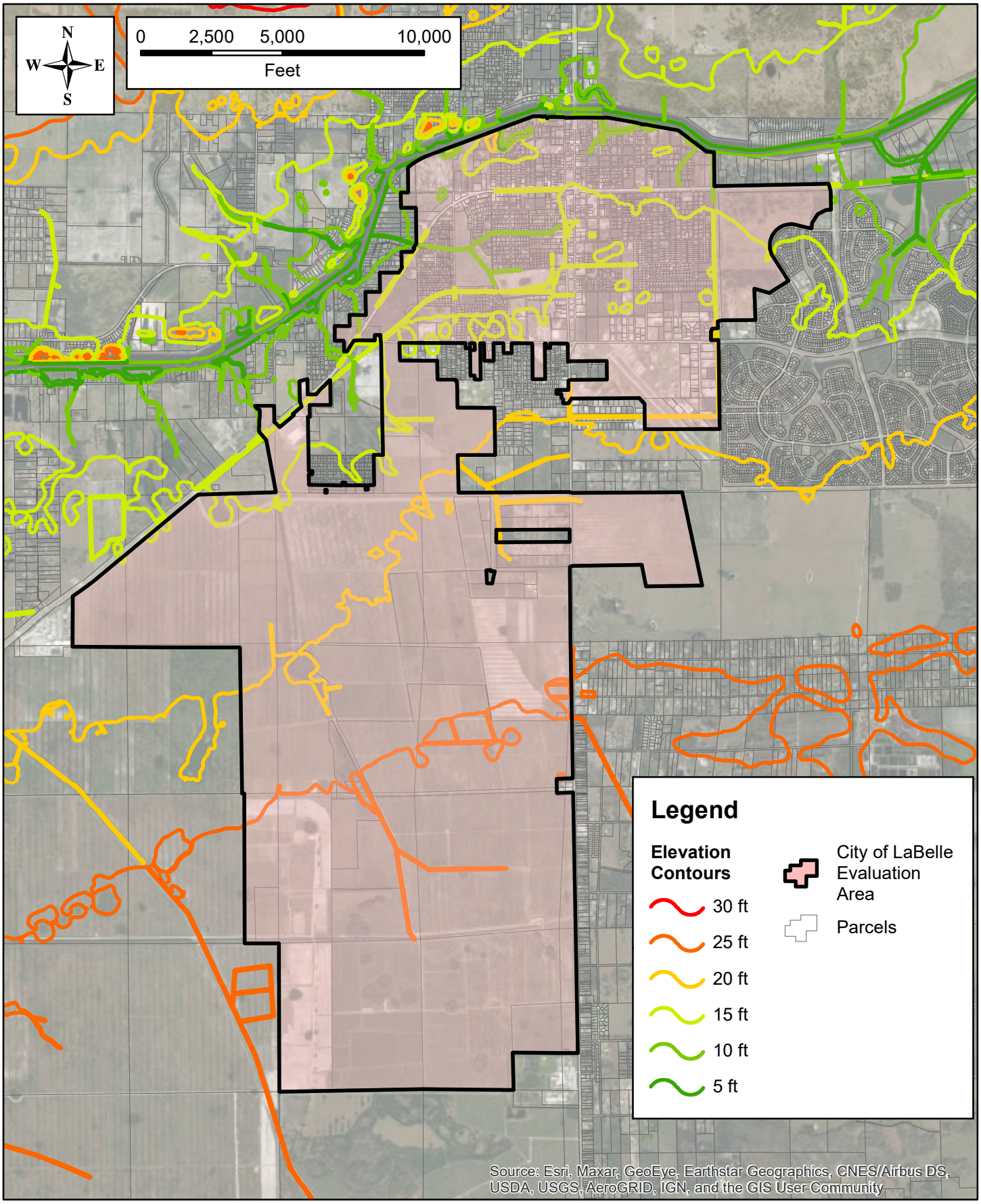


Figure 1.2: Topographical Contours

LaBelle, FL

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Revision Date: 9/6/2022 Path: P:\22-1012 LaBelle Sewer Master Plan\16.0 GIS\Map Document\Report Figure Maps\Figure 1.2 - Topographical Contours Ver2.mxd

1.3 ZONING AND LAND USE CHARACTERISTICS

The land uses throughout the City area include Commercial, Residential/Planned Residential, Industrial, Downtown District, Mixed Use, Public and South LaBelle Village. The City is predominantly a residential community although it has a large percentage of commercial and industrial properties in addition to a sizeable, annexed area of the City known as the South LaBelle Community. While the City is an economic hub and thoroughfare for millions of boxes of citrus, residential housing still accounts as the dominant land use type.

In 2002, LaBelle annexed approximately 5,982 acres into the City, through four separate annexations. The most significant annexed area is known as South LaBelle Community, which is proposed as a mixed-use community approved for 15,840 residential units, 1 million square feet of commercial development and over 300,000 square feet of industrial land uses.

Based on the City of Labelle's Land Development Code, the City has been divided up into a series of zoning districts to ensure the permitted and conditional use of development is compatible with surrounding land uses, served by adequate public facilities and to take into consideration natural and costal resources. The following zoning classifications are represented within the City:

- Agriculture (AG)
- Business (B-1 Professional, B-2 General and B-3 Heavy)
- Industrial (I-1A Light and I-2 Heavy)
- Mobile Home Park (MHP)
- Public (PS)
- Planned unit development zoning district (PUD)
- Residential, single family medium density, low density, family estates, duplex and duplex manufactured home (R-1, R1-A, R-1AA, R-2 and R-2T)
- Residential, multiple (R-3)
- Residential Neighborhood Urban (RNU)

Each zoning district has its own set criteria and established permitted uses and densities which shape the way sewer flows are generated. Figure 1.3 depicts the zoning districts of the City.

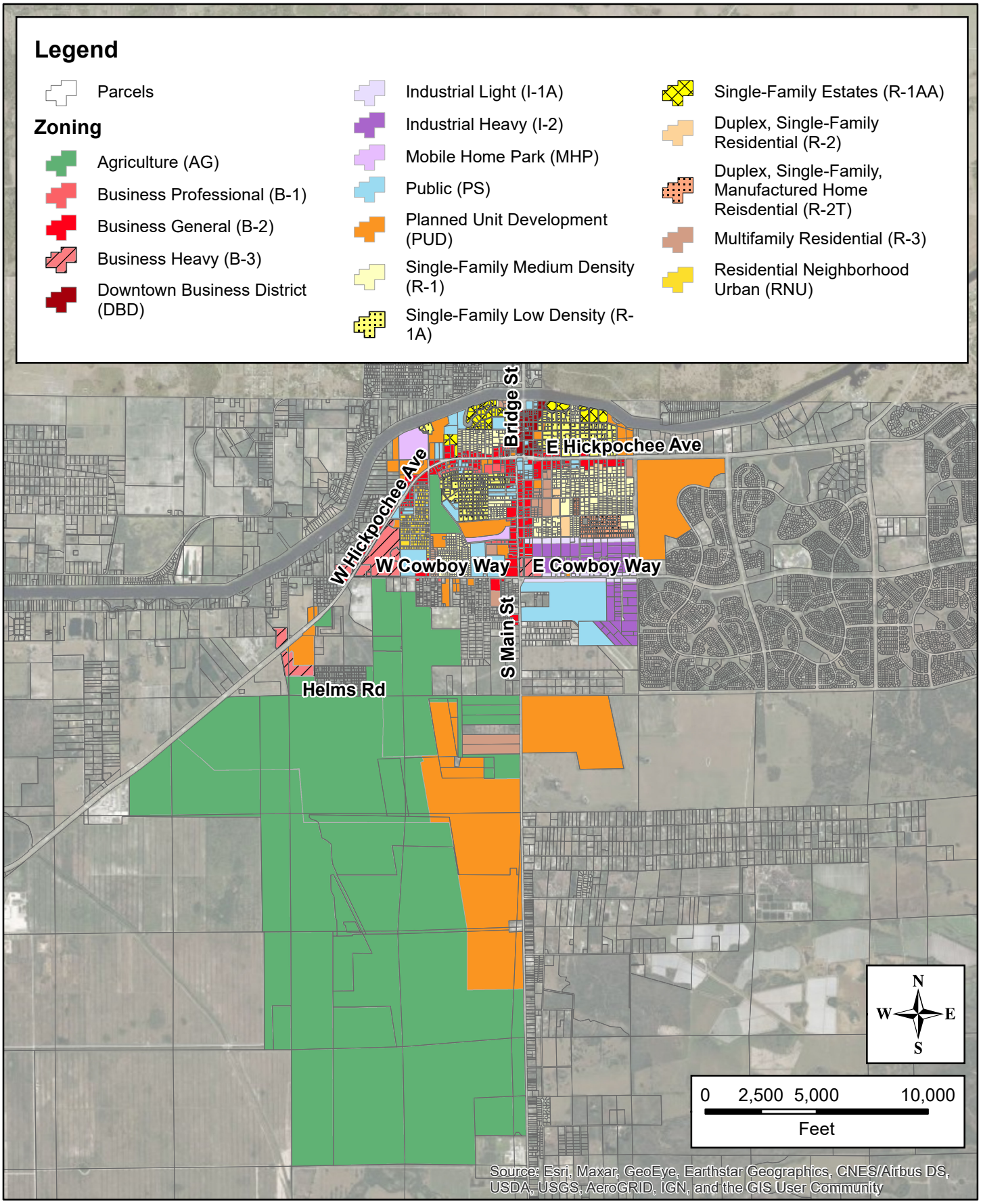


Figure 1.3: Zoning

LaBelle, FL

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

FOUR WATERS ENGINEERING

Revision Date: 9/2/2022 Path: P:\22-1012 LaBelle Sewer Master Plan\16.0 GIS\Map Document\Report Figure Maps\Figure 1.3 - Zoning.mxd

1.4 EXISTING SEWER SYSTEM SERVICE AREA

For the purposes of the Sewer Master Plan the sewer system service area represents the entire City limits, with a central wastewater treatment plant (WWTP), gravity collection mains, manholes, lift stations and their respective force mains. As cataloged from historical City information, Table 1.1 provides an overview of the sewer system service components and Figure 1.4 depicts the physical extents of the sewer system service area which is divided into corresponding lift station basins or area served by a particular lift station and the gravity mains flowing to it. A few of the lift stations pump directly to the gravity sewer system or other lift stations for repumping, however numerous lift stations are manifolded and utilize a common forcemain system.

Table 1.1 Sewer System Component Overview

Wastewater Treatment Plant	Lift Stations*	Manholes	Forcemain Length (Miles)	Forcemain Size Range (Inch)	Gravity Main Length (Miles)	Gravity Main Size Range (Inch)
1	25	385	14	2 to 12	23	4 to 15

**Three lift stations are privately maintained (Aqua Isles, Oak Grove, LaBelle Woods)*

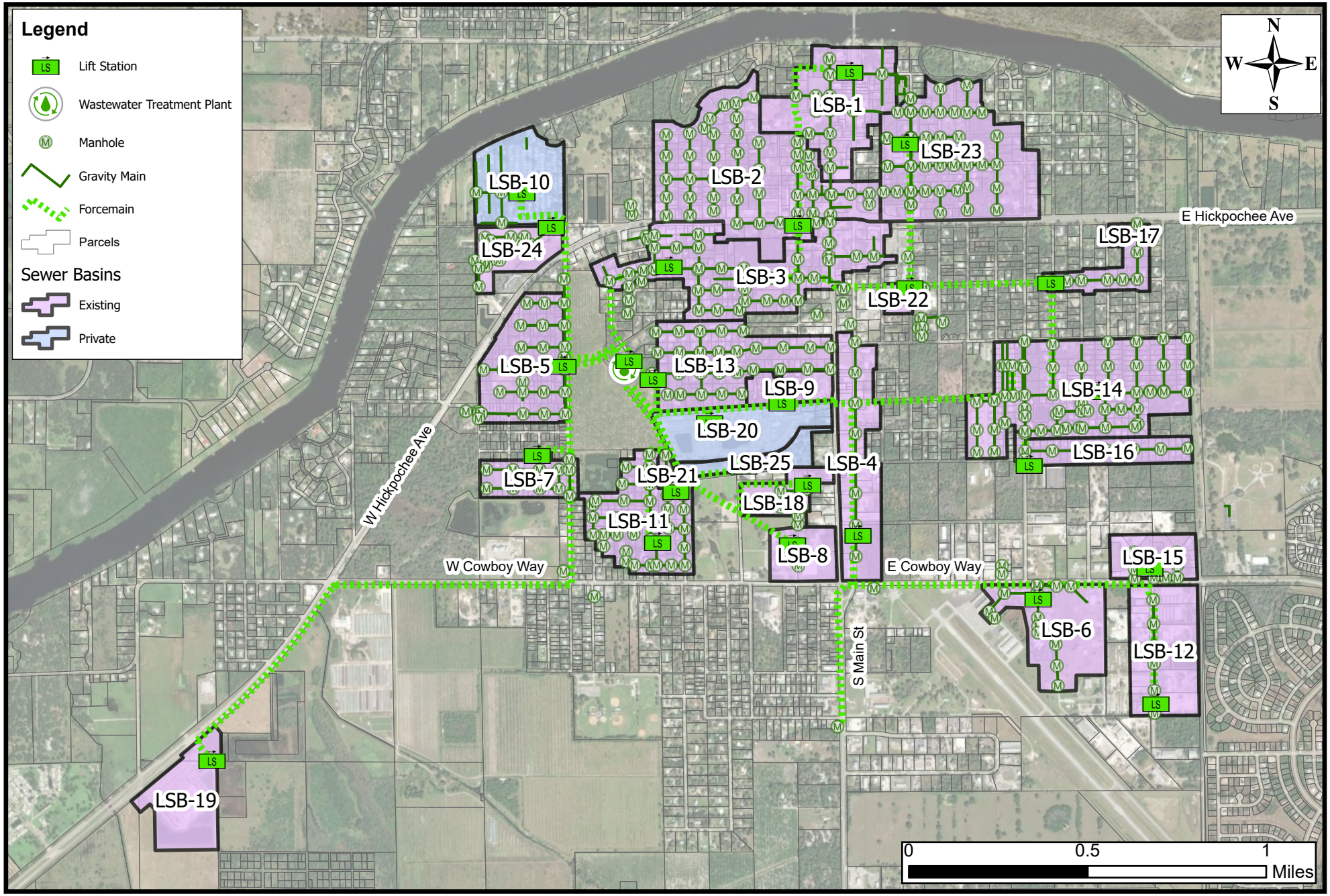


Figure 1.4: Lift Station Basins
Sewer System Service Area

LaBelle, FL

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

FOUR WATERS ENGINEERING

File Name: Figure 1 Path: P:\22-1012 LaBelle Sewer Master Plan\16.0 GIS\Map Document\Report Figure Maps\Figure 1.4 - Lift Station Basins\Figure 1.aprx Date Saved: 8/1/2023 11:21 AM

2.0 – EXISTING CONDITIONS

2.1 SEWER SYSTEM COMPONENTS

2.1.1 WASTEWATER TREATMENT PLANT

The City owns and operates the LaBelle Wastewater Treatment Plant (WWTP), which is located at 370 Citrus Street. The WWTP began processing wastewater under its current system in 1999 with modifications in 2001. The WWTP receives domestic wastewater from the local community. This wastewater is treated within permitted water quality standards and the effluent is disposed of with a rapid infiltration basin (RIB) land application system. The WWTP operates under the Florida Department of Environmental Protection (FDEP) Permit Number FLA014283 (issued June 2019). The effluent flow from the WWTP has a permitted capacity of 0.75 million gallons per day (MGD) Annual Average Daily Flow (AADF). The facility generally consists of the following:

- Pretreatment
  - Overflow Box
  - Static Fine Screen
  - Grit Removal
- Influent and Headworks
  - A master pump station consisting of three submersible pumps
- Sequential Batch Reactor (SBR) System
  - Three SBR basins (Single sludge, activated sludge process)
  - Five blowers
  - Waste sludge pump
- Disinfection
  - One chlorine contact chamber
  - Sodium Hypochlorite feed
- Solids Handling
  - Two aerobic digestors with forced air from the blowers through a diffuser system
  - Belt filter press and conveyor system
  - Disposal at local Landfill
- Disposal
  - Effluent transfer pump station to RIB system
  - Public access reuse system (not utilized)
    - Two vertical turbine pumps
    - Discharge to the deep injection well at the reverse osmosis treatment plant (ROWTP)

The WWTP discharges its effluent through two outfalls: a RIB land application discharge and deep injection well at the ROWTP. Table 2.1 provides information on the permit parameters.

LaBelle WWTP



Table 2.1 Sewer System Permit – WWTP

Sewer System	FDEP Permit No.	Discharge Method	Effective Date	Expiration Date	Permit Parameters	Average Parameter Limits
City of LaBelle WWTP	FLA014283	1. Land Application (99-acre off-site rapid rate land application sytem)	11/3/2019	11/2/2024	Flow	0.75 MGD (Annual)
					BOD_5	30 mg/L (Max Monthly)
					TSS	30 mg/L (Max Monthly)
					pH	6.0 - 8.5
		2. Discharge to the deep injection well at the reverse osmosis treatment plant (ROWTP)			Fecal Coliform	200/100 mL (Max Monthly)
					Chlorine	0.5 mg/L (Min)
					Nitrogen	12 mg/L (Min)

2.1.2 FORCEMAIN AND LIFT STATION SYSTEMS

Forcemains

The City sewer system includes 60,150 LF of forcemain which varies in size from 4- to 12-inch piping, with an 8-inch forcemain discharging from the WWTP to the RIB system. LS 16 and LS 21 are the only two of the 25 lift station that discharge to a manhole, all other 22 lift stations are manifold.

The forcemains are constructed of polyvinyl chloride (PVC), cast iron and ductile iron, however, the exact length of each material is unknown.

Lift Stations

As noted in Section 1.4, there are 25 lift stations in the City's sewer system, however only 22 were evaluated as part of this study, as the other three were determined to be privately owned. Table 2.2 below provides a general overview of each lift station, then the subsequent sections provide a more specific table and site picture with information on the lift stations including location, station type, wet well size and depth, piping material, pump information and discharge location. Each lift station table includes information representing the original design rating (if known) and the results of field conducted draw down testing.

Additionally, Figure 2.1 is provided below to show an overall flow schematic of the City's collection and pumping system that details the lift station routes to the WWTP.

Table 2.2 – Lift Station Summary

Lift Station Number	Location	Pump Type	Pump Discharge Size (In)	Pump Manufacturer	Motor HP	No. Pumps	Model
LS-1	6 Park Ave.	Submersible	4"/6"	Flygt	10	2	CP3127
LS-2	141 W. Hickpochee Ave.	Submersible	6"	Flygt	10	2	CP3127
LS-3	500 2nd Ave.	Submersible	10"	Flygt	30	2	CP3201
LS-4	Bridge St. (Ford)	Submersible	4"/6"	Flygt	10	2	**
LS-5	MLK / Suwanee St.	Submersible	4"	Flygt	4.7	2	CP3127
LS-6	Pratt Blvd.	Submersible	4"	Aurora	15	2	S4HRC
LS-7	Collier Ave. / New York St.	Submersible	4"	Flygt	4.0	2	CP3102
LS-8	LaBelle Elementary	Submersible	3"	**	5	2	**
LS-9	Kathryn St.	Submersible	4"	**	15	2	**
LS-10*	Aqua Isles	Submersible	**	**	**	2	**
LS-11	Maddox St.	Submersible	4"	Flygt	15	2	CP3140
LS-12	Commerce Dr.	Submersible	6"	Flygt	23	2	CP3152
LS-13	Citrus St. Next to WWTP	Submersible	6"/4"	Flygt	7.5	2	CP3127
LS-14	Seminole Ave.	Submersible	6"/4"	Flygt	30	2	CP3170
LS-15	961 Cowboy Cr.	Submersible	4"	Flygt	23	2	Unknown
LS-16	Elm St.	Submersible	4"	Flygt	3	2	CP3085
LS-17	Cypress / Broward	Submersible	6"	Flygt	20	2	CP3152
LS-18	Jacee Lyons Dr.	Submersible	4"	Flygt	3	2	CP3085
LS-19	Wal-Mart	Submersible	4"	Flygt	6.5	2	NP3102
LS-20*	Oak Grove	Submersible	**	**	**	2	**
LS-21	Citrus St.	Submersible	2"	Keen	2	2	KG2
LS-22	City Village	Submersible	4"/6"	Sulzer	3.75	2	XDP100C-CB1
LS-23	Washington / Missouri	Submersible	4"	Sulzer	12.1	2	XDP100E CB1
LS-24	Bell Arbor	Submersible	6"	Sulzer	16.8	2	XFP 81 E VX
LS-25	LaBelle Woods RV Resort	Submersible	**	**	**	2	**

**Private*

***Unknown*

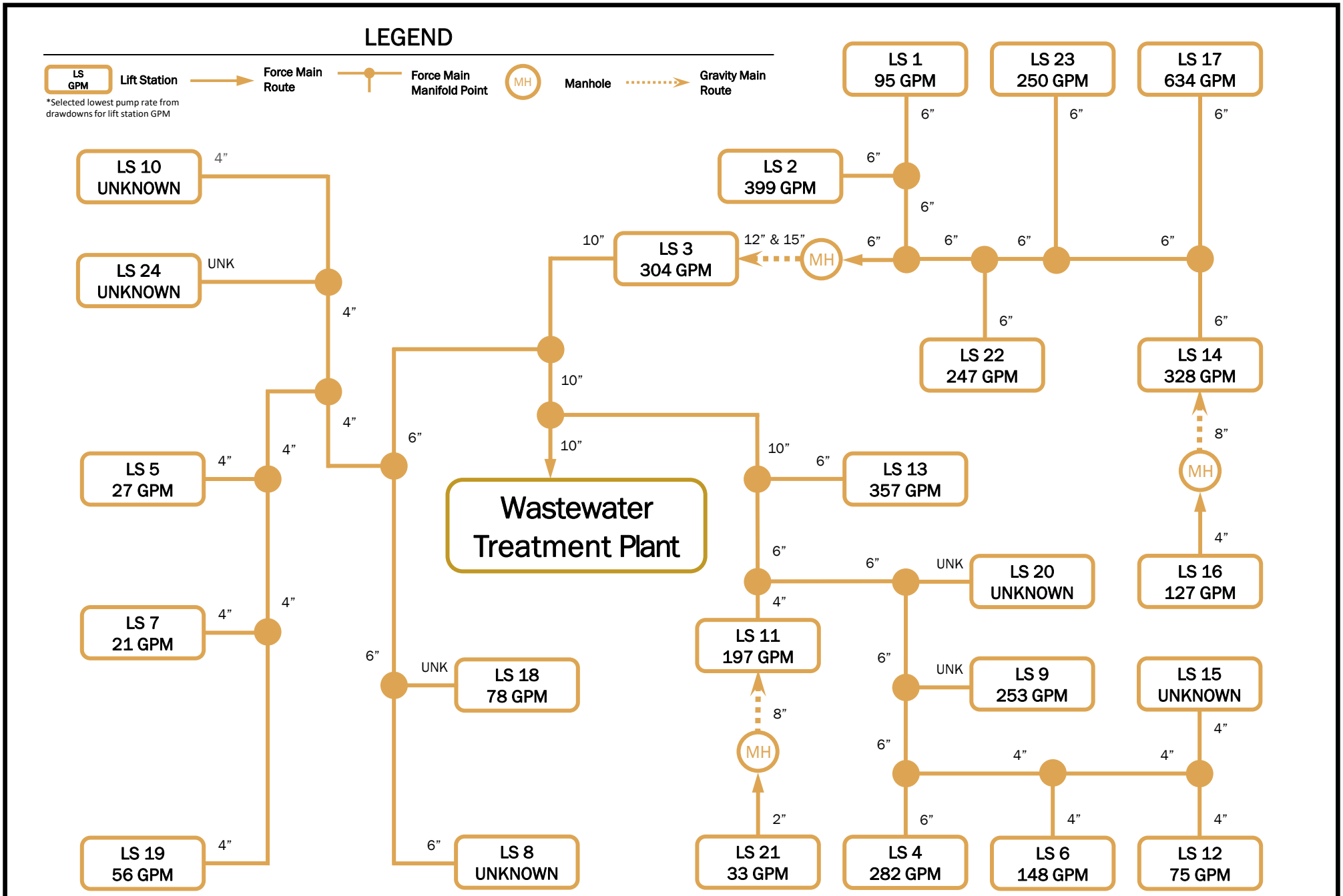


Figure 2.1: Wastewater Collection System Schematic

City of LaBelle, Florida

FOUR WATERS ENGINEERING

Lift Station No. 1



LS-1			
Location:	Bridge Street (Foot of Bridge) – 6 Park Ave.	Type:	Duplex Submersible

Wet Well	
Size:	6-feet
Depth:	14-feet
Material/ Coating:	Concrete / Coal Tar
Generator	No

Pump	
Design Rating:	Not Available
Draw Down Rating:	P1 113 gpm / P2 95 gpm
Discharge Pressure:	40 psi
Manufacturer / Model:	Flygt / CP3127
Horsepower:	10 Hp

Discharge	
Piping Size:	4-/6-inch
Piping Material:	Ductile Iron
Location:	MH 42 at the Corner of 2nd Avenue and Howe Avenue

Lift Station No. 2



LS-2			
Location:	80/Hall Street – 141 W. Hickpochee Ave.	Type:	Duplex Submersible

Wet Well		Pump		Discharge	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	6-inch
Depth:	18-feet	Draw Down Rating:	P1 399 gpm / P2 488 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete/Coal Tar Epoxy	Discharge Pressure:	3 psi	Location:	MH 42 at the Corner of 2nd Avenue and Howe Avenue
Generator	No	Manufacturer / Model:	Flygt / CP3127		
		Horsepower:	10 Hp		

Lift Station No. 3



LS-3					
Location:	2nd Ave (Behind City Hall) – 500 2nd Ave.	Type:	Duplex Submersible		
Wet Well		**Pump**		**Discharge**	
Size:	10-feet	Design Rating:	Not Available	Piping Size:	10-inch
Depth:	20-feet	Draw Down Rating:	P1 793 gpm / P2 304 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Flygt / CP3201		
		Horsepower:	30 Hp		

Lift Station No. 4



LS-4					
Location:	Bridge St. (Ford) – 901 S Bridge St		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	4-/6-inch
Depth:	18-feet	Draw Down Rating:	P1 331 gpm / P2 282 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	15 psi	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Flygt / Unknown		
		Horsepower:	10 Hp		

Lift Station No. 5



LS-5					
Location:	MLK/Suwanee St		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	4-inch
Depth:	16-feet	Draw Down Rating:	P1 27 gpm / P2 52 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Flygt / CP3127		
		Horsepower:	4.7 Hp		

Lift Station No. 6



LS-6					
Location:	Pratt Blvd		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	4-inch
Depth:	16-feet	Draw Down Rating:	P1 148 gpm / P2 148 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / None	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Aurora / S4HRC		
		Horsepower:	15 Hp		

Lift Station No. 7



LS-7					
Location:	Collier Ave / New York St.		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	4-inch
Depth:	17-feet	Draw Down Rating:	P1 74 gpm / P2 21 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Brick/ Concrete / Coal Tar Epoxy	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Flygt / CP3102		
		Horsepower:	4 Hp		

Lift Station No. 8



LS-8					
Location:	LaBelle Elementary		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	5-feet	Design Rating:	Not Available	Piping Size:	3-inch
Depth:	8-feet	Draw Down Rating:	Could not complete	Piping Material:	PVC
Material/ Coating:	Concrete / None	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Unknown		
		Horsepower:	5 Hp		

Lift Station No. 9



LS-9					
Location:	Kathryn St.		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	4-inch
Depth:	13-feet	Draw Down Rating:	P1 253 gpm / P2 587 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Unknown		
		Horsepower:	Hp		

Lift Station No. 10



LS-10					
Location:	Aqua Isles – 900 Aqua Isles Blvd		Type:	-	
Wet Well		**Pump**		**Discharge**	
Size:	-	Design Rating:	-	Piping Size:	-
Depth:	-	Draw Down Rating:	-	Piping Material:	-
Material/ Coating:	-	Discharge Pressure:	-	Location:	-
Generator	-	Manufacturer / Model:	-		
		Horsepower:	-		

This lift station was not evaluated as a part of the study.

Lift Station No. 11



LS-11					
Location:	Maddox St. – 901 Maddox St.		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	Not Available	Piping Size:	4-inch
Depth:	18.5-feet	Draw Down Rating:	P1 197 gpm / P2 197 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Flygt / CP3140		
		Horsepower:	15 Hp		

Lift Station No. 12



LS-12					
Location:	Commerce Dr. – 1225 Commerce Dr.		Type:	Duplex Submersible	
Wet Well			**Pump**		**Discharge**
Size:	8-feet		Design Rating:	Not Available	Piping Size: 6-inch
Depth:	16-feet		Draw Down Rating:	P1 138 gpm / P2 75 gpm	Piping Material: Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy		Discharge Pressure:	35 psi	Location: WWTP Headworks
Generator	No		Manufacturer / Model:	Flygt / CP3152	
			Horsepower:	23 Hp	

Lift Station No. 13



LS-13					
Location:	Citrus St. Next to WWTP – 370 Citrus St.	Type:	Duplex Submersible		
Wet Well		**Pump**		**Discharge**	
Size:	8-feet	Design Rating:	Not Available	Piping Size:	4-/6-inch
Depth:	19-feet	Draw Down Rating:	P1 357 gpm / P2 357 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	5 psi	Location:	WWTP Headworks
Generator	Powered by WWTP	Manufacturer / Model:	Flygt / CP3127		
		Horsepower:	7.5 Hp		

Lift Station No. 14



LS-14							
Location:	Seminole Ave. – 751 E. Seminole Ave.			Type:	Duplex Submersible		
Wet Well			Pump			Discharge	
Size:	6-feet		Design Rating:	Not Available		Piping Size:	4-/6-inch
Depth:	18-feet		Draw Down Rating:	P1 328 gpm / P2 434 gpm		Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy		Discharge Pressure:	35 psi		Location:	MH 42 at the Corner of 2nd Avenue and Howe Avenue
Generator	No		Manufacturer / Model:	Flygt / CP3170			
			Horsepower:	30 Hp			

Lift Station No. 15



LS-15							
Location:	Cowboy Cr. – 961 Cowboy Cr. (Lisa St. John)			Type:	Duplex Submersible		
Wet Well			**Pump**			**Discharge**	
Size:	7-foot		Design Rating:	Not Available		Piping Size:	4-inch
Depth:	18.5-feet		Draw Down Rating:	P1 0 gpm / P2 48 gpm		Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epxoy		Discharge Pressure:	60 psi		Location:	WWTP Headworks
Generator	No		Manufacturer / Model:	Flygt / Unknown			
			Horsepower:	23 Hp			

Lift Station No. 16



LS-16							
Location:	Elm St. - 691 Elm St.			Type:	Duplex Submersible		
Wet Well			Pump			Discharge	
Size:	5-feet		Design Rating:	Not Available		Piping Size:	4-inch
Depth:	21-feet		Draw Down Rating:	P1 127 gpm / P2 152 gpm		Piping Material:	Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy		Discharge Pressure:	2 psi		Location:	MH 42 at the Corner of 2nd Avenue and Howe Avenue
Generator	No		Manufacturer / Model:	Flygt / CP3085			
			Horsepower:	3 Hp			

Lift Station No. 17



LS-17					
Location:	Cypress/Broward – 591 Broward Ave.		Type:	Duplex Submersible	
Wet Well			**Pump**		**Discharge**
Size:	8-feet		Design Rating:	Not Available	Piping Size: 6-inch
Depth:	19-feet		Draw Down Rating:	P1 637 gpm / P2 Unknown	Piping Material: Ductile Iron
Material/ Coating:	Concrete / Coal Tar Epoxy		Discharge Pressure:	Not Available	Location: MH 42 at the Corner of 2nd Avenue and Howe Avenue
Generator	No		Manufacturer / Model:	Flygt / CP3152	
			Horsepower:	20 Hp	

Lift Station No. 18



LS-18					
Location:	Jacee Lyons Dr. – 115 Jacee Lyons Dr.	Type:	Duplex Submersible		
Wet Well		**Pump**		**Discharge**	
Size:	6-foot	Design Rating:	Not Available	Piping Size:	4-inch
Depth:	13.5	Draw Down Rating:	P1 78 gpm / P2 78 gpm	Piping Material:	PVC / Ductile Iron
Material/ Coating:	Concrete / None	Discharge Pressure:	Not Available	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Flygt/ CP3085		
		Horsepower:	3 Hp		

Lift Station No. 19



LS-19							
Location:	Wal – Mart 1951 W. Hickpochee Ave.			Type:	Duplex Submersible		
Wet Well				Pump		Discharge	
Size:	6-feet			Design Rating:	Not Available	Piping Size:	4-inch
Depth:	18’			Draw Down Rating:	P1 56 gpm / P2 127 gpm	Piping Material:	Ductile Iron
Material/ Coating:	Concrete / None			Discharge Pressure:	30 psi	Location:	WWTP Headworks
Generator	No			Manufacturer / Model:	Flygt / NP3102		
				Horsepower:	6.5 Hp		

Lift Station No. 20



LS-20			
Location:	Oak Grove – 520 S. Main	Type:	-

Wet Well		Pump		Discharge	
Size:	-	Design Rating:	-	Piping Size:	-
Depth:	-	Draw Down Rating:	-	Piping Material:	-
Material / Coating:	-	Discharge Pressure:	-	Location:	-
Generator	-	Manufacturer / Model:	-		
		Horsepower:	-		

This lift station was not evaluated as a part of the study.

Lift Station No. 21



LS-21					
Location:	Citrus St.		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	4-feet	Design Rating:	20 gpm @ 8' TDH	Piping Size:	2-inch
Depth:	11-feet	Draw Down Rating:	P1 96 gpm / P2 33 gpm	Piping Material:	PVC
Material/ Coating:	Fiberglass / None	Discharge Pressure:	11 psi	Location:	MH 305 at the Corner of Citrus Street and Pamona Avenue
Generator	No	Manufacturer / Model:	Keen / KG2		
		Horsepower:	2 Hp		

Lift Station No. 22



LS-22					
Location:	City Village		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	112 gpm @ 15' TDH	Piping Size:	4-/6-inch
Depth:	12-feet	Draw Down Rating:	P1 282 gpm / P2 247 gpm	Piping Material:	HDPE
Material/ Coating:	Concrete / None	Discharge Pressure:	1 psi	Location:	MH 42 at the Corner of 2nd Avenue and Howe Avenue
Generator	No	Manufacturer / Model:	Sulzer / XDP100C-CB1		
		Horsepower:	3.75 Hp		

Lift Station No. 23



LS-23					
Location:	Washington / Missouri		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	6-feet	Design Rating:	130 gpm @ 65' TDH	Piping Size:	4-inch
Depth:	26-feet	Draw Down Rating:	P1 462 gpm / P2 250 gpm	Piping Material:	HDPE
Material/ Coating:	Concrete / IET Polymorphic Resin	Discharge Pressure:	15 psi	Location:	MH 42 at the Corner of 2nd Avenue and Howe Avenue
Generator	Yes	Manufacturer / Model:	Sulzer / XFP 100E-CB1		
		Horsepower:	12.1 Hp		

Lift Station No. 24



LS-24					
Location:	Bell Arbor		Type:	Duplex Submersible	
Wet Well		**Pump**		**Discharge**	
Size:	8	Design Rating:	135 gpm @ 90' TDH	Piping Size:	6-inch
Depth:	23	Draw Down Rating:	Could not complete	Piping Material:	HPDE
Material / Coating:	Concrete / Coal Tar Epoxy	Discharge Pressure:	23 psi	Location:	WWTP Headworks
Generator	No	Manufacturer / Model:	Sulzer / XFP 81 E VX		
		Horsepower:	16.8 Hp		

Lift Station No. 25

LS-25					
Location:	LaBelle Woods RV Resort		Type:	-	
Wet Well			**Pump**		**Discharge**
Size:	-		Design Rating:	-	Piping Size: -
Depth:	-		Draw Down Rating:	-	Piping Material: -
Material / Coating:	-		Discharge Pressure:	-	Location: -
Generator	-		Manufacturer / Model:	-	
			Horsepower:	-	

This lift station was not evaluated as a part of the study.

2.1.3 GRAVITY SEWER SYSTEMS

The City pumping and collection system, as noted in Section 1.4, utilizes approximately 11 miles of forcemain and has been designed with routes of gravity sewer mains that total over 21 miles in length with approximately 391 manholes.

The gravity sewer mains range in size from 4- to 15-inch. The gravity sewer mains are constructed of PVC, clay, cast iron and ductile iron, however, the exact length of each material is unknown.

The manholes in the system are constructed of precast concrete or in older sewer basins of the system some of the manholes may be brick.

2.1.4 ON-SITE WASTEWATER DISPOSAL SYSTEMS

Similar to other municipalities within the State of Florida, the City of Labelle has not been able to provide sewer to all developed areas within the service area. There are several reasons for this: the cost of infrastructure to serve an area may have exceeded the benefits, both economic and environmental; the low density or sparseness of construction did not make centralized sewer systems feasible; or areas were developed well before an organized utility department was established. The result of this, and commonly the only choice remaining for homeowners and developers, is the use of on-site septic systems.

It is estimated that approximately one forth of the City residents utilize septic tanks. Based on an evaluation of the existing sewer collection systems in the available GIS data and a comparison with established residential developments in the City there are approximately 300 septic systems currently in use.

The City was recently awarded over $21 million in grant funds to convert any remaining septic areas to sewer and projects will be developed in subsequent sections of the Sewer Master Plan.

2.1.5 MAJOR SEWER TRANSMISSION SYSTEMS

The primary goal of the Sewer Master Plan is to evaluate the condition and needs of the existing sewer systems and plan for future growth. A comprehensive assessment of all components of the sewer systems is not necessary to achieve these goals in an effective manner. As such, 4Waters collaborated with City staff to define the components of the sewer systems which represent the major backbone of the sewer collection and transmission systems including gravity sewer mains, lift stations, forcemains, and the WWTP. In total, these components of the systems have been termed the Major Transmission Systems (MTS). All the components of the MTS are public and are maintained by the City.

The limits and components of the MTS are described in Table 2.3. Additionally, Figure 2.2 depicts each of the 22 MTS lift station basins (also showing the 3 private lift stations for reference).

Table 2.3 Entire and Major Sewer Transmission System Comparison

Entire System Pump Stations	MTS Pump Stations	Entire System Manholes	MTS Manholes	Entire System Forcemain Length (Feet)	MTS Forcemain Length (Feet)	Entire System Forcemain Size Range (Inch)	MTS System Forcemain Size Range (Inch)	Entire System Gravity Main Length (Feet)	MTS Gravity Main Length (Feet)	Entire System Gravity Main Size Range (Inch)	MTS System Gravity Main Size Range (Inch)
25	22	391	20	60,539	55,406	2 to 12	2 to 12	109,361	4,636	4 to 15	8 to 15

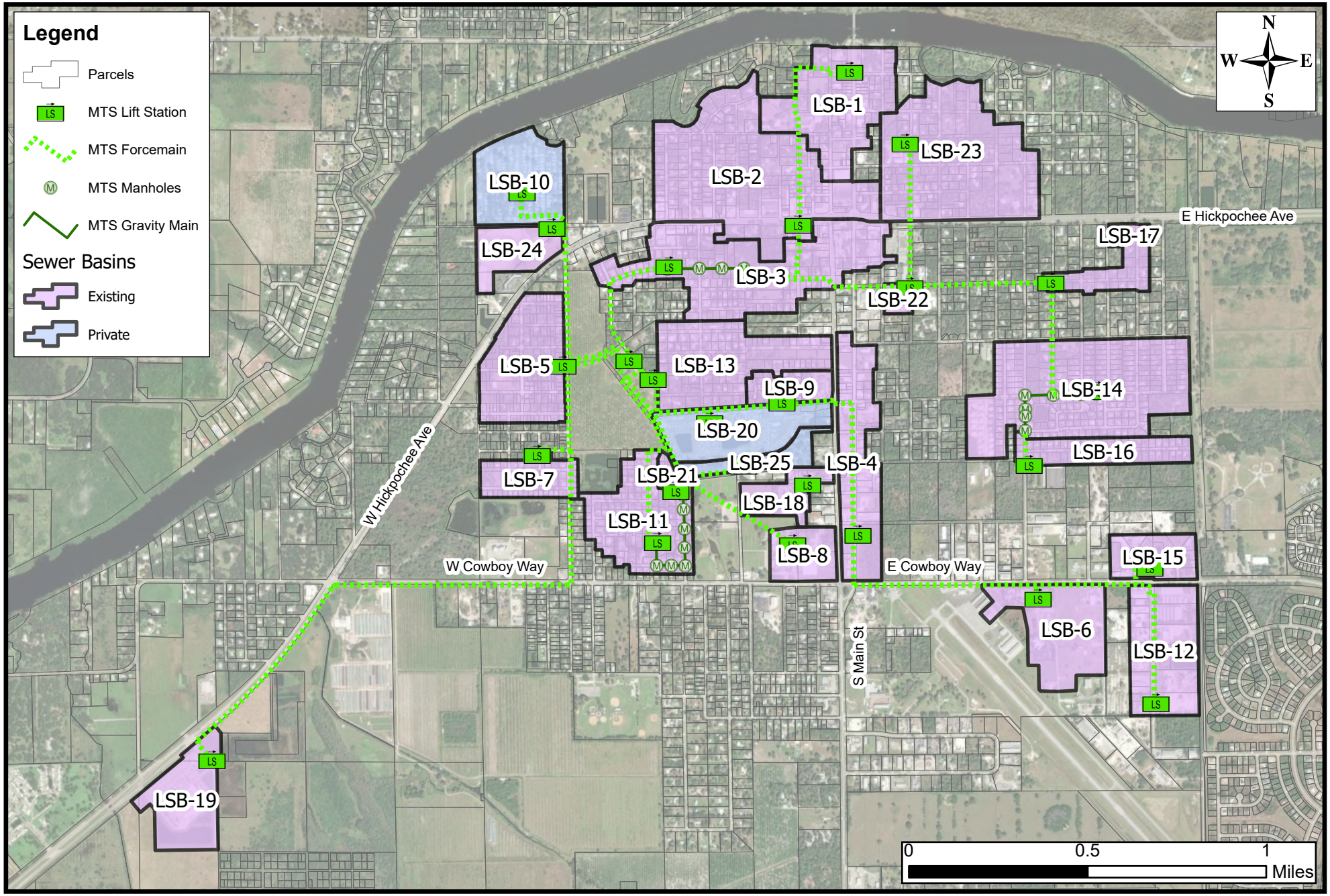


Figure 2.2 Major Transmission System

LaBelle, FL

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

FOUR WATERS ENGINEERING

File Name: Figure 1 Path: P:\22-1012 LaBelle Sewer Master Plan\16.0 GIS\Map Document\Report Figure Maps\Figure 1.4 - Lift Station Basins\Figure 1.aprx Date Saved: 8/1/2023 11:21 AM

2.2 POPULATION AND SEWER GENERATION RATES

2.2.1 BASE POPULATION FOR SEWER SYSTEM

Development of a base or existing population is critical to the Sewer Master Plan, as it is used for the determination of a per capita sewer demand, which forms the basis for future sewer projections. As previously mentioned, a lift station basin represents the extents of an area served by a specific lift station and the corresponding gravity mains flowing to it. 4Waters examined existing historical data and available GIS data including sewer lift station basins, parcels, zoning/land use type, aerial imagery and water meter locations to determine an overall number of house holds within a specified lift station basin. Table 2.4 below shows a breakdown of the number of house holds and population (single family or multifamily) for each basin and if the lift station basin received sewer flows from a commercial or institutional type contributor.

Table 2.4: Households and Population (Single/Multi Family) and Commercial per Basin

Lift Station Number	Single Family (# of House Holds)	Single Family Population (People)*	Multi Family (# of House Holds)	Multi Family Population (People)**	Commercial / Institutional / Industrial Component
LS-1	0	0	0	0	Yes
LS-2	93	252	0	0	Yes
LS-3	81	220	0	0	Yes
LS-4	3	8	0	0	Yes
LS-5	42	114	0	0	No
LS-6	0	0	0	0	Yes
LS-7	40	108	0	0	No
LS-8	0	0	0	0	Yes
LS-9	21	57	2	4	Yes
LS-10	0	0	175	349	No
LS-11	128	347	0	0	No
LS-12	0	0	0	0	Yes
LS-13	70	190	0	0	Yes
LS-14	179	485	21	42	No
LS-15	0	0	0	0	Yes
LS-16	43	117	0	0	No
LS-17	20	54	0	0	Yes
LS-18	96	260	0	0	Yes
LS-19	0	0	0	0	Yes
LS-20	0	0	183	366	Yes
LS-21	9	24	0	0	No
LS-22	15	41	0	0	No
LS-23	0	0	25	50	Yes
LS-24	0	0	0	0	Yes
Total	**840**	**2,276**	**406**	**811**	-
Total People	**3,087**				-

**Utilizes 2.71 people per single family house hold as indicated in the 2019 Comprehensive Plan*

***Utilizes 2.0 people per multi family house hold based on research provided by the US Census*

2.2.2 SEWER GENERATION RATES

The first step in this analysis is to develop an understanding of the historic sewer generation rates, and specifically the domestic sewer generation rates. The monthly Average Daily Flow (ADF) was calculated by averaging the total monthly sewer generation flow for the City and dividing by the number of days in each month.

The distinction and determination of significant or large industrial, institutional and commercial uses was made for the City system so that when the system per capita rate was calculated it would more accurately represent the flow associated with each permanent resident and the corresponding

commercial and institutional sewer generation rates typical of neighborhood support facilities and the character of the areas. Therefore, when the per capita rate was used in conjunction with the projected populations for the growth areas, the projected sewer generation rates reflect only the commercial and institutional flows associated with residential developments.

The flows associated with these large uses was based on billing data provide from the City. Large commercial, institutional, and industrial accounts were added directly as loads into the existing conditions model, so as to properly approximate the sewer loadings in the systems. Any projected large commercial or industrial sewer loadings were added in a similar manner to the future system hydraulic sewer model.

The domestic flow for the City was derived by removing large commercial, institutional and industrial flows from the totalized flows measured at the WWTP. The monthly ADF sewer generation rates for the various sources discharging to the City WWTP for 12 month period from January 2022 to December 2022 are presented in Table 2.5.

Table 2.5: WWTP Sewer Generation Rates

Date	WWTP Monthly ADF (MGD)
Jan-22	0.41
Feb-22	0.41
Mar-22	0.41
Apr-22	0.40
May-22	0.38
Jun-22	0.44
Jul-22	0.43
Aug-22	0.47
Sep-22	0.60
Oct-22	0.56
Nov-22	0.50
Dec-22	0.45

Numbers based on Influent DMR Records

2.2.3 SEWER PER CAPITA GENERATION RATES

Development of a per capita value is critical to the Sewer Master Plan Update, as it is used for the determination of the projected future sewer generation rates through 2042. A per capita sewer generation rate used for flow projection determination should not be overly influenced by I&I as newly constructed sewer systems should not be susceptible to significant amounts of I&I, therefore, it is desirable to use sewer generation data from a predominantly dry period which still incorporates some background I&I. Rainfall data from NOAA rain gauges was used to determine these dry periods. The per capita sewer generation rate for the City was calculated by dividing the adjusted domestic monthly ADF during dry periods, by the base sewer population as described in Section 2.2.1. The sewer generation per capita rate for the City is provided in Table 2.6.

Table 2.6: Sewer Generation Per Capita Rates

Per Capita Rate (gpc/d)
137

The 137 gallons per capita per day (gpcd) is in line with the adopted level of service in the City's 2019 Comprehensive Plan.

One of the primary tasks of the Sewer Master Plan is the general evaluation of the existing facilities within the sewer transmission system. These evaluations included field inspections and staff interviews to understand completed CIP projects and system improvements in addition to any concerns or needs. A summary of the field evaluations and status of the facilities is detailed in Sections 3.1, 3.2 and 3.3.

4Waters utilized assessment forms to compile the field data gathered for the various facility components and documented conditions with photographs. The site assessment documentation is provided in Appendix B and C.

Charles Cobb with Chatham Engineering, Inc., a professional electrical engineer, accompanied 4Waters staff on the field inspections and provided the electrical and controls system assessments. Charles Cobb regularly provides electrical engineering design and evaluation services and is familiar with City's standards, staff and facilities. Deficiencies identified by Charles Cobb are included in the summaries in Section 3.3, and the full electrical assessment reports and recommendations are provided in Appendix B and C.

3.1 COMPONENT ASSESSMENT EVALUATION SYSTEM

Probability of Failure Scoring

Based on the visual inspections of the facilities and the information gathered from City management, engineering, and operations staff, each sewer component was evaluated. A numerical ranking system with a scale of 1 to 5 was used to rate the civil, mechanical, and electrical condition of the facilities. This ranking is representative of the Probability of Failure for each component where on the scale, a 1 is indicative of a facility in apparent excellent operational condition with no visible mechanical or electrical issues or code violations. A score of 5 indicates significant civil, mechanical, or electrical problems at a the facility which impedes operation or efficiency of the system and which will likely cause complete and imminent failure of the system. A facility with a score of 4 or 5 would be recommended for immediate attention.

Figure 3.1 Component Assessment Scoring



The focus of the assessments is the ability of a facility to meet its operational requirements and to determine any necessary capital improvements and a schedule for upgrade. Hydraulic analysis and evaluation of the sewer facilities have been conducted and are described in Sections 5.0 -- Sewer System Hydraulic Model. The combination of the field and hydraulic assessments has been utilized to prioritize projects within the sewer system and is presented in Section 6.0 Sewer Master Plan Implementation of the report.

3.1.1 ROUTINE PREVENTATIVE MAINTENANCE

Routine preventative maintenance is a vital element of achieving efficient operations and maintaining the assets of a utility system. The goal of preventative maintenance is to preserve and enhance equipment reliability by replacing worn components in a just-in-time manner to extend the life of the equipment and preclude failure. Preventive maintenance activities include equipment checks, partial or complete overhauls at specified periods, oil changes, lubrication, etc., and possibly altering conditions at a facility to enhance system efficiency. Additionally, during routine maintenance and inspections, staff can record equipment deterioration levels and appropriately schedule work orders to replace or repair worn parts prior to system failure.

Long-term benefits of preventive maintenance include:

- Improved system reliability.
- Decreased cost of replacement.
- Decreased system downtime.
- Better spares inventory management.

Long-term effects and cost comparisons usually favor preventive maintenance over performing maintenance actions only when the system fails. The City has routine preventative maintenance programs implemented for the sewer systems and is currently working to enhance these capabilities through the use of contract operations provided by Woodard & Curran and by creating an asset management system to better utilize available information and assess the risk of component failure and necessary preventative measures.

Routine preventative maintenance was not a primary focus of the facility assessments although the general condition is reported in the summary reports in Appendix B and C. Unless a lack of routine preventative maintenance was evident by the poor condition of a facility or component and warranted inclusion on a CIP, it was not included in the assessment lists in Sections 3.1 and 3.2.

3.2 SEWER SYSTEM COMPONENTS

The following sections summarize the assessments of the physical condition and capacity of the existing facilities evaluated in this study. A general physical condition assessment of the WWTP was additionally completed and capacity and treatment levels were examined.

Section 3.4 addresses I&I of the existing gravity sewer systems and recommended rehabilitation efforts. The SewerGEMs hydraulic model of the sewer system as described in Section 5.0 provides further information on the hydraulic condition of the system and the capability of the sewer systems to meet the flowrate requirements. Recommendations for rehabilitation capital improvements encompassing all of the noted physical and hydraulic deficiencies are provided in Section 6.0 Sewer Master Plan Implementation.

3.2.1 WASTEWATER TREATMENT PLANT

The City's existing WWTP was built in the late 1990's and is a 0.75 MGD Aqua-Aerobic System, Inc. sequencing batch reactor (SBR) facility which discharges to a rapid infiltration basin (RIB) system. Currently, the WWTP provides basic screening prior to the SBRs and chlorination of the effluent prior to pumping to the RIBs. The WWTP has a disc filter to assist with meeting restricted access reuse, however it is non-operational. Additional there is an 8-inch forcemain that can discharge effluent to the deep injection well at the existing reverse osmosis water treatment plant (ROWTP). Residuals are put through the belt filter press and hauled to a landfill.

Based on discussions with the City's WWTP operations staff and assessments of the facility, the following deficiencies and recommendations were noted:

City WWTP		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	**5.0**

Civil/Mechanical

- Headworks is inoperable and piping is heavily corroded.
- Screens are leaking and inefficient.
- Site lacks equalization tank to buffer flow.
- Influent transfer pumps are 20 years old.
- Ductile iron pipe and ductile iron 90° bends in influent wet well – Poor/Catastrophic Condition - extremely corroded.
- Effluent discharge piping is corroded.
- Digesters tanks are corroded and rusty with inoperable valves.
- Disc filter is inoperable.

Electrical

- Transfer pumps require new controls, electrical and instrumentation.
- No site lighting.
- Issues with the generator ATS.
- Uncertainty if incoming power is sufficient to accommodate WWTF current and future needs.
- No site lighting.

3.2.1.1 WASTERWATER TREATMENT PLANT - PROCESS ASSESMENT

Based on discharge monitoring reports for a recent 36-month period the facility appears to consistently meet all permit requirements, with the exception of Total Suspended Solid (TSS) for July 2022 and Fecal Coliform for 8 of the months shown. Table 3.1 provides a summary of treatment levels for Jan 2020 through Dec 2022 for the WWTP in comparison to the permitted levels.

Table 3.1 WWTP *Treatment Levels*

Date (MO-YR)	Max Monthly Average Effluent BOD (mg/L)	Max Monthly Average Effluent TSS (mg/L)	Max Monthly Fecal Coliform Geometric Mean (200 Mo Geomn)	Average Effluent pH (Min/Max)	Nitrogen, Nitrate, Total Monthly Average (mg/L)
Jan-20	2.80	9.10	**400.00**	6.5/7.2	0.55
Feb-20	3.25	6.30	**344.00**	6.8/7.9	0.42
Mar-20	2.40	7.98	5.00	6.6/7.9	0.68
Apr-20	3.50	11.60	1.00	6.5/7.7	0.77
May-20	2.00	10.50	1.00	6.5/8.0	0.05
Jun-20	2.00	5.74	0.50	6.6/7.8	1.41
Jul-20	2.00	5.00	1.00	6.6/7.8	0.90
Aug-20	2.00	7.30	0.50	6.6/8.1	0.80
Sep-20	2.00	2.30	0.50	6.6/7.9	0.51
Oct-20	3.00	8.20	0.50	6.6/7.4	0.72
Nov-20	3.00	15.10	0.50	6.0/7.7	0.63
Dec-20	3.00	12.50	4.00	6.0/7.7	0.74
Jan-21	3.00	12.93	0.50	6.0/7.7	0.56
Feb-21	3.00	10.40	0.50	6.2/7.2	0.40
Mar-21	4.00	16.32	10.00	6.5/7.2	0.20
Apr-21	3.00	10.28	16.00	6.5/7.9	0.10
May-21	5.00	11.62	200.00	6.5/7.4	0.05
Jun-21	3.00	15.33	6.00	6.5/7.5	0.02
Jul-21	2.00	8.90	**400.00**	6.7/7.6	0.06
Aug-21	2.00	8.90	**400.00**	6.7/7.6	0.06
Sep-21	2.75	16.85	200.00	7.27/7.47	0.05
Oct-21	5.00	7.70	100.00	7.2/7.6	0.47
Nov-21	5.00	22.70	**400.00**	7.3/7.8	0.42
Dec-21	5.00	17.00	112.00	7.1/7.6	0.11
Jan-22	5.40	13.00	4.00	7.3/7.6	0.60
Feb-22	4.80	15.70	2.00	6.9/7.5	0.33
Mar-22	5.80	22.40	**400.00**	6.9/7.3	0.53
Apr-22	5.30	23.10	7.80	7.0/7.3	0.91
May-22	3.60	20.40	14.00	7.0/7.5	0.94
Jun-22	4.80	25.60	2.00	6.9/7.3	0.39
Jul-22	2.00	**31.30**	4.00	6.9/7.5	0.40
Aug-22	4.80	18.70	2.00	6.9/7.4	1.78
Sep-22	5.30	8.70	4.00	6.9/7.5	1.04
Oct-22	2.50	14.00	25.00	7.1/7.4	0.82
Nov-22	5.00	22.70	**400.00**	7.3/7.6	0.42
Dec-22	3.60	11.40	**400.00**	6.9/7.2	1.17
Permit Limits	**30.00**	**30.00**	**200**	**6.0 - 8.5**	**12.0**

3.2.1.2 WASTEWATER TREATMENT FACILITY - AVAILABLE CAPACITY

Table 3.2 provides an analysis of the historic metered effluent flows through the City's WWTP over the 36-month period from January 2020 through December 2022. The analysis includes an evaluation of the monthly average daily flow (ADF), which have set permit limits for the facility.

Table 3.2 WWTP *Historic and Permitted Monthly ADF Comparison*

Date (MO-YR)	Monthly ADF (MGD)
Jan-20	0.399
Feb-20	0.390
Mar-20	0.324
Apr-20	0.287
May-20	0.281
Jun-20	0.345
Jul-20	0.321
Aug-20	0.391
Sep-20	0.460
Oct-20	0.400
Nov-20	0.399
Dec-20	0.364
Jan-21	0.345
Feb-21	0.336
Mar-21	0.398
Apr-21	0.360
May-21	0.351
Jun-21	0.308
Jul-21	0.380
Aug-21	0.456
Sep-21	0.412
Oct-21	0.369
Nov-21	0.444
Dec-21	0.419
Jan-22	0.413
Feb-22	0.413
Mar-22	0.406
Apr-22	0.398
May-22	0.376
Jun-22	0.436
Jul-22	0.429
Aug-22	0.467
Sep-22	0.603
Oct-22	0.562
Nov-22	0.501
Dec-22	0.454
Average (MGD)	**0.400**
Maximum (MGD)	**0.603**
Permit Limits (MGD)	0.750

Based on the historic monthly average daily flows over the noted 36-month period, the WWTP is currently operating at 53% of permitted capacity. The WWTP has sufficient capacity available for the current customer base population and has not had any permitted exceedances during the evaluation period. The facility has enough treatment capacity available with the existing infrastructure to provide service for the existing sewer users, however future growth and development will be evaluated later in the report.

3.2.2 PUMPING AND FORCEMAIN SYSTEMS

4Waters with City staff conducted field inspections of 22 sewer lift station facilities in July 2022. The assessments evaluated the pumps, piping, controls, electrical systems, instrumentation, wet well and other structures at the lift station sites. A summary of the noted deficiencies is provided below for each individual lift station. As noted in Section 2.1.2, three lift stations were not included in the evaluation effort, because they are privately owned. Theses lift stations are listed below, however were given a Not Applicable (NA) Probability of Failure Score.

Overall the lift station facilities which were visited were generally secure, pumps and equipment were operational, and the sites were neat and clear. It appears that good housekeeping measures are maintained along with important routine maintenance efforts such as regular removal of grease from wet wells.

LS-1		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	3.0	**3.0**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in good condition.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Water service lacks back flow preventor.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- H2S in panel.
- Bonding in meter and back plate.
- Grounding unknown.
- Neutral to insulated neutral BUS.
- Surge protection appears to have failed.
- No site lighting.

LS-2		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	3.5	**5.0**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in good condition.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- No water service.
- Site lacks generator.
- No permanent safety grating on wet well.

Electrical

- Grounding wrong and not per NEC,
- No external disconnect switch.
- Equipment rack is leaning and not anchored properly.
- No bonding after meter.
- Surge protection has failed.
- No site lighting.

LS-3		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	**4.5**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in good condition.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- No water service.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Float and pump cables come through same junction box.
- Grounding is not per NEC and poor with single ground rod at the meter with acorn nut.
- Bonding in meter w/ equipment-grounding conductor extended to panel.
- Generator conductors not connected to the emergency circuit breaker.
- Circuit breaker is in panel with slide block.
- All power distribution equipment is in control panel.
- APT surge protection unit has failed.
- No site lighting.

LS-4		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	5.0	**5.0**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron pipe and ductile iron 90° bends in wet well – Poor/Catastrophic Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Poor/Catastrophic Condition - paint wearing off, completely underwater and signs of corrosion.
- No water service.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Panel is obstructed by fence.
- Disconnect switch (3R) is obstructed by fence and rusty.
- Grounding is in meter and reached the end of useful life.
- No overcurrent protection.
- No surge protection.
- No site lighting.

LS-5		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	**5.0**

Civil/Mechanical

- Pumps are over 30 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Fair Condition - paint wearing off and signs of corrosion.
- Concrete foundation is undermined.
- No water service.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Panel power distribution in fair condition.
- No surge protection.
- No bonding.
- General neutral has failed.
- No site lighting.

LS-6		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	5.0

Civil/Mechanical

- Pumps are over 30 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete and brick.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Fair Condition - paint wearing off and signs of corrosion.
- No water service.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Panel needs to be replaced.
- No grounding.
- Uncertain power distribution.
- No surge protection.
- No site lighting.

LS-7		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	5.0

Civil/Mechanical

- Pumps are over 25 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete and brick.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Poor Condition – extremely corroded and due to limited space maintenance is an issue.
- Water service lacks back flow preventor.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Neutral bonded in meter.
- Neutral and ground (electrical ground terminal) terminated to insulated neutral bus in panel.
- Control panel has large hole in bottom.
- Panel mounted close to ground.
- Pump cables pulled directly into panel
- No junction box.
- Power distribution all within panel.
- No surge protection.
- No site lighting.

LS-8		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	5.0

Civil/Mechanical

- Pump(s) is/are over 25 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete and brick.
- PVC pipe and PVC 90° bends in wet well - Fair Condition.
- PVC, fittings and valves in valve vault in Fair Condition.
- No water service.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Continual low voltage trip failures. The pumps are rated for 230V utilization power but school pad mounted transformer is 208Y/120V 3-phase 4-wire system, which are not compatible.
- Bad grounding.
- No surge protection.
- No junction box.
- No site lighting.

LS-9		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	5.0	5.0

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron pipe and ductile iron 90° bends in wet well – Poor/Catastrophic Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Poor/Catastrophic Condition - paint wearing off, completely underwater and signs of corrosion.
- Water service lacks back flow preventor.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Service pole, meter, disconnect switch and electrical box are all outside of the fence.
- Disconnect switch (3R).
- H2S infiltration and corrosion in.
- Neutral BUS in Panel – Ground possible terminated to BUS. No ground lug on back plate.
- Surge protection is old lightning arrestor.
- No site lighting.

LS-10		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	N/A	5.0
LS-10 was not evaluated as part of this study		

LS-11		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	4.0

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Fair Condition - paint wearing off and signs of corrosion.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Neutral bonded in meter.
- Neutral and ground attached to back plate in disconnect switch.
- Neutral terminated to insulated neutral in panel.
- Ground to back plate.
- No surge protection.
- No site lighting.

LS-12		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	**5.0**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Fair Condition - paint wearing off and signs of corrosion.
- Water service lacks back flow preventor.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Junction box not sealed from control panel.
- H2S corrosion in control panel and on disconnect switch.
- Service equipment is bad.
- Grounding incorrect.
- No surge protection.
- Panel is old and in poor condition.
- No site lighting.

LS-13		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.0	**4.0**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in fair condition.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Water service lacks back flow preventor.
- Site lacks generator.
- No permanent safety grating on wet well.

Electrical

- Float and pump cables come through same junction box.
- No equipment-grounding conductor run with feeder from treatment plant, only neutral.
- Neutral bonded in panel.
- Extensive H2S corrosion in panel.
- No grounding rod.
- All power distribution equipment is in control panel.
- APT surge protection unit has failed.
- No site lighting.

LS-14		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.5	3.0

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Fair Condition - paint wearing off and signs of corrosion.
- No water service.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- No surge protection.
- No bonding.
- No site lighting.

LS-15		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.0	3.0

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in fair condition.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- No water service.
- Site lacks generator.
- No permanent safety grating on wet well.

Electrical

- No overcurrent protection in disconnect switch.
- No surge protection.
- Service grounding bad.
- No site lighting.

LS-16		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	3.0	**3.0**

Civil/Mechanical

- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping, fittings and valves in valve vault in Fair Condition - paint wearing off and signs of corrosion.
- Wet well lacks liner – exposed concrete.
- Site lacks bypass.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Wrong grounding.
- Surge protection has failed.
- No site lighting.

LS-17		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.0	**3.0**

Civil/Mechanical

- Pumps are over 15 years old; need to plan for replacement in next 5 years.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in fair condition.
- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- No water service.
- Site lacks generator.
- No permanent safety grating on wet well.

Electrical

- Bonding incorrect in panel.
- Grounding incorrect.
- Surge protection has failed.
- No site lighting.

LS-18		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	4.0	**2.0**

Civil/Mechanical

- Pumps continual need to be de-ragged and are undersized for estimated capacity required.
- Wet well lacks liner – exposed concrete.
- Ductile iron piping and fittings in valve vault in poor condition and extremely corroded.
- PVC pipe and PVC 90° bends in wet well are in good condition.
- Water service lacks back flow preventor.
- Site lacks generator.
- No permanent safety grating on wet well.

Electrical

- Ground from disconnect switch neutral.
- Bonded in panel.
- No ground rod from insulated neutral.
- No surge protection.
- No site lighting.

LS-19		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	3.0	**3.0**

Civil/Mechanical

- Ductile iron pipe and ductile iron 90° bends in wet well - Poor Condition - extremely corroded.
- Ductile iron piping and fittings in valve vault in good condition.
- Wet well lacks liner – exposed concrete.
- Site lacks generator.
- No safety grating on wet well.

Electrical

- Service is grounded in the meter.
- Neutral bonded in panel but no ground rod connection.
- Service disconnect switch does not have overcurrent protection or bonding.
- Surge protection had failed.
- No site lighting.

LS-20		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	N/A	**N/A**

LS-20 was not evaluated as part of this study.

LS-21		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	1.5	**2.0**

Civil/Mechanical

- PVC pipe in Good condition.
- PVC piping and ductile iron valves in valve vault in Good condition.
- Wet well is fiberglass and does not require liner.
- No safety grating on wet well.

Electrical

- Grounding/Bonding in meter.
- Neutral to insulated neutral BUS.
- Ground to back plate and not per NEC.
- No site lighting.

LS-22		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	1.5	**3.0**

Civil/Mechanical

- HDPE pipe in Good condition.
- HDPE piping and ductile iron valves in valve vault in Good condition.
- Wet well lacks sufficient liner.
- Site lacks generator.
- Site lacks security fence.
- Site lacks water service.
- No safety grating on wet well.

Electrical

- Grounding bad.
- Disconnect switch (3R).
- No site lighting.

LS-23		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	1.0	**2.0**

Civil/Mechanical

- HDPE pipe in Good condition.
- HDPE piping and ductile iron valves in valve vault in Good condition.
- No safety grating on wet well.

Electrical

- Acorn nuts on ground rods.
- No site lighting.

LS-24		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	1.5	**2.0**
Civil/Mechanical • HDPE pipe in Good condition. • HDPE piping and ductile iron valves in valve vault in Good condition. • Wet well lacks sufficient liner. • Site lacks generator. • No safety grating on wet well. Electrical • Bad grounding. • PVC between meter and disconnect switch. • No equipment grounding conductor from meter. • No ground rod from disconnect switch. • No overcurrent protection. • Surge protection of poor quality. • No site lighting.		

LS-25		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	N/A	**N/A**
LS-25 was not evaluated as part of this study.		

3.3 OVERALL ELECTRICAL ASSESSMENTS

Charles Cobb with Chatham Engineering, a professional electrical engineer, accompanied 4Waters staff on the field inspections and provided the electrical and controls system assessments. The electrical deficiencies noted at the various facilities have been listed in the sections above. The Chatham Engineering full electrical evaluations are provided in Appendix C. Important electrical design standards that were reviewed are described below.

As defined by the National Fire Protection Association (NFPA) a Classified Area is a space where a flammable gas, flammable liquid-produced vapor, combustible liquid produced vapors, combustible dusts, or combustible fibers could be present, and the likelihood that a flammable or combustible concentration or quantity is present. NFPA 820, Standard for Fire Protection in Wastewater Treatment and Collection Facilities, indicates that the envelope within 18 inches above the wet well top slab, and within 3 ft of the outside edge of the hatch, is designated as a Division 2 Classified Location. The classified area also extends for a 5 foot radius from the end of the wet well vent. Lift station electrical equipment should not permitted within the classified area.

The Florida Department of Environmental Protection (FDEP) Notification/Application for Construction a Domestic Wastewater Collection/Transmission System requires the electrical equipment to be protected by National Electrical Code (NEC) approved conduit sealing fittings to prevent the atmosphere or the wet well from gaining access to the electrical equipment. The FDEP permit application also

requires wet well electrical equipment including the pump motors, float switches, and level sensor, to be disconnected and removed without disturbing the conduit sealing fittings. To meet these requirements the City standard lift station design should use explosion protected wet well terminal boxes between the wet well and the pump control panel, with cable seals on the wet well conduits, and explosion proof conduit sealing fittings on the control panel conduits.

The City standard lift station control panel should be equipped with a dead front inner door to allow the operator to have access to the pump controller and circuit breaker operating handles without being exposed to live electrical parts. The standard lift station electrical service surge protection equipment should have status indication lights that are only operational when the equipment is energized. This equipment should also be installed so that the status indication lights are visible from outside the dead front inner door, or through a view window.

Currently, many of the above requirements are not currently being met by the existing facilities. While operational, many have issues with the following:

- Lack of conduit seals/terminal boxes
- Service disconnect,
- Service grounding,
- Lack of surge protection

Currently there is a SCADA system at the WWTP which monitors and records flows from the influent and effluent sides of the WWTP, however there are no control capabilities for the lift station sites. Additionally, many of the sites lack permanent generators, however they have the ability to accommodate portable generators.

3.4 INFLOW AND INFILTRATION EVALUATION

3.4.1 INTRODUCTION AND METHODOLOGY

The City of LaBelle's sewer collection system was primarily installed in the 1960's and consists of clay pipes with brick manholes in the older sections and PVC with precast manholes in the newer sections. The nearly 21 miles of gravity sewer mains, which vary from 4-inches to 15-inches in diameter, and 385 manholes are divided into 25 different sub-basins with each basin collecting flow from a given area or neighborhood and conveying sewage via a trunk main and/or lift station until it reaches the WWTP.

The sanitary sewer system and manholes in some sub-basins are approaching 60 years old, and no major rehabilitation of the system has been performed. The City has recognized significant increases in rainfall derived inflow and infiltration (I&I) at the WWTP. The City understands that without repairs to the system, the I&I flows will continue to increase and will threaten the structural integrity of the sewer system and pose increased risk to public health concern and safety from additional system overflows and potential roadway collapse from failing sewers.

The City is currently working with Woodard & Curran (contracted operations staff) to complete a Consent Order driven Sanitary Sewer Evaluation Survey (SSES) to assess the general condition of the sewer system, identify the primary areas of the sewer system contributing I&I and begin prioritizing sewer sub-basins for repairs. This study is intended to include a desktop evaluation of data followed by field investigations and assessments to include manhole inspections, closed circuit television (CCTV) inspections and smoke testing to confirm excessive infiltration and potential private inflow sources. The analysis of these efforts will allow the City to develop an understanding of the I&I sources and to prioritize repairs and rehabilitation which could provide the most cost-effective reduction in I&I.

Since the SSES is in progress, the Sewer Master Plan will provide estimated overall I&I flows in the system and generally prioritize the sub-basin rehabilitation efforts as more granular information like pump run times are not currently available.

3.4.2 OVERALL INFLOW & INFILTRATION IN CITY WWTP SYSTEM

The typical overall I&I entering the City WWTP sanitary sewer collection system was determined by performing an overall evaluation of the system based on monthly rainfall totals for the service area and the average daily and maximum daily flowrates recorded at the WWTP. The analysis was conducted from January 2020 through June 2022. Rain events during summer months from June to September often cover large areas draining to the WWTP and might be expected to produce higher flows, whereas winter events during November to February may be associated with more localized storm cells that do not cover large areas of the system and may result in lower flows at the WWTP. This evaluation does not specifically account for seasonal variations in flow, however, the Average Dry Weather Flow (ADWF) determination incorporates flow data from periods throughout the year and tends to dampen the impact from seasonal variations.

Months during the study period with the lowest total rainfall were used to approximate the Base Flow or ADWF for the sewer system. The estimated Average Dry Weather Flow for the Labelle WWTP system is 0.46 MGD as presented in Table 3.3.

The monthly data was then divided according to total rainfall in increments of one inch (1") up through six inches (6") of total rainfall. All months with total rainfall over six inches (6") were placed in one category. The sewer flows measured at the WWTP on the day of the rainfall event or the following day, whichever was greater, were used to determine I&I levels for rainfall events less than one inch. The ADWF calculated for the system was compared with the Maximum Daily Flow recorded in each month (or day for storms less than one inch) to determine the approximate I&I in the system for each month of the study.

The evaluation resulted in a determination of the average I&I for the system by categories of total monthly rainfall. Table 3.3 presents the calculated average I&I for the City WWTP system.

Table 3.3 Average I&I in the City WWTP Sewer System

Total Monthly Rainfall (inches)	I&I Increase over Average Dry Weather Flow (%)
ADWF (MGD)	0.43
1"	14%
2"	21%
3"	19%
5"	21%
+6"	36%

This information was utilized to develop a linear regression of the percent flow increase at varying rainfall amounts for each system. Based on these equations, for a one inch (1") storm event, an increase of 59,547 gallons (14%) is anticipated at the City WWTF.

These rates of I&I represent a loss of capacity in the transmission and treatment systems which can limit the capacity available for growth and development of the service areas. Additionally there is an unnecessary operational cost to the City associated with treating and disposing of non-sanitary sewer flows. The above estimate of Inflow & Infiltration is for a one inch (1") storm which is very common for this region of Florida. As indicated in Table 3.3, as the number of storms and volume (inches) of rainfall increases, the I&I rate also increases and can lead to excessive peak flow conditions at the WWTP and potential permit flow exceedances. For example, during and after more extreme events such as Hurricane Sally, I&I flows at the WWTP exceeded the capacity of the flow monitoring and resulted in a peak flow at the WWTP of over 1.0 MGD, more than double the typical dry weather flows at the WWTP.

3.4.3 SUB-BASIN DELINEATIONS

The City WWTP sewer system has 25 sub-basins (3 of which are private). Sub-basins are typically delineated around lift stations or to encompass no more than approximately 10,000 linear feet of gravity sewer to improve the assessment value of flow monitoring data. Within the City WWTP sewer system, the pump stations are primarily located within subdivisions or isolated areas such as Walmart. The basin delineation was provided to 4Waters based on City GIS data. Accordingly, the majority of the sub-basins are the gravity sewer associated with the individual lift stations.

Figure 3.2 depicts the sub-basins, the pump stations within the sub-basin, and the existing gravity sewer.

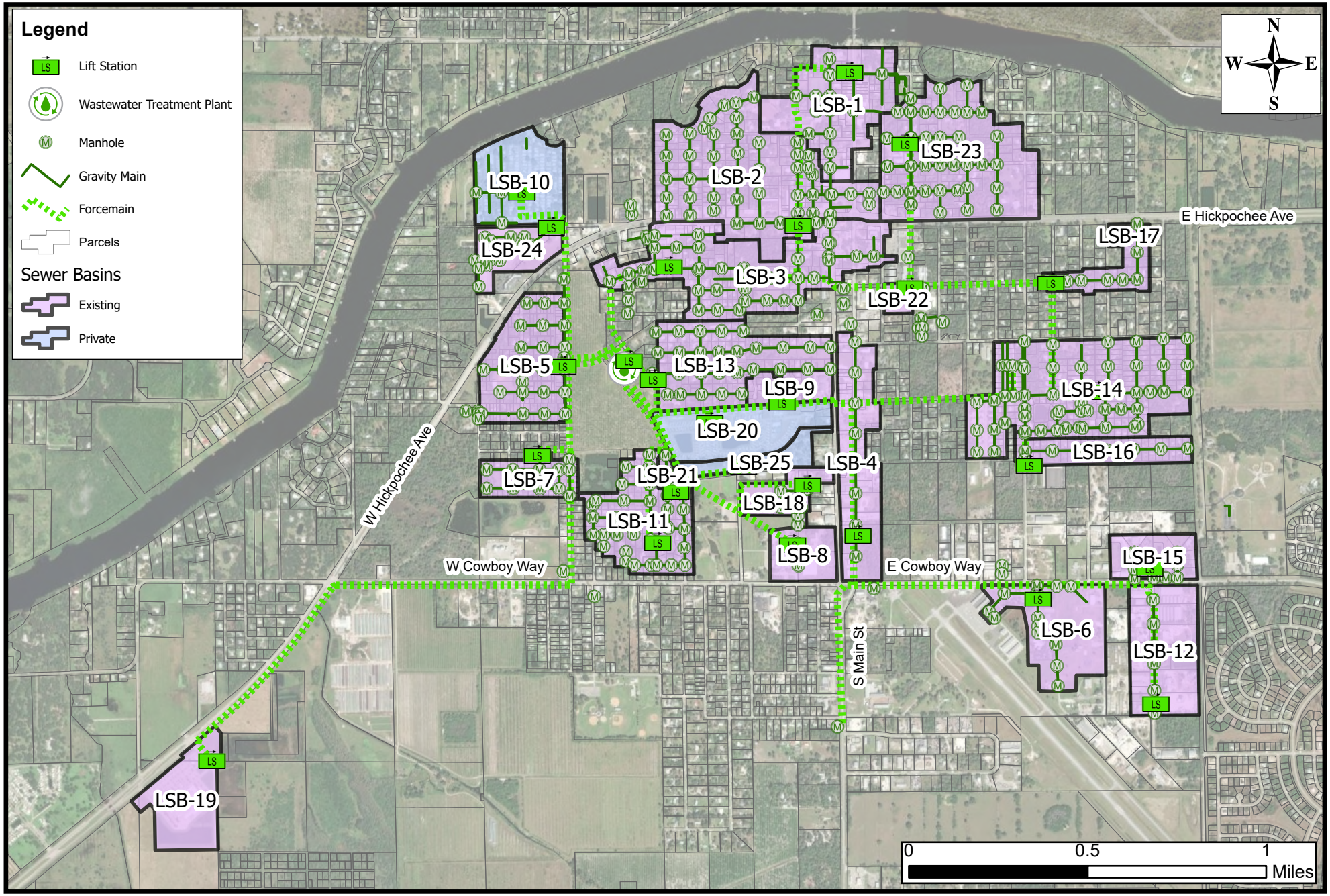


Figure 3.2: Lift Station Sub-Basins

LaBelle, FL

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File Name: Figure 1 Path: P:\22-1012 LaBelle Sewer Master Plan\16.0 GIS\Map Document\Report Figure Maps\Figure 1.4 - Lift Station Basins\Figure 1.aprx Date Saved: 8/1/2023 11:21 AM

The sewer material within each basin was additionally compiled based on available GIS information. The material information will be used in the SSES to assist with prioritizing field investigation areas. Table 3.4 summarizes each delineated basin and provides a list of length and material type of gravity sewer pipe contained in each basin. More than 70% of the gravity sewer system is represented by PVC, 17% by CIP/DIP/VCP and 13% is unknown.

Table 3.4 I&I Basin Delineation – Material Type

Lift Station Basin	Total Gravity Sewer within Sub-Basin (LF)	PVC Gravity Sewer (LF)	CIP Gravity Sewer (LF)	DIP Gravity Sewer (LF)	VCP Gravity Sewer (LF)	Unknown or Other Material Gravity Sewer (LF)
LS-1	8,030	807	0	0	5,303	1,920
LS-2	13,821	4,586	425	0	8,353	457
LS-3	12,955	5,126	0	0	6,670	1,159
LS-4	4,264	619	0	0	0	3,645
LS-5	7,918	7,383	0	0	0	535
LS-6	3,732	3,732	0	0	0	0
LS-7	3,369	3,369	0	0	0	0
LS-8	415	0	0	0	0	415
LS-9	0	0	0	0	0	0
LS-10*	3,955	3,955	0	0	0	0
LS-11	8,107	8,107	0	0	0	0
LS-12	2,111	1,887	0	0	0	224
LS-13	8,590	8,590	0	0	0	0
LS-14	17,859	15,351	0	0	0	2,508
LS-15	1,625	1,625	0	0	0	0
LS-16	2,945	455	0	0	0	2,490
LS-17	2,281	2,281	0	0	0	0
LS-18	1,462	0	0	0	0	1,462
LS-19	0	0	0	0	0	0
LS-20*	0	0	0	0	0	0
LS-21	549	549	0	0	0	0
LS-22	0	0	0	0	0	0
LS-23	11,972	11,972	0	0	0	0
LS-24	2,801	2,801	0	0	0	0
LS-25*	75	0	0	0	0	75
Total	**118,836**	**83,195**	**425**	**0**	**20,326**	**14,890**

**Private*

3.4.4 SYSTEM REHABILITATION – SANITARY SEWER EVALUATION SURVEY

As previously mentioned, to adhere to the Consent Order, the City has set forth to conduct a SSES of the collection system to identify infrastructure beyond design life contributing to substantial I&I and heavy maintenance requirements. Woodard & Curran (contracted operations staff) will be leading the SSES efforts. The SSES will start with a desktop evaluation of data and included field investigations, closed circuit television inspections (CCTV), smoke testing to confirm excessive infiltration and potential private inflow sources.

The smoke testing will follow industry best practices and typically include the introduction of smoke into the sewer main with a smoke stick and a blower using the single blower technique with the maximum "setup" typically being two to three-line sections. Smoke testing reports will include the manhole-to-manhole extent of the testing, observations of smoke from catch basins, roof leaders, etc., observations of building stacks that do not smoke and other results noted. Smoke testing reaches are generally no more than 1,000 feet. The locations of suspected inflow sources are to be photographed.

Sewer segments with suspected excessive infiltration will be scheduled for CCTV inspection. CCTV inspection will be conducted during high groundwater season on each manhole-to-manhole segment or

service, as indicated on the plans or as required. CCTV equipment will include a remote controlled, pan-and-tilt camera capable of recording the entire interior circumference of the pipe. The camera will stop at each defect and at each service connection and record the footage from the start manhole or main line and other notable information. If a defect or blockage in the pipe prevents passage of the CCTV equipment, the sewer inspection contractor will perform light cleaning to remove debris. An attempt to inspect the sewer segment from the opposite manhole or location will be attempted as necessary.

All inspections will be recorded digitally onto a hard drive and each manhole-to-manhole segment will be a separate file. Each inspection will conform to NASSCO Pipeline Assessment Certification Program (PACP) inspections, including data such as project locations; street or easement name; upstream manhole number, downstream manhole number, direction of inspection, pipe type, pipe size, pipe length, date and time, inspector and engineer.

In conjunction with the CCTV inspections, the contractor will complete NASSCO Manhole Assessment Certification Program (MACP) Level 1 manhole inspections within areas of the collection system. The Level 1 inspections will include surface level, basic condition assessment and include data including but not limited to cover condition, frame seal condition, any observed defects or potential I/I sources, bench condition and photograph of the manhole. Data will be used to make recommendations for rehabilitation or repair.

Following the field inspection efforts, a SSES report will be prepared. The memorandum will summarize results including potential I&I sources and associated estimated quantities of I&I, recommended remedial actions for system improvements to achieve I&I reductions, and an opinion of probable cost for recommended rehabilitation work. Final results from Woodard & Curran are expected towards the end of 2023/early 2024. Preliminary smoke testing and CCTV areas have been provided in Appendix D.

It is expected that the results will identify repairs that can be done in-house to address “find and fix” type inflow items identified, such as missing sewer cleanout caps and manhole sealing. The City however understands that a programmatic approach is necessary to reduce the infiltration levels in the overall sewer system. It has been recommended that CIP funds be allocated to an I&I Reduction Program. These have been included in the Rehabilitation CIPs and are shown in Section 6.

4.0 – FUTURE CONDITIONS

During the 2006 Wastewater Collection System Expansion Analysis, the City of LaBelle was focused on expanding the service area to already developed areas currently served by septic tanks with anticipated growth to the south (South LaBelle Village or previously known as Bonita Bay) over a 30-year planning window. There has not been an updated wastewater related study since 2006, therefore the City commissioned the 2023 Sewer Master Plan to evaluate the status of the existing system, prepare for septic to sewer conversion and plan for projected growth throughout the service area.

In 2019, the City of LaBelle updated their Comprehensive Plan from 2011 to address an amendment to the water supply. The information covered in the 2006 Wastewater Collection System Expansion Analysis is not included in the Comprehensive Plan. Apart from the water supply update, there are very few updates or new information available relating to population projections. The zoning and future land use was however updated in a 2023 Comprehensive Plan update. More current sources of information were sought for the 2023 Sewer Master Plan including recent Planned Use Developments (PUDs) and the updates to the zoning and future land use.

The above-mentioned documents provide a reliable source of past and projected population data that was utilized as a part of the 2023 Sewer Master Plan. The following sections will discuss projected land use and anticipated development trends that were used to develop the projected population numbers and corresponding sewer generation rates for each of the service area.

4.1 PROJECTED LAND USE

There are diverse land uses throughout the City of LaBelle and the surrounding area that present their own demands for the City's sewer system. Since the 2006 Wastewater Collection System Expansion Analysis, the goal of expanding the sewer system was to stop the use of septic tanks and connect customers to a centralized sewer system. While this is still an achievable goal for the City, there is an additional need to expand the system to allow sufficient capacity for the planned future connections and uses as the City continues to grow and annex surrounding areas. There are several large areas in and around the City of LaBelle that are under PUDs.

The City of LaBelle is likely to see growth through infill and redevelopment with some areas under PUDs. Areas to the south and southwest of the City are mostly agricultural with several areas that have been accepted under PUDs to be developed as single-family and multi-family residential and commercial developments.

4.2 ANTICIPATED DEVELOPMENT TRENDS

The City of LaBelle breaks down its land areas by their designated uses in its 2023 Comprehensive Plan. The following sections describe the different types of land uses in the City of LaBelle's Comprehensive Plans with particular focus on the character of the land uses and the vision of the future development in those areas. This information is summarized briefly below and is presented as it guides a foundation for the development of population projections and sewer generation projections for the 20-year Sewer Master Plan study period from 2023 – 2043.

4.2.1 RESIDENTIAL

According to the City of Labelle Comprehensive Plan, there are 6,282 acres with developable residential uses. The areas with residential land uses have the following land classification breakdown:

- Residential Suburban – 10.4%
- Residential Urban – 2.8%
- Outlying Mixed Use – 4.2%
- Downtown District – 0.9%
- Old Groves Mixed Use – 5.1%
- South LaBelle Community – 76.6%

Between these residential land uses, the occupancy rate of the acreage breaks down into:

- Occupied – 18.3%
- Vacant – 81.7%

The high vacancy rate of the acreage is due to the annexation of the South LaBelle Community, which is primarily undeveloped. The residential zoning areas are scattered throughout the City.

To minimize sprawl that could occur and to strengthen the central core of LaBelle, residential unit density was increased for land use categories that are central to the survival and redevelopment of the core of LaBelle and reduced for land use categories where development is not a priority. With the current zoning structure, the Comprehensive Plan states that there should be sufficient accommodations for the projected population while encouraging development in areas that should help the community thrive.

4.2.2 COMMERCIAL

According to the City of Labelle Comprehensive Plan, there is 1,449 acres with developable commercial uses. The areas with commercial land uses have the following land classification breakdown:

- Outlying Mixed Use – 7.9%
- Downtown District – 3.9%
- Old Groves Mixed Use – 0.7%
- Commercial – 29.8%
- South LaBelle Community – 57.8%

Between these commercial land uses, the occupancy rate for these areas breaks down into:

- Occupied – 28.5%
- Vacant – 71.5%

These vacant commercial areas are located entirely in the Outlying Mixed Use and the South LaBelle Community areas. For rural towns of this size, 15 to 18 percent of the land should be for commercial development. The Comprehensive Plan states that the City has 1,280 acres for commercial use, or 14%, with 81% of this commercial land vacant. In order to keep up with the expected growth in population, the City will need to add an additional 183 acres of commercial land on top of the entire 1,280 acres by 2025.

The commercial zoning is concentrated along the State Road 80 and State Road 29 corridors. The corridor along SR29 includes the Downtown District, which is intended as a mixed use zoning area to encourage the development of a compact downtown and enhance the historic area of the City.

4.2.3 INDUSTRIAL

According to the City of Labelle Comprehensive Plan, there is a total of 560 acres with developable industrial uses. The areas with industrial land uses have the following land classification breakdown:

- South LaBelle Community – 53.6%
- Industrial – 46.4%

Between these commercial land uses, the occupancy rate breaks down into:

- Occupied – 23.4%
- Vacant – 76.6%

These vacant industrial areas are located entirely in the Outlying Mixed Use and the South LaBelle Community areas. The industrial zoning is concentrated in the southeast corner of the City proper. Since most of the industrial properties are broken up into relatively small properties for this use, the City has had difficulty attracting new industrial development to the area.

Figure 4.1 below shows the future land use map and anticipated development trends as depicted in the 2023 Comprehensive Plan.

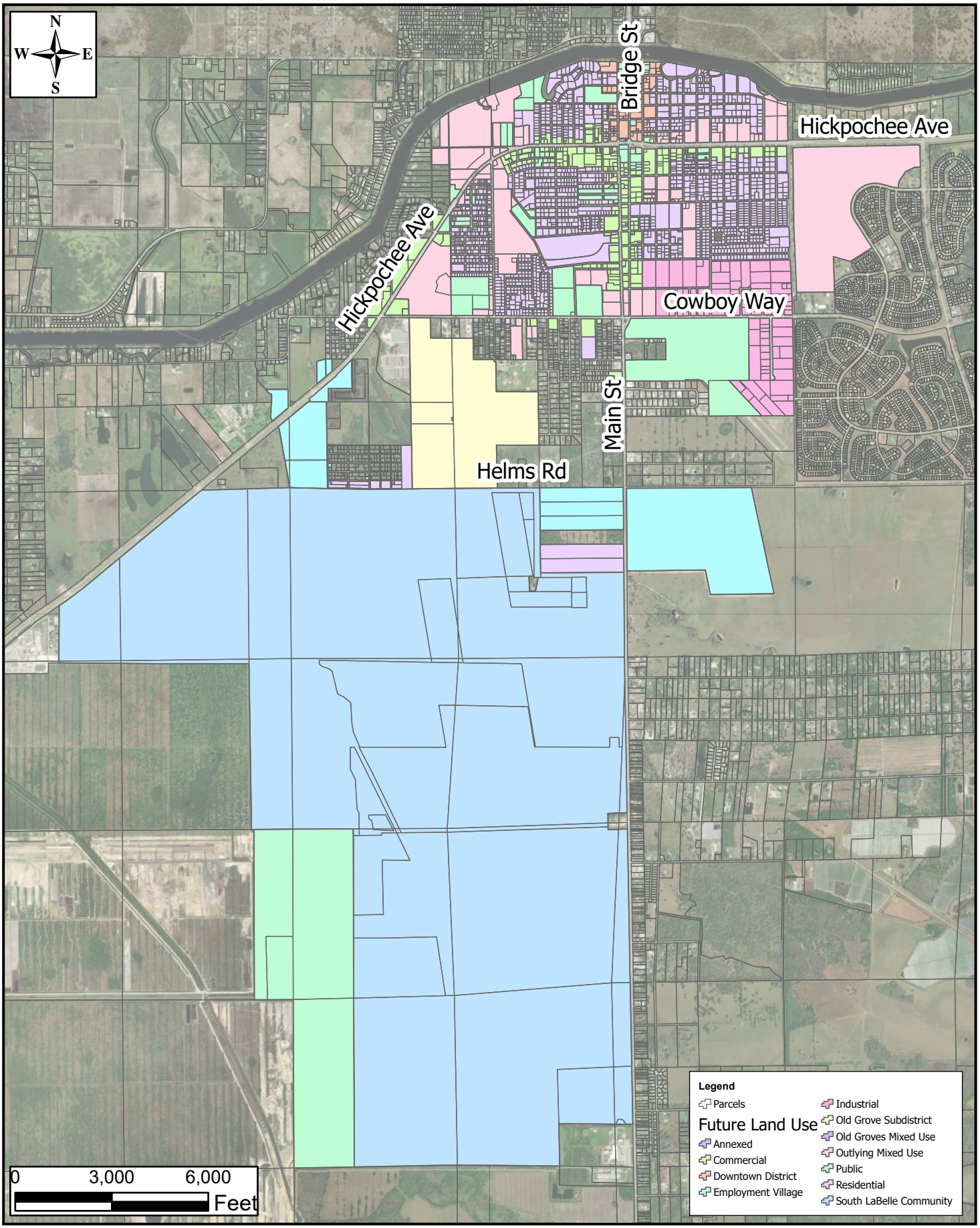


Figure 4.1 Future Land Use

LaBelle, FL

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4.3 PROJECTED POPULATION FOR THE SERVICE AREA

4.3.1 METHODOLOGY

The following sections describe the general methodology used to develop the population projections for the various sewer system service areas for the 20 year planning period. The complete accounting of the population projections is provided in Appendix A.

Several types of information were gathered to develop a comprehensive method of projecting the future development growth areas and associated populations for the sewer service area. The foundation for all the projections was the 2023 City of Labelle Comprehensive Plan. Additionally, 4Waters regularly corresponds with community stakeholders through development plan reviews and Hendry County.

Other sources of information that were used include the Labelle GIS databases and discussions with City staff.

All of this information was compiled and evaluated to determine the population projections for the 20 year study period. The population projections for each 5 year planning window were developed by using a linear interpolation between the 2023 and 2043 time frames.

4.3.2 KEY DEVELOPMENT AREAS

While the Comprehensive Plan was primarily used for the projections, it is still important to have an understanding of the key planned development areas (PUDs) and how they are geographically located throughout the City. The below sections provide a high-level description of some of the key development areas within the City. These areas will include the following:

- State Road 80 Corridor
- Septic to Sewer
- Helms Road
- Core City

As the State Road 80 Corridor Key Development Areas have not been included in a plan to this point, they will be discussed first.

4.3.2.1 STATE ROAD 80 CORRIDOR KEY DEVELOPMENT AREAS

There are several areas along State Road 80 that are considered key development areas: Old Florida RV Resort, SOFLO, Murphy's Landing, Cottonstrip PUD, River Landings, River Bend, Original Bryan Paul PUD, Brian Paul PUD, and Tractor Supply PUD. Much of the information gathered on these developments was provided by the Planning and Community Development Director for Hendry County.

The Old Florida RV Resort is a recently approved 160-acre development. It is designed for 444 RV lots, welcome center with sports courts, community amenity center, and ten acres of designated for future commercial development. Construction is expected to be completed by the end of 2024. It is important to note that with this development there is the plan for water and sewer main extensions down SR80 to the Hendry County line. These extensions will open up the corridor and allow for connection of developments along SR80, which otherwise would not have a viable connection to the City system. Some of these areas will need to be annexed into the City.

The SOFLO development is a 48-acre property south of State Road 80 on Townsend Canal Road. The planned development is centered around the Primera Science Center. This area is planned for 20 multi-family residential units, 160,000 square feet of office use, and 180,000 square feet for other uses such as animal enclosure buildings and a research facility.

Murphy's Landing is a roughly 210-acre area that is abutted to the north by the Caloosahatchee River and State Road 80 to the south. The property is divided by the Townsend Canal. The proposed usage for the development is 890 single-family residential units as well as 80,000 square feet of commercial use.

There are two large PUDs within the development area that are for commercial developments. The Cottonstrip PUD proposes to provide about 8 acres of commercial usage on a 15-acre property. The property has been partially built out with about 350,000 square feet of commercial area remaining for development. The property approved for the PUD is located at the intersection of State Road 80 and Double J Acres Road. The Tractor Supply PUD is a roughly 40-acre parcel at the intersection of Huggetts Road and State Road 80. It proposes to provide about 87,120 square feet for commercial use.

River Landings and River Bend are two large developments in the area. They are both RV resorts that offer RV lots that offer associated single family residences on a portion of the lots. River Landings is a 33-acre parcel with 66 RV lots, and River Bend is a roughly 120-acre parcel with 315 RV lots. Both developments currently have onsite water treatment and wastewater treatment but have requested to be able to tie into the City's systems.

Two PUDs are located near County Road 78A and State Road 80: Original Bryan Paul PUD and Bryan Paul PUD. The two PUDs include 1,443 residential units which are to be a mix of single- and multi-family and RV as well as 177,000 square feet of commercial usage. The Original Bryan Paul PUD was established in 2005, but no work has been done since that time. In 2017, the Bryan Paul PUD was established adjacent to the Original Bryan Paul PUD, but similarly, no work has been done in the subsequent years.

4.3.2.2 SEPTIC TO SEWER

To comply with Senate Bill 712, the Clean Waterways Act, and development of the Caloosahatchee River and Estuary Basin (23-0114) Basin Management Action Plan, the City has multiple projects to connect existing septic tank users to centralized sewer. The projects are to be completed in phases for the conversion of different areas (Zones) throughout the City. There are currently nine septic to sewer conversion Zones designated as Zone B through Zone J. These Zones are predominantly located on the eastern side of the City with some smaller areas scattered throughout the western side of the City. Within the nine basins, there are approximately 351 existing septic systems and 203 future septic systems which will either be removed or not constructed, depending on the time of construction verses the conversion project. There are minimal additional areas in the City that will remain on septic due to their proximity to the existing infrastructure. Table 4.1 shows the breakdown by zones of existing and future possible septic tanks.

Table 4.1 Existing and Future Septic Tanks

Areas	Existing Septic Tanks	Future Septic Tanks
Zone B	56	21
Zone C	127	48
Zone D	31	17
Zone E	61	76
Zone F	8	2
Zone G	24	7
Zone H	10	21
Zone H	18	6
Zone J	16	7

4.3.2.3 HELMS ROAD KEY DEVELOPMENT AREAS

There are several areas along Helms Road that are considered key development areas: Arbours at South LaBelle Village PUD, Old Groves PUD, Jack Paul PUD, Liberty Village PUD, Ben Moore South of Walmart, and Simmons Property. In 2020, the Arbours at South LaBelle plan was adopted for a 61-acre property located on Helms Road. The proposed development is to include up to 400 multi-family or townhouse residential units as well as any areas for accessory residential uses and recreational areas. This area is a part of the "South LaBelle Community" future land use area..

The Old Groves Mixed-Use PUD is north of Helms Road and the South LaBelle Community within an area that is designated as the Employment Village. The area encompasses approximately 335 acres. The PUD is proposed to include a total of 1,249 dwelling units, a maximum of 80,000 square feet of commercial property, and a community / recreation area.

In 2021 the City adopted the Jack Paul PUD which is located west of SR29 and south of Helms Road with the intended use of industrial and commercial. Liberty Village PUD is south of Helms Road within the "South LaBelle Community" future land use area. The total area under the PUD is approximately 280 acres. The proposed development is to include 971 single-family dwelling units and 60,000 square feet of commercial retail and office use. The development is also to include a golf course.

Ben Moore South of Walmart is a proposed development where there is not currently an approved PUD. Based on available information, it is to include 130 single-family units. It is located north of Helms Road and south of the Huggets Road and the State Road 80 intersection.

The Simmons Property is a large tract of land north of Helms Road near SR29 with the intended use of residential, commercial, and natural areas.

4.3.2.4 CITY OF LABELLE KEY DEVELOPMENT AREAS

The development areas within the City of LaBelle proper differ from those that are discussed in the State Road 80 Corridor Key Development Areas and the Helm Road Key Development Areas due in fact that the areas that are planned as PUDs or subdivisions are limited by land availability and the existing street layout. As such, the number of dwelling units or square footage for commercial uses are lower than those seen outside of the City of LaBelle. There are several areas throughout the City of LaBelle that are considered key development areas: Shady Oaks / Sandy Oaks, Kutty Multi-Family Development, City Village PUD, Birkland PUD, Belle Arbor, and LaBelle Riverside PUD. The Shady Oaks / Sandy Oaks subdivision is a proposed development located on Shady Oaks Avenue roughly a tenth of a mile from Live Oak Lane and abuts the Caloosahatchee River on the northern edge of the development. There are 53 single-family dwelling units plated to be constructed on the 5.95-acre parcel.

The Kutty Multi-Family Development is located north of Seminole Avenue and west of Oak Street. It is anticipated to include 20 duplex dwelling units. The City Village PUD is located on the Lee Street, Broward Avenue, Missouri Street, and Rover Street block within the City of LaBelle. The PUD includes a total of 36 dwelling units constructed as duplexes on a 3.9-acre parcel. The PUD is currently under construction.

The Birkland PUD is a proposed development that is currently under review for a zoning change. The proposed development is to be located at the intersection of State Road 80 and Fort Thompson Avenue. The PUD, as currently planned, is to include 128 multi-family dwelling units as well as 40,000 square feet for commercial uses.

The Belle Arbor subdivision is located north of State Road 80 and west of Shady Oaks Avenue. Phase one of the development includes construction of 44 single-family dwelling unit which are currently under way. The plan for the site currently includes a future phase of 24 additional single-family dwelling unit

as well as an outparcel for future residential development and two outparcels for future commercial developments.

The LaBelle Riverside PUD is to include 93 multi-dwelling family units with a community center and 5,000 square feet for commercial use. The 9.35-acre parcel is located to the south of East Cowboy Way and a quarter of a mile west of Dr. Martin Luther King Jr. Boulevard.

Figure 4.2 presents the development areas within the City of LaBelle and the surrounding area that could develop during the 20-year planning period of this study. These growth projections and development areas form the basis for the sewer system expansion capital improvement plans developed in this report.

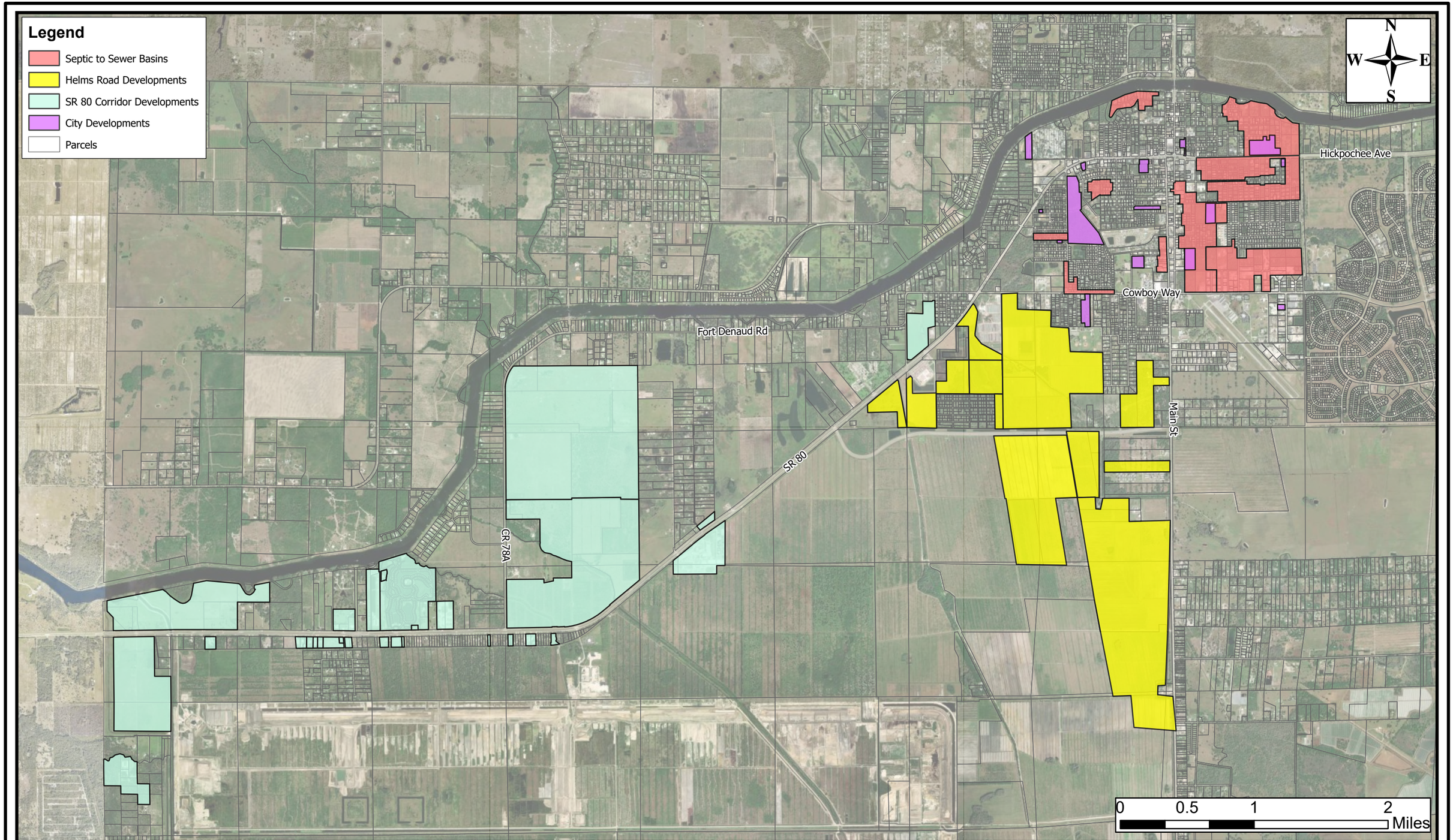


Figure 4.1 : Proposed Developments

LaBelle, FL

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

FOUR WATERS ENGINEERING

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4.3.3 PROJECTED POPULATION FOR SEWER SYSTEM SERVICE AREAS

Table 4.2 provides the base 2023 sewer population in people which are currently connected to the existing sewer system and the five-year increment projected sewer populations for the total proposed service area, which were derived from information found in the 2023 Comprehensive Plan. These will be used to develop the projected sewer generation rates for the 20 year study period.

Table 4.2 Population Projections for Sewer Service Areas

Year	Population
2023	3,066
2027	5,002
2032	7,936
203	11,404
2042	14,811

It is important to note that with the SR80 corridor opening up from the Old Florida RV Resort water and sewer main extensions, large existing and buildout developments such as RiversBend and River Landing are anticipated to connect. Development along this corridor could allow for rapid increases in population numbers and are reflected in the 5 to 10 year planning windows. It is estimated that Old Florida RV Resort, RiversBend and River Landing could add a population of over 1,500 customers. Additionally, the septic to sewer projects will bring on instantaneous customers that add to the population increases.

4.4 PROJECTED SEWER GENERATION FLOWRATES

The projected sewer generation flowrates for the service area of the Sewer Master Plan are presented below along with an analysis of the remaining available capacity at the existing wastewater treatment plants. Any need for expansion of the existing wastewater treatment plants or construction of new facilities is also addressed in the following sections.

4.4.1 PROJECTED AVERAGE DAILY SEWER GENERATION FLOWRATES

The per capita sewer generation rate developed for the sewer service area is 137 gallons per day per capita (gpc/d) as described in Section 2.3.4. The projected sewer generation flowrates for the service area for 2023 are based on the calculated average daily flow based on the population of each basin in 2023. The projected sewer generation flowrates for the service area for the period from 2027 to 2042 were determined by multiplying the respective populations and per capita sewer generation rates for the service area.

As previously noted, the projected sewer generation flowrates for the City of LaBelle and future developments have been divided into five-year increments: 2023 – 2026, 2027 – 2031, 2032 – 2036, and 2037 – 2041, to allow for more accurate and efficient planning of the necessary sewer infrastructure. Table 4.3 presents the projected incremental average daily sewer generation flowrates.

Table 4.3 Projected Sewer Generation Flowrates

Year	Projected ADF (MGD)
2023	0.49
2027	0.74
2032	1.11
203	1.54
2042	2.03
Permitted AADF (MGD)	0.75

4.4.2 PEAK HOURLY FLOW FACTORS

For sewer collection and transmission systems, the minimum accepted standard is to design the system for hydraulic capacity to handle the peak anticipated flow condition. For residential populations there are two accepted methods for calculating peaking factors: The Fair-Geyer Equation (10 State Standards) or the Babbitt Equation (recommended by ASCE). Both equations are based on populations and attest to account to some degree for inflow and infiltration (I&I).

The Fair Geyer Equation was applied to the projected development populations within the sewer sub-basins. This represents a very conservative design as the peaking factors for smaller populations are greater because as the population gets smaller it is more likely that a greater portion of the population will act in the same manner at the same times than it is with a larger population.

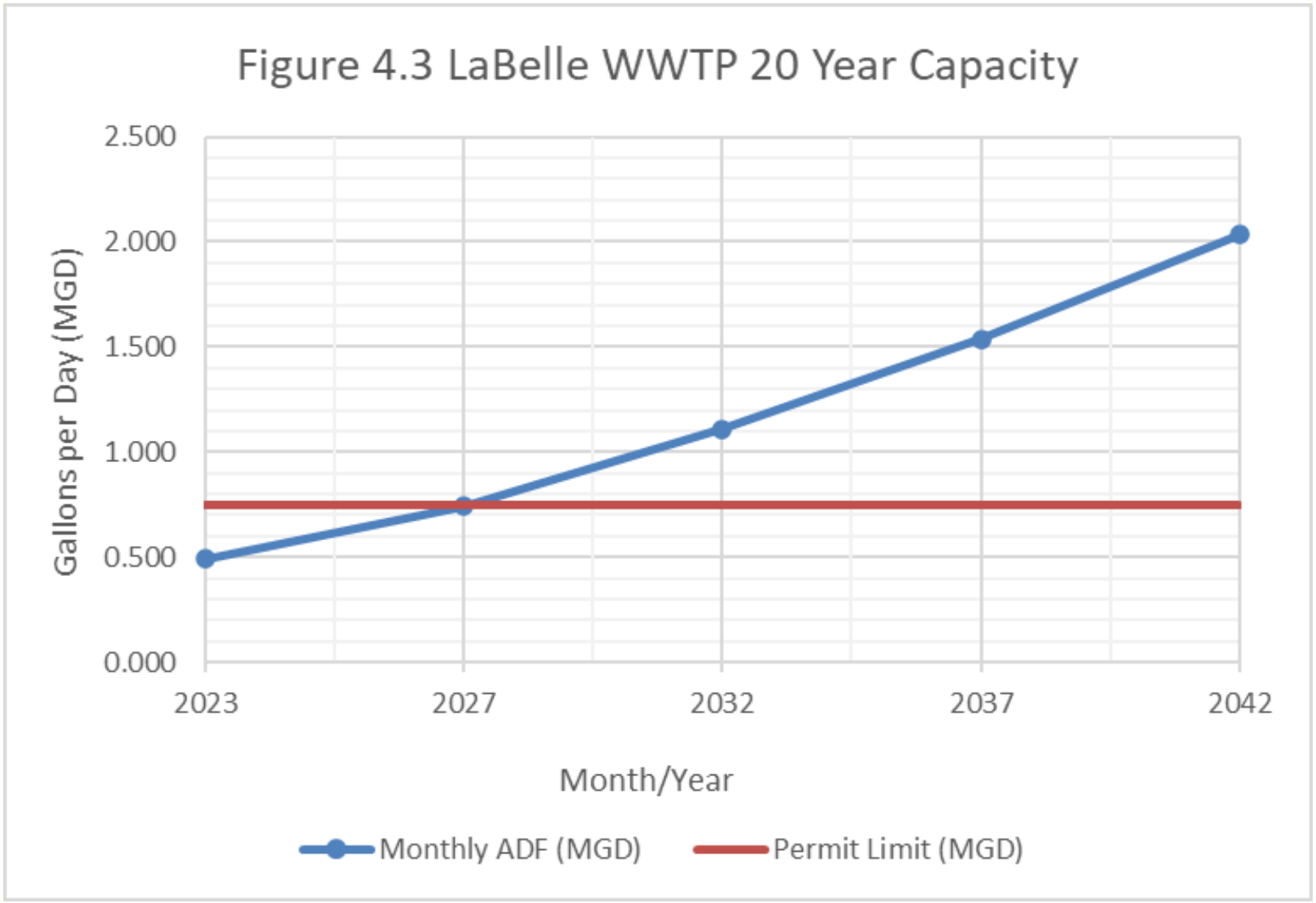
4.4.3 AVAILABLE CAPACITY AT EXISTING WASTEWATER TREATMENT PLANT

4.4.3.1 LABELLE WASTEWATER TREATMENT PLANT

As described in Sections 2.1.1 and 3.2.1.2, the LaBelle Wastewater Treatment Plant has a permitted capacity of 0.75 MGD and is currently utilizing on average approximately 53% of the design capacity, based on historic monthly average daily flows from January 2020 through December 2022. There is approximately 0.368 million gallons of available treatment capacity at the LaBelle Wastewater Treatment Plan. All components of the facility including influent handling, treatment works, residuals handling, and the effluent disposal system have design capacity for 0.75 MGD.

Figure 4.3 provides a graph of the total projected sewer generation flowrates for the City of LaBelle system over the 20-year study period of the Sewer Master Plan. The 0.75 MGD design and permitted capacity of the LaBelle Wastewater Treatment Plant is also delineated for comparison.

As seen in Figure 4.3, the LaBelle Wastewater Treatment Plant does not have sufficient capacity to serve the projected growth in the City of LaBelle and the expected development of the sewer system through the 20-year period. The need for expansion of the existing wastewater treatment plants or construction of new facilities will be addressed in the following sections.


Figure 4.3 LaBelle WWTP 20 Year Capacity
Gallons per Day (MGD)
2.500
2.000
1.500
1.000
0.500
0.000
2023
2027
2032
2037
2042
Month/Year
Monthly ADF (MGD)
Permit Limit (MGD)

4.5 PROJECTED STATUS OF ON-SITE SEWER DISPOSAL SYSTEMS

On-site Sewer Disposal

On-site sewer disposal or septic systems are expected to remain a permanent element of wastewater management systems throughout the country, and when properly designed, sited, constructed, and maintained, they can be an environmentally sound method of wastewater treatment and disposal. Failures, however, are inevitable and unfortunately, it is common for homeowners to believe that their septic systems are functioning properly so long as there are no backups in the home and no foul odor in the yard or adjacent areas.

There is no statistical data available on typical septic system failure rates, this may be due in part to the fact that failure potential varies significantly based on installation year, age of the system, and the soil characteristics and water table elevation of the septic system site.

There are several ways that septic systems can fail including backups of the system caused by lack of pumping and maintenance of the septic tank, clogging of the drainfield piping, or the use of an undersized system; or the capacity of the soil to absorb effluent can be reduced due to solids or other substances in the effluent clogging the soil. When septic systems fail, the effluent from the system can work its way to the surface and run off to surface water bodies or inadequately sealed wells down gradient, or poorly treated effluent from the septic system can travel down to groundwaters. A failing septic system can discharge as much as 76,650 gallons a year based on conservative per capita generation rates. These poorly treated waters which work their way in to ground water and surface waters can carry excessive nutrients, nitrogen and phosphorus, excessive organic matter, and metals, and thereby contaminate drinking water sources, cause algae growth or eutrophication, or cause a reduction in the oxygen supply of surface waters.

In the City of LaBelle, there are several areas in the City of LaBelle where septic systems continue to be used as noted in Section 2.1.4. These areas are located predominantly on the eastern side of the City with some smaller areas scattered throughout the western side of the City. These areas are the areas that should be the highest priority in expanding the sewer system as it will have the greatest impact on ground and surface waters and public health. These areas were incorporated in the sewer generation projections to better predict the expected flowrate for the wastewater treatment plant. As mentioned in Section 2.1.4, the City of LaBelle has received $21 million in grant funds to convert any remaining septic areas to sewer.

4.6 SEWER PROJECTS RELATED TO FUTURE GROWTH

Under Section 3.0, the condition of the existing sewer system was assessed, and the information gathered on this system was then used to develop a hydraulic computer model of the sewer system. After development and calibration of the model, the ability of the existing sewer system to meet the needs of the existing and future sewer customer bases was evaluated. The description of the model development, calibration, and assessment of the hydraulic capability of the sewer system are described in Section 5.0.

The projected sewer generation rates developed in the sections above were then added to the hydraulic model to assess the ability of the system to serve the projected needs of the systems and to determine upgrades or expansions which need to be made. Therefore, Section 5.0 provides a description of the recommended expansion projects necessary for future growth of the sewer service areas over the 20-year planning period. This section addresses the recommendations for lift stations, forcemains, septic conversion and capacity of a future WWTP.

5.0 – SEWER SYSTEM HYDRAULIC MODEL

A primary objective of the Sewer Master Plan is to provide the City with a hydraulic model of the major sewer transmission systems. The model will be used to evaluate the existing systems for deficiencies, and to determine solutions to alleviate these deficiencies. The model will also be used to evaluate future needs of the major sewer transmission systems based on anticipated development within the City as described in Section 4.0. The model can also be used by the City as a planning tool and to evaluate necessary upgrades to the sewer systems to serve currently unknown future developments as the need arises.

The sewer model was created in the SewerGEMs platform developed by Bentley, which has an added integration with the Environmental System Research Institute's (ESRI) ArcGIS software environment and improved interaction with GIS data. The SewerGEMS software is capable of hydraulically modeling both gravity and pressurized sewer systems, a feature that is critical for modeling these systems which incorporate both pumped, pressurized systems and gravity sewer systems to transfer sewage to the WWTP.

The SewerGEMs model utilizes dynamic wave routing that accounts for piping storage, backwater effects, entrance/exit losses, flow reversal and pressurized flow. As noted, the City's major sewer transmission system is interspersed with segments of gravity sewer piping which have typically been designed for hydraulic capacity during a peak hour flow condition. By calculating the backwater effects in the gravity sewer, the model creates a more accurate depiction of system operation as the backwater effects may slow down the transmission of sewage and lessen the necessary capacity of pipes which would be determined solely by the traditional engineering design hydraulic calculations. The dynamic wave routing has typically been utilized for modeling of stormwater conveyance systems which is the original intended use of the SewerGEMs modeling package.

5.1 SEWER SYSTEM MODEL METHODOLOGY

A primary goal of the Sewer Master Plan Update is to evaluate the condition and needs of the existing sewer systems, to eliminate redundancies in the systems and pool resources to correct existing deficiencies and plan for any future growth and expansion of the service areas. A comprehensive assessment of all components of the sewer systems is not necessary to achieve these goals in an effective manner. As such, 4Waters collaborated with City staff to define the components of the sewer systems which represent the major backbone of the sewer collection and transmission systems including gravity sewer mains, pump stations, forcemains, and the WWTP. In total, these components of the systems have been termed the Major Sewer Transmission System (MSTS).

The City MSTS is composed of approximately 4,900 LF of gravity sewer mains ranging in size from 4- to 15-inch, 20 manholes, 24 pump stations, approximately 82,500 LF of sewer forcemains ranging in size from 2- to 12-inch, and the WWTP.

Although a hydraulic model could be prepared for the entire sewer systems, the primary focus of the model and the evaluations is the transmission portion of the system including the pump stations, forcemains and the gravity sewer which the pump stations discharge to or which represent major corridors of flow. Modeling the entire gravity sewer collection portion of the sewer systems would not provide significant additional information and is beyond the scope of this project due to the limited availability of as-built gravity sewer drawings and the extensive effort which would be required to perform field evaluations/surveys of the manholes and gravity sewer piping. Additionally, to prepare a meaningful model of the gravity sewer system a determination of the sewer loadings throughout the entire system, the identification of all facilities and residences served by on-site sewer systems, and the anticipated inflow and infiltration into the system would be required.

Therefore, the methodology used to create a functional, informative model and planning tool was to consider the pump stations to be the upstream boundaries of the system. Only those gravity sewer pipes and manholes, which receive discharge from upstream pump stations and forcemains, which represent major sewer flow corridors have been included in the model. The City's hydraulic models incorporates the major transmission pump stations, the forcemains, the discharge locations for the

entire system at the WWTP, and any gravity sewer pipes and manholes located along the transmission routes downstream of the pump stations.

5.2 SEWER MODEL INPUTS

Each component of the model requires a variety of information, at a minimum, to perform the hydraulic calculations. SewerGEMs data objects are grouped as physical and non-physical. Physical objects refer to those network elements that can be visually shown on a map in the SewerGEMs workspace. The physical objects used for this model are junctions (manholes or pressure nodes), outfall (WWTP), storage units (wet wells), conduits (gravity sewer pipes or forcemains) and pumps.

Non-physical objects represent supplementary characteristics and processes within the study area. The non-physical objects include pump curves and time patterns. Pump curves permit flow to vary with different head conditions. Time patterns allow external Dry Weather Flow (DWF) and peak hourly flow (PHF) to vary in a periodic fashion. They consist of a set of adjustment factors applied as multipliers to a baseline DWF flow rate. In this case the time pattern acts as a diurnal curve, representing flow into the system throughout the day. The diurnal curve utilized mimics the widely accepted diurnal curve developed by the American Water Works Association (AWWA).

SewerGEMs provides a note attribute on each individual component to enter and store supplemental model related information concerning installation dates, field notes and how data was achieved. In addition to being stored with the feature, all supplemental information was kept on record as a hard copy. Pump and wet well construction information is provided in Appendix E.

5.2.1 GIS DATA

The available GIS data was imported into the model and included lift station locations, gravity sewer piping, manhole location, forcemains and the WWTP location.

5.2.2 PUMPS

In SewerGEMs, pumps are actually separate components from the wet wells as pumps can be utilized in various situations. The minimum pump information required for the model includes invert elevation, startup and shutoff depth and manufacturer pump curves. Pumps in SewerGEMs are represented by choosing various curve types. For the purpose of these models the Multiple Point (Head vs. Flow) curve was used to represent a pump where flow varies continuously with head differences between the inlet and outlet nodes. The manufacturers pump curves used in the model are provided in Appendix E.

5.2.3 WET WELLS

The minimum wet well information required for the model includes top of wet well elevations; sectional elevations such as maximum, initial, minimum, and base; and wet well diameter or area. The model uses all of the components to calculate rising and falling water levels in the wet well based on incoming loads and pumping capacity.

5.2.4 FORCEMAINS

Forcemains in the model require the following information: pipe length, size, upstream and downstream invert elevations, presence of a check valve, Hazen Williams “C” value and minor loss coefficient. The pipe material, size, and length values were typically imported into the model from available GIS data and verified by available as-builts.

The minor loss coefficient and Hazen-Williams “C” value for a forcemain are factors used in the determination of the minor loss and friction loss elements of the total dynamic head. Minor losses are head losses in a system caused by forcing water through a change in direction or through valves or fittings with obstructed or reduced diameters. Minor loss coefficients are based on historical research and experience. When modeling an existing pump and forcemain system, minor losses do not typically

represent a significant portion of the total dynamic head and are usually accounted for in the friction head losses. The one exception is the minor losses at a pump station which are related to the significant number of valves and fittings on the discharge side of the pump. Therefore, the only instances where minor losses were added to the model were on the section of forcemain on the downstream side of a pump. During calibration of the model, minor losses were occasionally added to more accurately reflect the pump condition witnessed during field drawdown testing.

Friction losses are head losses caused by the resistance the pumped water encounters from the pipe wall. There are several methods for calculating friction losses but the standard, accepted method for pressure systems is the Hazen Williams. The "C" value is a roughness coefficient in the Hazen Williams equation, which accounts for the resistance of the pipe based on material and age. The "C" values used in the model were estimated based on reported material type and the age of the system. It is important to note that for all new forcemain systems a conservative "C" value of 120 – 130 was used in the model to accurately portray the condition of the piping as it ages. This will ensure that the system is able to provide the necessary capacity over its lifetime.

To model forcemains accurately it is important to account for major changes in elevation. The feature SewerGEMs utilizes is a junction, which can physically represent a manhole or a pressure node.

5.2.5 GRAVITY SEWER PIPING AND MANHOLES

The gravity sewer is composed of manhole and gravity pipe elements in the model. The minimum required information for a manhole includes the rim, diameter and invert elevations. As the majority of manholes in a sewer system are typically 4 feet in diameter, this was the standard diameter used for junction nodes in the sewer model. The model uses this diameter to determine a surface area that was used to compute changes in water depth.

The minimum required information for gravity sewer piping includes pipe shape, pipe material, Manning's "n" value, upstream and downstream pipe inverts, length, and pipe size. The pipe material, size, and length values were typically imported into the model from available GIS data and verified by available as-builts. City staff additionally performed a visual inspection of a select group of manholes to determine the up and down stream inverts. Pipe shape was assumed to be circular in all cases.

The Manning's "n" value is associated with calculation of the slope of the energy grade of a pipe and in the case of gravity sewer is used to determine the velocity of water in the pipe. Similar to the Hazen-Williams "C" value, the Manning's "n" value is used to account for the resistance of the pipe based on material and age. The "n" values used in the model were estimated based on reported material type and the age of the system.

5.2.6 WASTEWATER TREATMENT PLANT

The location of the WWTP, as provided by the GIS data, was used in the model to locate the ultimate discharge outfalls for all the forcemains and gravity sewers for the system. Outfalls require an invert elevation and tailwater conditions. The tailwater conditions were considered to be a free discharge as all incoming pipes at the WWTP discharge into a manhole prior to the influent pump station.

5.2.7 SEWER GENERATION RATES "SEWER LOADS"

The junction DWF data table stores information regarding the sewer loads entering the collection system at the junction node. The junction DWF table was utilized to specifically load the ADF flow to particular manholes. Importing the diurnal curve allowed the model to accurately represent the pattern at which the flow entered the collection system. The PHF flow was loaded separately from the ADF and utilized a separate diurnal curve.

5.2.8 TOPOGRAPHY

Contour data from USGS was evaluated to determine the highest location along forcemain routes so that the static head could be accurately established. Junction (pressure) nodes were added along the forcemain routes as necessary to reflect the highest elevation of the main.

5.3 EXISTING CONDITIONS MODEL AND CALIBRATION

5.3.1 CALIBRATION

After entering all necessary data for the City's system, trouble shooting was performed, and the model was run to analyze the hydraulic calculations and corresponding capacities of the pump stations. As previously mentioned, several of the factors in headloss calculations are subjectively based on engineering standards and experience, primarily the Hazen-Williams "C" value and the Manning's "n" value. Each of the pump capacity results was evaluated and compared to the draw down test results if available.

In situations where the model calculated a pump's capacity to be significantly different than the draw down conditions or design operating point, the forcemain size and age, the Hazen-Williams "C" value, and the static head conditions were reevaluated and adjusted, within a reasonable range, to simulate the real-world or design operating condition.

In situations where the calculated pump's capacity was much lower than the draw down condition or design operating condition, the age of the pump station and forcemain, the size of the forcemain, and the Hazen-Williams "C" value were reevaluated to determine whether this reduced capacity was probable. Typically, as pumps age the impellers wear down, the pumps lose efficiency and are not capable of pumping the same capacity as when first installed. Additionally, as forcemains age, they can become clogged with sediments and grease, which increase the headloss through the forcemain and, therefore, reduce the capacity of the pump. Such factors could impact a reduction in capacity for pump stations which only had design operating conditions available.

Many of the pump systems utilize manifolded forcemains with more than one pump station operating on the same pipe. It was not always noted during the draw down testing whether manifolded pump stations were operating or not. If a modeled pump station showed a much lower capacity than the draw down testing results, various scenarios were evaluated in the model to determine whether the operation of manifolded pump stations was causing the reduction in pump capacity in comparison to the draw down results.

5.3.2 EXISTING CONDITIONS MODEL

After calibration of the City model was completed, an analysis of deficiencies in the systems was conducted. The analysis included an evaluation of water levels in manholes, pipe capacities which were exceeded or which were approaching full capacity, wet well capacity utilized, water levels in wet well and any above the lead pump on level, pump run times, and operation of lag pumps. Any noted deficiencies are elaborated in the following sections.

The City's existing conditions model includes 24 wet wells and pump setups, the corresponding forcemains, and 19 gravity sewer pipes segments between manholes, and 20 manholes. Table 5.1 provides information relating to various pump station related components in the City system.

Table 5.1 Pump Station Related Information

LS	No. Pumps	Design Operating Point Per Pump	Draw Down Date	Draw Down Operating Point (Pump 1)	Draw Down Operating Point (Pump 2)	Manifolded
		GPM		GPM	GPM	
1	2	Not Available	7-12-2022	113	95	Yes
2	2	Not Available	7-13-2022	399	488	Yes
3	2	Not Available	7-11-2022	793	304	Yes
4	2	Not Available	7-12-2022	331	282	Yes
5	2	Not Available	7-12-2022	27	52	Yes
6	2	Not Available	7-12-2022	148	148	Yes
7	2	Not Available	7-12-2022	78	10	Yes
8	2	Not Available	7-13-2022	-	-	Yes
9	2	Not Available	7-12-2022	253	587	Yes
10	2	Not Available	7-12-2022	-	-	Yes
11	2	Not Available	7-12-2022	197	197	Yes
12	2	Not Available	7-12-2022	138	75	Yes
13	2	Not Available	7-11-2022	357	357	Yes
14	2	Not Available	7-12-2022	328	434	Yes
15	2	Not Available	7-12-2022	0	48	Yes
16	2	Not Available	7-12-2022	127	152	No
17	2	Not Available	7-12-2022	634	-	Yes
18	2	Not Available	7-12-2022	78	78	Yes
19	2	Not Available	7-12-2022	56	127	Yes
20	2	Not Available	7-12-2022	-	-	Yes
21	2	Not Available	7-12-2022	96	33	No
22	2	Not Available	7-12-2022	282	247	Yes
23	2	130	7-12-2022	462	250	Yes
24	2	135	7-12-2022	-	-	Yes

-- denotes data that was not available

The analysis of the existing conditions model resulted in deficiencies at four lift stations. The model analysis results also revealed that the LS-14 basin has gravity mains with sags, negative slopes and staging flow.

Table 5.2 shows a comparison of the current lift station pump capacities and the required 2023 customer base pumping capacity and whether the station has sufficient capacity to meet the current level of service needed. If the station lacks sufficient capacity, it is recommended that the station be upgraded.

Table 5.2 Available Pump Station Pumping Capacity

LS	No. Pumps	Current Lift Station Pumping Capacity	2023 Customer Population Base Required Pumping Capacity*	Available Lift Station Pumping Capacity	Has Sufficient Capacity?	Current Lift Station Pumping Capacity Source
		GPM	GPM	GPM		
1	2	95	17	78	Yes	Draw Down
2	2	399	119	280	Yes	Draw Down
3	2	304	612	-308	No	Draw Down
4	2	282	5	277	Yes	Draw Down
5	2	27	45	-18	No	Draw Down
6	2	148	2	146	Yes	Draw Down
7	2	10	42	-32	No	Draw Down
8	2	-	5	-	N/A	N/A
9	2	253	27	226	Yes	Draw Down
10*	2	-	170	-	N/A	N/A
11	2	197	139	59	Yes	Draw Down
12	2	75	4	71	Yes	Draw Down
13	2	357	72	285	Yes	Draw Down
14	2	328	237	90	Yes	Draw Down
15	2	0	1	-	N/A	Draw Down
16	2	127	45	-	Yes	Draw Down
17	2	634	23	611	Yes	Draw Down
18	2	42	51	-9	No	Draw Down
19	2	56	3	53	Yes	Draw Down
20*	2	-	43	-	N/A	N/A
21	2	33	10	23	Yes	Draw Down
22	2	247	12	234	Yes	Draw Down
23	2	250	103	147	Yes	Draw Down
24	2	-	46	-	Yes	N/A

Table 5.3 provides a summary of the City system lift station, forcemain and wastewater treatment upgrades necessary to serve the current customer population. The projects listed are only related to treatment, pumping and hydraulic capacities. Any projects related to the structural, electrical or physical elements of the facility have been addressed in Section 3 and Section 5.

As seen in Section 4.4.3.1 the existing WWTP will exceed capacity in the five year window. With this understanding projects related to the hydraulic capacity have been identified and are seen in Table 5.3. It is anticipated that the proposed WWTP will be co-located with the exiting Reverse Osmosis Water Treatment Plant (ROWTP) on SR29.

Table 5.4 provides a summary of the septic conversion projects that are intended to come online in the 5 year window.

Table 5.3 Near Term Model Recommendations: 2023 – 2027 (Lift Stations and WWTP)

Facility	Near Term Recommendations: 2023 - 2027 (Lift Stations and WWTP)
LS-3 (Master Lift Station for New WWTP)	Install new pumps 30-35 HP and 316 SS guiderails
	Install new abovegrade 316 SS discharge piping, bends and valves
	Intall 2,300 LF of 10-inch forcemain to WWTP
LS-4 (Master Lift Station for New WWTP)	Install new pumps 10-15 HP and 316 SS guiderails
	Install new abovegrade 316 SS discharge piping, bends and valves
	Intall 6,250 LF of 10-inch forcemain to WWTP
LS-5	Install new pumps 5 HP and 316 SS guiderails
	Install new abovegrade 316 SS discharge piping, bends and valves
LS-7	Install new pumps 5 HP and 316 SS guiderails
	Install new abovegrade 316 SS discharge piping, bends and valves
LS-18	Install new pumps 3 HP and 316 SS guiderails
	Install new abovegrade 316 SS discharge piping, bends and valves
New WWTP	New 1.0 - 1.5 WWTP (Located East of Exisitng ROWTP) - Design/Permitting
New WWTP	New 1.0 - 1.5 WWTP - Construction (Land Application/DIW)
New WWTP	New Master Lift Station at Existing WWTP
New WWTP	Install new redundant forcemain from Existing WWTP to New WWTP

Table 5.4 Near Term Model Recommendations: 2023 – 2027 (Septic Conversion)

Facility	Near Term Recommendations: 2023 - 2027 (Septic Conversion)
Septic	Zone B Lift Station and Forcemain Construction, Gravity Main Construction
Septic	Zone J Lift Station and Forcemain Construction, Gravity Main Construction
Septic	Zone C Gravity Main Construction
Septic	Zone D Lift Station and Forcemain Construction, Gravity Main Construction
Septic	Zone E Lift Station and Forcemain Construction, Gravity Main Construction
Septic	Zone G Lift Station and Forcemain Construction, Gravity Main Construction
Septic	Zone H Gravity Main Construction
Septic	Zone I Gravity Main Construction

5.4 FUTURE SEWER SYSTEM RECOMMENDATION SUMMARY

The recommendations for sewer system expansion beyond the 5 year study period in the City are presented below in Tables 5.5-5.7. The improvements include septic conversion and expansion of existing and future facilities for forcemain construction and wastewater treatment plant to serve the development with a high level of service and reliability.

Table 5.5 5 – 10 Year Model Recommendations: 2028 – 2032 (Lift Stations and WWTP)

Facility	5 - 10 Year Recommendations: 2028 - 2032
LS-6, LS-12 and LS-15 Forcemain	Intall approximately 4,400 LF of 10-inch forcemain along Cowboy Way
LS-16, LS-17, LS-22 and LS-23 Forcemain	Intall approximately 4,600 LF of 10-inch forcemain along Broward Avenue
WWTP Expansion	1.0 - 1.5 WWTP Expansion - Design/Permitting

Table 5.6 5 – 10 Year Model Recommendations: 2028 – 2032 (Lift Stations and WWTP)

Facility	10 - 15 Year Recommendations: 2033 - 2037
WWTP Expansion	1.0 - 1.5 WWTP Expansion - Construction

Table 5.7 10 – 15 Year Model Recommendations: 2033 – 2037 (Septic Conversion)

Facility	Near Term Recommendations: 2023 - 2027 (Septic Conversion)
Septic	Zone F Gravity Main Construction

6.0 – MASTER PLAN IMPLEMENTATION

The culmination of the Sewer Master Plan is to provide a plan of implementation for the identified deficiencies and the proposed recommendations listed throughout the report. The Implementation Plan addresses both the Rehabilitation needs of the system to maintain and/or provide a desirable level of service for the current customer population (person) and also for the Expansion needs of the systems to service growth and development in the service areas.

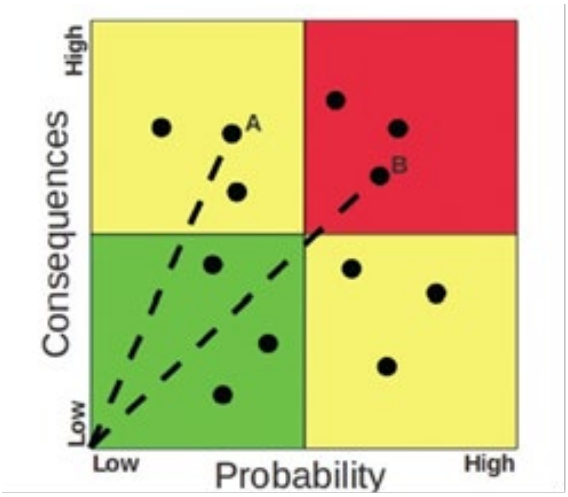
6.1 REHABILITATION CAPITAL IMPROVEMENT PLAN

The Sewer Rehabilitation Capital Improvement Plan (CIP) presented in the following section incorporate all deficiencies for the City as noted from the field assessments and Inflow & Infiltration (I&I) study in Section 3.0 and the hydraulic modeling efforts presented in Section 5.0 for the sewer system. The purpose of the Implementation Plan is to address deficiencies in the system which need to be handled in the near-term future to provide an acceptable level of service to the existing customer base population (person). This Rehabilitation CIP Implementation Plan will provide the City with a method of systematically and thoroughly addressing the anticipated needs of the existing sewer systems over the next 20 years. The critical deficiencies of the systems have been placed in the near term, five (2023-2027) to ten (2028–2032) year periods with the issues anticipated to become more critical in the later portion of the study period pushed back to the 15 (2033-2037) and 20 (2038-2042) year periods. As with any capital improvement plan, these plans should be re-evaluated every five years.

The Rehabilitation CIPs are comprehensive and typically identify any concerns of note from the site visits or modeling. Accordingly, it may be more feasible for the City to review the related Rehabilitation CIPs for similar critical issues which can be handled together and may be more cost effective. A few examples are the replacement of Ductile Iron discharge pipes in lift station wet wells which are corroded and the common electrical improvements such as providing wet well isolation.

6.1.1 CONSEQUENCE OF FAILURE AND RISK PRIORITIZATION

In order to provide a risk-based prioritization of the Rehabilitation CIP projects, a Consequence of Failure score was developed for each rehabilitation project. The Consequence of Failure score, similar to the Probability of Failure score, ranges from 1.0 to 5.0. The criteria for the Consequence of Failure score was developed by 4Waters and the associated matrix is included in Appendix B.



The matrix includes several factors to consider for developing the Consequence of Failure score including: Social/Community factors - public image (noise/odor/discharges), outage duration, customers affected, health and safety; financial factors – financial impact, operational/resource impact; and Environmental/Regulatory factors. A score of 1.0 indicates negligible or limited impact to these factors. If a facility fails it will have a score of 5.0 indicating potential severe impacts to public image, health and safety, financial resources, and/or consent order.

As noted, each rehabilitation project received a Consequence of Failure score which was then multiplied by the Probability of Failure score. This developed the Risk score which was used to prioritize the Rehabilitation CIP projects. The Consequence of Failure scores for the Rehabilitation CIP projects are provided in Appendix B.

6.1.2 SEWER SYSTEM REHABILITATION CIP – ORDER OF MAGNITUDE COST

The following section provides the recommended rehabilitation improvements necessary to provide an acceptable level of service and reliability within the City system. These address improvements at the lift stations, forcemains and gravity sewer systems. The estimated Order of Magnitude Costs are provided

with the rehabilitation items prioritized. Supporting detail of project scope and cost is provided in Appendix F and detailed location maps are provided at the end of this Section.

The estimated Order of Magnitude Costs of the projects included in the Sewer Rehabilitation Capital Improvement Plan are presented below. The tables also indicate the recommended priority and five year period of recommended implementation of the projects. The estimated costs for the Sewer Rehabilitation CIPs include installation, contingency (20%), and engineering, permitting, and administration (15%) fees.

Table 6.1 Sewer Rehabilitation Capital Improvement Plan (2023 – 2027 Implementation Window)

Total Risk Score and Quadrant	Facility	Recommended Improvements (0-5 Yr) Description	Order of Magnitude Costs
25.00	**Emergency WWTP Repairs**	**Civil/Mechanical** Upgrade headworks by installing static screen, Install a new equalization tank and transfer pumps, Upgrade master lift station with new submersible pumps **Electrical** Install electrical system upgrades associated with new master and lift station pumps, including controls and instrumetation	$ 3,500,000
22.50	**LS-3 Upgrade & New FM**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 10" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating, Install 10" forcemain **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 1,500,000
22.50	**LS-9 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 450,000
22.50	**LS-2 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 6" piping and plug/check valves in valve vault, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 350,000
20.25	**LS-14 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 6" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 565,000

Table 6.1 Sewer Rehabilitation Capital Improvement Plan (2023 – 2027 Implementation Window) cont.

Total Risk Score and Quadrant	Facility	Recommended Improvements (0-5 Yr) Description	Order of Magnitude Costs
20.25	**LS-11 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 450,000
20.00	**LS-4 Upgrade & New FM**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating, Install 10" forcemain **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 2,500,000
20.00	**LS-5 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating, Repair concrete slab **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 335,000
20.00	**LS-8 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 310,000
18.00	**LS-13 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 6" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 365,000

Table 6.1 Sewer Rehabilitation Capital Improvement Plan (2023 – 2027 Implementation Window) cont.

Total Risk Score and Quadrant	Facility	Recommended Improvements (0-5 Yr) Description	Order of Magnitude Costs
17.50	**LS-7 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 320,000
15.00	**LS-12 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 6" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 540,000
15.00	**LS-6 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 520,000
14.00	**LS-15 (Additional LS Improvements - CO Driven)**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 480,000
N/A	**I&I**	**Civil/Mechanical** Additional collection system repairs.	$ 2,000,000
N/A	**Generators**	**Civil/Mechanical** Additional collection system repairs.	$ 450,000
Total Near Term (0-5 Yr) Sewer Rehabilitation CIP			**$ 14,635,000**

Table 6.2 Sewer Rehabilitation Capital Improvement Plan (2028 – 2032 Implementation Window)

Total Risk Score and Quadrant	Facility	Recommended Improvements (Long Term 5-10 Yr) Description	Order of Magnitude Costs
14.00	**LS-6, LS-12 and LS-15 Forcemain**	**Civil/Mechanical** Install approximately 4,400 LF 10" forcemain from LS-15 to manifold with LS-4.	$ 895,000
14.00	**LS-17**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 6" piping and plug/check valves in valve vault, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 475,000
14.00	**LS-16, LS-17, LS-22 and LS-23 Forcemain**	**Civil/Mechanical** Install approximately 4,600 LF 10" forcemain from LS-17 to discharge at LS-3manhole on Howe Ave and 2nd Ave.	$ 935,000
14.00	**LS-18**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 300,000
13.50	**LS-1**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault, Install wet well liner, Install new water service, Install safety grating **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 345,000
Total Long Term (5- 10 Yr) Sewer Rehabilitation CIP Plan			**$ 2,950,000**

Table 6.3 Sewer Rehabilitation Capital Improvement Plan (2033 – 2037 Implementation Window)

Total Risk Score and Quadrant	Facility	Recommended Improvements (Long Term 5-10 Yr) Description	Order of Magnitude Costs
12.00	**LS-19**	**Civil/Mechanical** Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install safety grating, **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 265,000
10.50	**LS-16**	**Civil/Mechanical** Replace pumps and rails due to age, Replace 4" piping and plug/check valves in valve vault and install above grade, Install wet well liner, Install safety grating, **Electrical** Entire electrical system capital replacement. Poor condition and significant safety hazards.	$ 300,000
Total Long Term (10 - 15 Yr) Sewer Rehabilitation CIP Plan			**$ 565,000**

Table 6.4 Sewer Rehabilitation Capital Improvement Plan (2038 – 2042 Implementation Window)

Total Risk Score and Quadrant	Facility	Recommended Improvements (Long Term 5-10 Yr) Description	Order of Magnitude Costs
9.00	**LS-22**	**Civil/Mechanical** Install wet well liner, Install fencing, Install safety grating, **Electrical** Replace / upgrade all electrical equipment	$ 120,000
8.00	**LS-23**	**Civil/Mechanical** Install safety grating on wet well, Install larger pumps to accommodate future development **Electrical** Replace / upgrade all electrical equipment	$ 270,000
7.00	**LS-24**	**Civil/Mechanical** Install wet well liner, Install safety grating **Electrical** Replace / upgrade all electrical equipment	$ 260,000
5.00	**LS-21**	**Civil/Mechanical** Install safety grating on wet well. **Electrical** Replace / upgrade all electrical equipment	$ 135,000
Total Long Term (15 - 20 Yr) Sewer Rehabilitation Plan			**$ 785,000**

6.2 EXPANSION CAPITAL IMPROVEMENT PLAN

The City of LaBelle and Hendry County are anticipating growth and development within the 20 year period of this study, therefore this Sewer Master Plan addresses the long-term future needs of the sewer systems to serve these new developments. The sewer Expansion Capital Improvement Plans presented in the following sections incorporate all the upgrades necessary, on a broad basis, to provide sewer service to the developments that have been identified and to address conversion of septic systems. Supporting detail of project scope and cost is provided in Appendix F.

The projects have been prioritized and are in order of need to address the growth and development accordingly. An attempt has been made to develop the Expansion CIP timeline in a reasonable manner such that Engineering, Design, Permitting and Construction can be completed as needed to serve anticipated development. It will be vital to proper planning to regularly coordinate the Expansion CIPs with the City so that the infrastructure needs can be properly addressed.

6.2.1 SEWER SYSTEM EXPANSION CIP - ORDER OF MAGNITUDE COST

The estimated Order of Magnitude Costs of the projects included in the Sewer Expansion Capital Improvement Plan are provided below. The table also indicates the recommended priority and five year period of recommended implementation of the projects to meet the anticipated growth. The estimated costs for the Sewer Expansion CIPs include installation, contingency (20%), and engineering, permitting, and administration (15%) fees.

Table 6.5 Expansion Capital Improvement Plan

Overall Priority	Project Description	Implementation Year	Order of Magnitude Cost	Implementation Window Total
1	Zone B Lift Station and Forcemain Construction, Gravity Main Construction (Septic)	2023-2027	$ 4,854,000	
2	New WWTP - Design/Permitting for Design Capacity of 1.0 - 1.5 MGD	2023-2027	$ 2,000,000	
3	New WWTP - Construction for Design Capacity of 1.0 - 1.5 MGD	2023-2027	$ 28,750,000	
4	Construction of new Disposal Site or Expansion of Existing Site	2023-2027	$ 3,500,000	
5	New Master Lift Station at Existing WWTP	2023-2027	$ 3,500,000	
6	Redundant FM from Existing WWTP to New WRF	2023-2027	$ 2,750,000	
7	Zone C Gravity Main Construction (Septic)	2023-2027	$ 7,394,000	
8	Zone D Lift Station and Forcemain Construction, Gravity Main Construction (Septic)	2023-2027	$ 5,313,000	$ 71,051,000
9	Zone E Lift Station and Forcemain Construction, Gravity Main Construction (Septic)	2023-2027	$ 6,032,000	
10	Zone G Lift Station and Forcemain Construction, Gravity Main Construction (Septic)	2023-2027	$ 3,422,000	
11	Zone H Gravity Main Construction (Septic)	2023-2027	$ 817,000	
12	Zone I Gravity Main Construction (Septic)	2023-2027	$ 1,010,000	
13	Zone J Lift Station and Forcemain Construction, Gravity Main Construction (Septic)	2023-2027	$ 1,709,000	
14	New WWTP - Land Acquisition, Design/Permitting for 1.0 - 1.5 MGD WRF	2028-2032	$ 2,000,000	$ 2,000,000
15	Zone F Gravity Main Construction (Septic)	2033-2037	$ 1,000,000	$ 29,750,000
16	New WWTP - Construction for 1.0 - 1.5 MGD for WRF	2033-2037	$ 28,750,000	
Total Sewer Expansion CIP				**$ 102,801,000**

6.3 FINANCIAL ELEMENT

This section provides an evaluation and discussion of project funding for the recommended Sewer Master Plan projects. The City of LaBelle maintains a public utility and relies primarily on user fee revenue billed monthly to its sewer customers. The City also earns revenue through miscellaneous customer services, penalties, and capital improvement fees collected from new development. As part of the Sewer Master Plan, Raftelis has developed a 20-year financial model to evaluate the adequacy of revenues to fund the Sewer Master Plan capital projects and ongoing operating expenses. At the time of publication of this report, Raftelis was working to evaluate the recommendations from the Rehabilitation and Expansion capital projects included in the first five years of this study as part of the fiscal year 2024 rate analysis and revenue sufficiency conducted for the City.

6.3.1 CAPITAL FUNDING

The Sewer Master Plan projects have three major funding sources:

1) Renewal and Replacement Fund ("R&R Fund"): This is a dedicated City fund for existing capital asset renewal and replacement.

2) Wastewater Impact Fees: New development is required to pay impact fees to accommodate for the use of transmission and treatment capacity. Such funds are reserved by the City and dedicated to growth related projects.

3) State and Federal Grants: The City regularly pursues infrastructure grants from both State and Federal agencies such as State Revolving Fund, Community Development Block Grant, USDA Rural Development, the US Economic Development Agency. The available grants vary in amount and criteria and typically require matching funds for a portion of the grant amount.

6.3.2 REVENUE REQUIREMENTS

The financial element is primarily concerned with project funding as outlined above. These funding sources are integrated into a multi-year financial model to identify revenue sufficiency and debt service coverage trends. Two critical goals for the financial element are minimum year end reserves and debt service coverage.

6.3.3 REVENUE SUFFICIENCY CONCLUSIONS

An update to the financial model and revenue sufficiency conclusions for the City's anticipated operations and capital improvements and a comparison of the City's sewer rates in comparison to others in the region is provided in Appendix G.

7.0 – CONCLUSIONS AND RECOMMENDATIONS

The goal of the Sewer Master Plan is to assess the current "health" of the sewer system to ensure that it meets the needs of the community. The analysis intends to provide the City with a concise guide for planning near-term and long-term sewer system improvements with a focus on feasible solutions to sewer problems which balance the desired level of service to be provided with environmental, funding, and regulatory constraints.

In order to assess inefficiencies in the systems, an evaluation of the major components of the sewer systems was conducted which incorporated and extrapolated other various recent assessments conducted by the City including Facility Plan evaluations which resulted in development of Sewer Captial Improvement Plan which was used to support grant applications. Hydraulic models of the sewer system was developed and calibrated with the Bentley System SewerGEMs software package. Sewer generation rates were developed and extended to 2043 for the service areas based on an analysis of actual flows and treatment volumes, billing data, and population projections prepared by 4Waters with City involvement and information provided by PUDs and developers in the region.

The overall service area of the City's sewer system includes the existing City infrastructure limits and unserved areas within the City's boundary or within the annexation process. The service area has been delineated with this Sewer Master Plan, reference Figure 4.1.

7.1 CONCLUSIONS

One of the first tasks of the Master Plan as to assess the systems condition by performing field inspections of the major sewer transmission systems and evaluating the waste water treatment facility operating abilities.

The results of the facility inspections and the hydraulic model indicate that the sewer system is effectively operated and in relatively good condition. Limited issues of concern were identified such as significant corrosion on discharge piping, a need for increased hydraulic capacity and required electrical upgrades. City staff are aware these conditions and are working to develop and implement feasible and cost effective solutions for repair and operational reliability. Many of the lift station facilities were noted as having significant or severe corrosion – particularly on the ductile iron pump discharge piping. The failure of the discharge piping effectively results in failure of the lift station, subsequent sewer system overflows, and could lead to additional Consent Orders.

With the implementation and greater use of the City's asset management system, it is anticipated that data capture and assessment of facility condition information will be improved to ensure suitable maintenance is conducted at lift stations to extend the life of the facilities. Additionally, this information can be utilized to identify those facilities approaching the end of design life or which are at risk of failure in advance so that the necessary improvements can be made to maintain system reliability.

The hydraulic sewer models and operational data provided by the City indicate that overall the pumping and piping systems in the waste water treatment system are capable of handling the current sewer flows but not necessarily in accordance with industry standards and regulatory requirements for backup capacity. In particular, LS-3 was identified as having insufficient pumping capacity for the current base flow conditions and is slated for improvements with grant funding.

The occurrence of I&I has a significant impact on the WWTP collection system and leads to loss of system and treatment capacity, additional operation costs to transfer and treat I&I, and can cause structural damage and loss of integrity in the system. Significant portions of the City's sewer system is an older system with VCP (clay) pipe and brick manholes which is susceptible to I&I. Starting in 2023, the City began investigating the I&I in the system and has developed an implementation plan and program, continued with the evaluation included in this Sewer Master Plan, to utilize a systematic approach to identifying the sources of I&I in the sewer sub-basins and utilizing an arsenal of tactics including CCTV cleaning and inspection and smoke testing. The sewer sub-basins are being regularly prioritized to focus funding on the rehabilitation of areas of the collection system which will provide the most cost effective and impactful reduction in I&I.

7.2 RECOMMENDATIONS

In summary, the Sewer System CIP totals $122 million for the 20 year study period, although the majority are recommended for completion within the next ten years. A breakdown of the Sewer CIPS can be seen below and are in line with the CIP totals presented in the Sewer Facilities Plan.

Table 7.1 Sewer System CIP (Five Year Increments)

CIP Category	0-5 Year (2023 - 2027)	5-10 Year (2028 - 2032)	10-15 Year (2033 - 2027)	15-20 Year (2038 - 2042)	Total
Rehabilitiaton	$ 14,635,000	$ 2,950,000	$ 565,000	$ 785,000	$ 18,935,000
Expansion	$ 71,051,000	$ 2,000,000	$ 29,750,000	-	$ 102,801,000
Total	$ 85,686,000	$ 4,950,000	$ 30,315,000	$ 785,000	$ 121,736,000



City of LaBelle
2023 Water Master Plan

FOUR WATERS ENGINEERING





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Table 4.2	–	Projected Water Demands
Table 5.1	–	Water Storage Tank Model Data
Table 5.2	–	Total Lengths of Water Main in City Hydraulic Model
Table 5.3	–	Fire Hydrant Testing
Table 5.4	–	Existing Conditions Model Results
Table 5.5	–	Near Term Model Recommendations: 2023-2027
Table 5.6.1	–	Near Term Recommendations: 2023-2027
Table 5.6.2	–	20 Year Model Recommendations: 2038-2042
Table 6.1	–	Water Rehabilitation Capital Improvement Plan (2023-2027 Implementation Window)
Table 6.2	–	Water Rehabilitation Capital Improvement Plan (2028-2032 Implementation Window)
Table 6.3	–	Expansion Capital Improvement Plan
Table 7.1	–	Water System CIP (Five Year Increments)

1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

The City of LaBelle Public Works Department (City) has set a goal to provide water treatment and distribution that meets the health and safety of the community. To this end, the City commissioned Four Waters Engineering, Inc. (4Waters) to prepare a Water Master Plan (Master Plan) to assess the status of the existing system and to plan for capital improvements that meet the current and projected service area needs.

A Water Supply Facilities Work Plan was prepared for the City 2014, however since that time parts of the system have been modified or expanded and the City requires an up-to-date assessment to understand the current system hydraulics and to ensure the current level of service is being met and projected service needs are identified. Currently, the City is having a Water Facilities Plan developed for near term grant applications, which will additionally support the Water Master Plan.

The general scope of this project involved a thorough analysis of the City's water treatment and distribution system and as part of the Water Master Plan, 4Waters completed the following tasks:

- Existing system assessment and site inspections
- Population projections and associated water usage rates
- Existing water system data collection and analysis
- Development of hydraulic water model
- Compilation of rehabilitation and expansion capital improvement plans (CIPs) which addresses the need for renovation of existing water for a planning period of 20 years
- Rate Study prepared by Raftelis (Revenue Sufficiency Analysis, Monthly User Rate Design Analysis and Impact Fee Analysis)

The resulting 2023 Water Master Plan provides a concise guide for the City to utilize for planning near-term and long-term water distribution system improvements with a focus on feasible solutions to problems which balance the desired level of service to be provided with environmental, funding, and regulatory constraints.

1.2 SERVICE AREA AND TOPOGRAPHY

The City of LaBelle is located on the northern border of Hendry County, approximately 32 miles east of Fort Myers (the closest metropolitan area and located in Lee County), 50 miles east of the Gulf of Mexico and approximately 92 miles west of Palm Beach (Palm Beach County). LaBelle is bounded by Glades County to the north, Palm Beach Count to the east, Collier County to the south and Lee County to the west and encompasses approximately 12 square miles. It is the site of the county seat of Hendry County and the only urban area of any size in western Hendry County and southern Glades County. As such, LaBelle provides the commercial base for an area that reaches beyond the corporate limits of the City into surrounding Hendry and Glades Counties.

Two major state roads, State Road (SR) 80 and State Road 29, bisect the City. SR 80 (Hickpochee Avenue) connects the east and west sides of Southern Florida (Fort Myers to West Palm Beach) while SR 29 connects travelers north and south from SR 27 to Everglades City. Figure 1.1 provides a map of the City of LaBelle with the Water Master Plan evaluation area delineated.

According to the United States Geological Survey (USGS), the topographical elevations of the evaluation area range from a high of approximately 30 feet to a low of 5 feet, North American Datum of 1983 (NAD83). The higher areas are typically found in the middle of the City with the topography of the area gently sloping downward from the high areas towards the Caloosahatchee River. Figure 1.2 depicts the topography of the area.

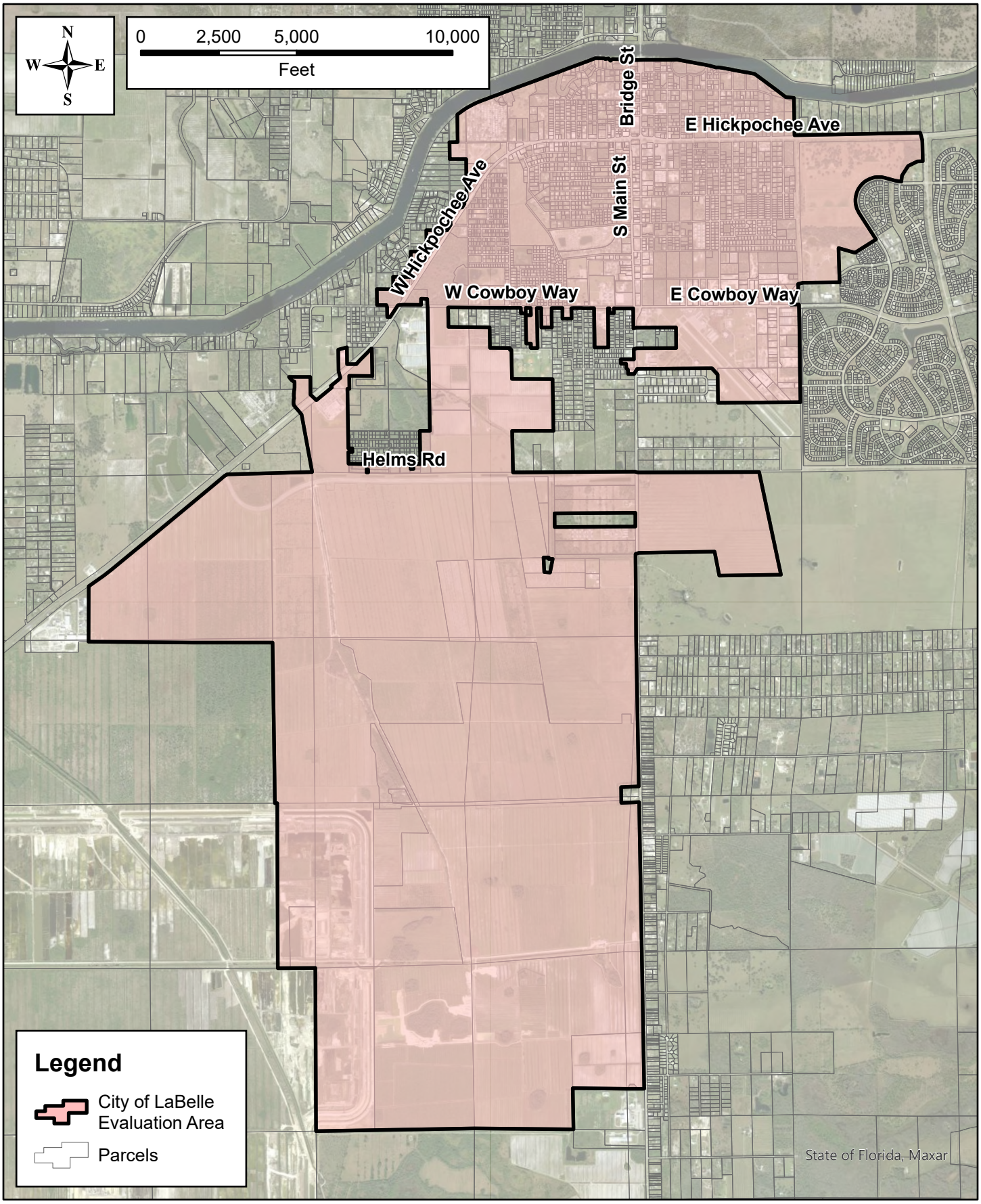


Figure 1.1: Water Master Plan Evaluation Area

LaBelle, FL

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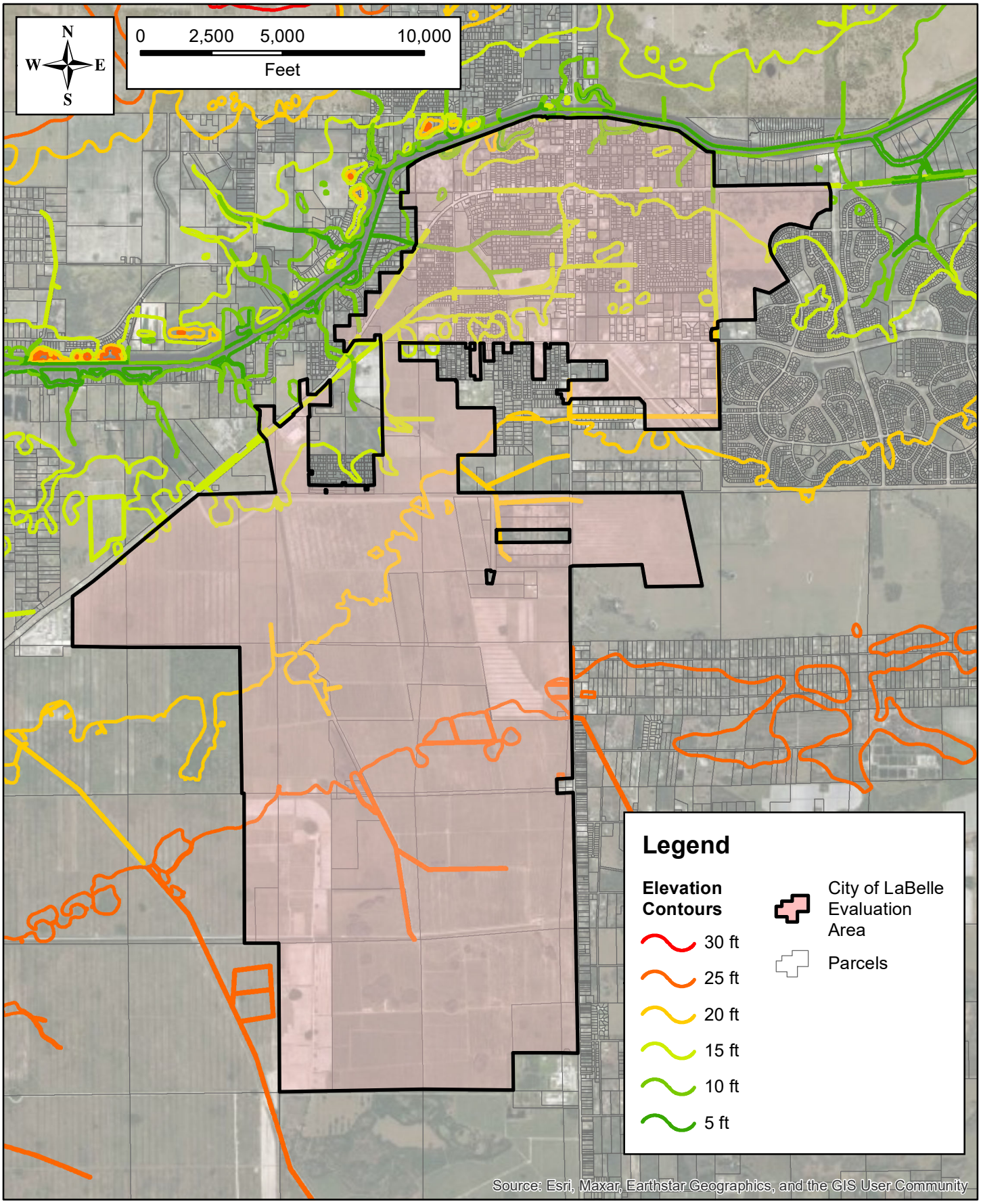


Figure 1.2: Topographical Contours

LaBelle, FL

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Revision Date: 4/14/2023 Path: P:\22-1021 LaBelle Water Master Plan 2022\16.0 GIS\Map Document\Report Figures\Figure 1.2 - Topographical Contours Ver2.mxd

1.3 ZONING AND LAND USE CHARACTERISTICS

The land uses throughout the City area include Commercial, Residential/Planned Residential, Industrial, Downtown District, Mixed Use, Public and South LaBelle Village. The City is predominantly a residential community although it has a large percentage of commercial and industrial properties in addition to a sizeable, annexed area of the City known as the South LaBelle Community. While the City is an economic hub and thoroughfare for millions of boxes of citrus, residential housing still accounts as the dominant land use type.

In 2002, LaBelle annexed approximately 5,982 acres into the City, through four separate annexations. The most significant annexed area is known as South LaBelle Community, which is proposed as a mixed-use community approved for 15,840 residential units, 1 million square feet of commercial development and over 300,000 square feet of industrial land uses.

Based on the City of Labelle's Land Development Code, the City has been divided up into a series of zoning districts to ensure the permitted and conditional use of development is compatible with surrounding land uses, served by adequate public facilities and to take into consideration natural and costal resources. The following zoning classifications are represented within the City:

- Agriculture (AG)
- Business (B-1 Professional, B-2 General and B-3 Heavy)
- Industrial (I-1A Light and I-2 Heavy)
- Mobile Home Park (MHP)
- Public (PS)
- Planned unit development zoning district (PUD)
- Residential, single family medium density, low density, family estates, duplex and duplex manufactured home (R-1, R1-A, R-1AA, R-2 and R-2T)
- Residential, multiple (R-3)
- Residential Neighborhood Urban (RNU)

Each zoning district has its own set criteria and established permitted uses and densities which shape the way water is utilized. Figure 1.3 depicts the zoning districts of the City.

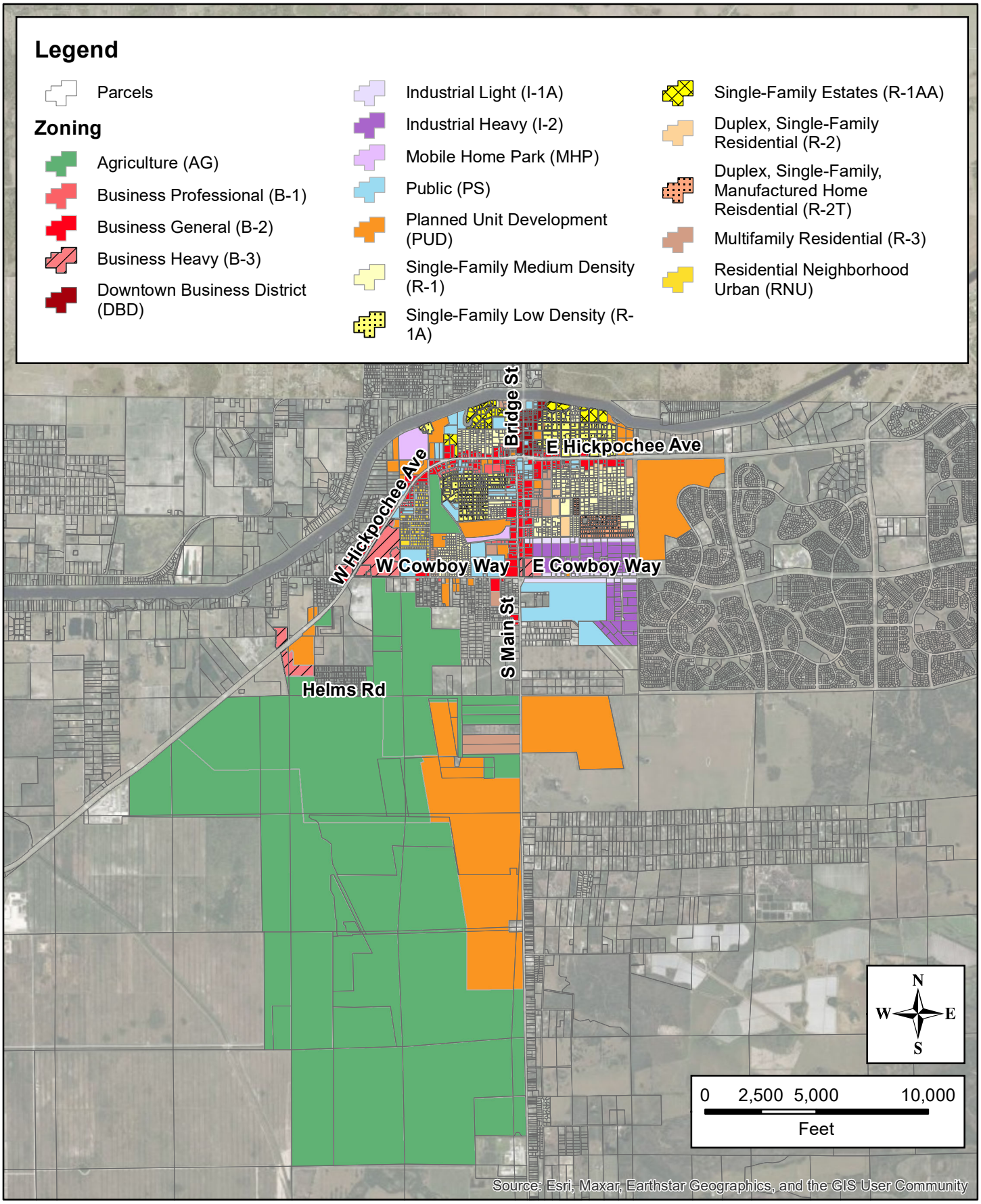


Figure 1.3: Zoning

LaBelle, FL

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Revision Date: 4/14/2023 Path: P:\22-1021 LaBelle Water Master Plan 2022\16.0 GIS\Map Document\Report Figures\Figure 1.3 - Zoning.mxd

1.4 EXISTING WATER SYSTEM SERVICE AREA

For the purposes of the Water Master Plan the water system service area represents the entire City limits, with a water treatment plant (WTP), a ground storage tank, well sites, water mains, valves and fire hydrants. As cataloged from historical City information, Table 1.1 provides an overview of the water system service components and Figure 1.4 depicts the physical extents of the water system service area.

Table 1.1 Water System

Water Treatment Plants	Elevated Storage Tanks	Ground Storage Tanks	Watermain Length (Miles)	Watermain Size Range (Inch)	Well Sites	Fire Hydrants	Water Valves
1	0	1	64	2 to 12	2	115	600

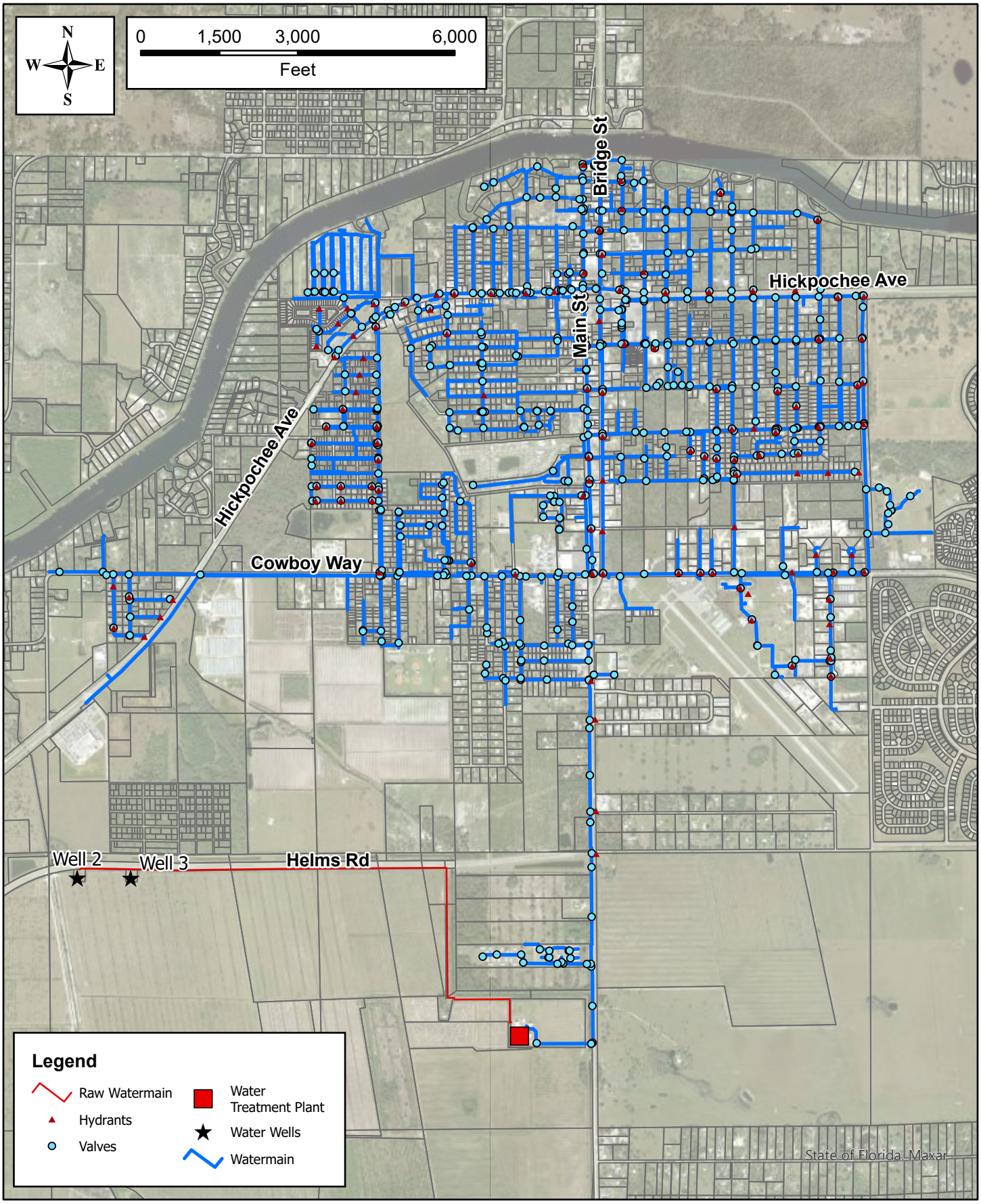


Figure 1.4: Water System Map

LaBelle, FL

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2.0 – EXISTING CONDITIONS

2.1 WATER SYSTEM COMPONENTS

2.1.1 WATER TREATMENT PLANT

The City owns and operates a 1.5 million gallons per day (MGD) Reverse Osmosis (RO) Water Treatment Plant (WTP), which is located at 2600 State Road 29. Construction on the RO WTP was completed in 2015. Design drawings are provided in Appendix A. Since 2019, the RO WTP has been the only water treatment plant serving the community since the closure of Water Treatment Plant No. 1, also known as the Main Street WTP. The Main Street WTP was originally constructed in the 1970's with a capacity of 999,999 gallons per day (gpd). The City received funding assistance in 2009 to construct a 750,000 gpd nano-filtration plant at the Main Street WTF to help improve water quality. While water quality was improved, it was not sufficient to warrant its continued operation after the construction of RO WTP. The RO WTP operates under the Florida Department of Environmental Protection (FDEP) Permit Number 293520-001-WC (issued June 2009). The RO WTP facility generally consists of the following:

- Raw Water – Upper Floridan Aquifer
    - 2 - 10' x 900' x 1,000 gallons per minute (gpm) wells cased to 600 feet
    - Raw Water Monitor
- RO Treatment – Pretreatment and Purification
    - Sand Separators
    - Scale Inhibitors and Sulfuric Acid addition
    - Two RO Feed Cartridge Filters
    - Two RO Membrane Feed Pumps
    - Two RO Membrane Units (Skids)
    - Blend Cartridge Filter
    - RO Membrane Cleaning System
- Post RO Treatment
    - Degasifier Aeration Tower – Removes odors caused by hydrogen sulfide
    - Chlorine Contact Chamber – Disinfection
    - Corrosion Inhibitors and Floride
        - Orthophosphate addition
        - Sodium Hydroxide addition
        - Hydrofluoric Acid addition
    - Two Finished Water Transfer Pumps (Vertical Turbine)
        - 1,050 gpm – 20 Hp
    - CO2 Feed System – Rehardens and add alkalinity to water to reduce corrosion rates
- Storage and Distribution
    - 1.0 million gallons per day (MGD) Finished Water Storage Tank
    - Four High Service Pumps (Horizontal Split Case)
        - 700 gpm – 50 Hp
        - 1,500 gpm – 100 Hp
    - Finished Water Flow Monitor
    - Concentrate Disposal
        - Deep Inject Well
        - Two Concentrate Pumps (Horizontal Split Case)
            - 575 gpm – 40 Hp
        - 1.5 MGD Concentrate Storage Tank

LaBelle RO WTP



LaBelle Well



Raw Water

Table 2.1 provides information on the permits, the aquifer withdraw, and the permitted volume of withdrawal. As noted in the table, the currently utilized source water for the water system is provided from the Upper Floridan Aquifer. The wells associated with the Main Street WTP and the RO WTP are permitted with groundwater consumptive use permits (CUP) with the South Florida Water Management District (SFWMD). Two wells located along Helms Road are currently in use to supply the RO WTP and have a combined permitted allowable annual average daily flow (ADF) of 0.919 MGD. Design drawings are provided in Appendix A. The Main Street WTP was supplied by six wells and was permitted for an allowable annual ADF of 0.137 MGD. Since the closure of the Main Street WTP, the six water table wells that served the WTP are no longer actively used and are in the process of being abandoned.

Table 2.1 Water System Permit – RO WTP

FDEP Groundwater Consumptive Use Permit No.	No. of Wells Permitted	Maximum Monthly Allocation (MG)	Max Annual Allocation (MG)	Aquifer Withdrawal	Water Production Facilities Served	Permit Expiration Date	Active
26-00105-W	2	33.55	335.52	Upper Floridan	ROWTP	6/27/2031	Yes
26-00105-W	6	5.01	50.13	Water Table	Main Street WTP	6/27/2031	No

RO Treatment – Pretreatment and Purification

The raw water from the wells is pumped through a pretreatment system that consists of a sand separator, sulfuric acid addition for pH adjustment, scale inhibitor addition, and cartridge filtration. The sand separator is used to remove sand particles from the water to protect the filtration components of the RO WTP. Pretreatment pH adjustment and addition of scale inhibitor are provided to prevent the precipitation of calcium carbonate and salt, which can create scaling on the membrane and affect the membrane's performance. Additionally, the cartridge filters remove large particulates in the water to prevent fouling of the membranes.

Following the pretreatment process is the purification process, where water is pumped by high feed vertical turbine pumps to dual RO membrane skids. There is one dedicated feed pump for each membrane skid. Each feed pump boosts the water to a maximum of 185 psi to the feed the membrane skid at a constant flow rate. An interstage booster pump is then utilized to increase the feed pressure following the first stage of the membrane treatment process. To meet finished water quantity and quality goals raw water is blended with water leaving the membrane skids (permeate) by a blend cartridge filter. A cleaning system for the membranes is provided to dissolve or remove inorganic scales, flush out particulate material, and break down bacterial slimes.

Post RO Treatment

From the membrane skids the permanent water enters a degasifer tower to remove entrained hydrogen sulfide. The degasifier operates by cascading water through media while air is introduced at the bottom of the tower providing counter current air flow, which causes the sulfide to be released into the gas phase. After cascading through the degasifier, the water drains into the chlorine contact chamber for disinfection. The chlorine contact chamber functions as a buffer between the water production and distribution to allow for necessary chlorine contact time set by FDEP. The water is pumped from the chlorine contact chamber by two 1,050 gpm vertical turbine transfer pumps where it is then treated for pH and alkalinity adjustment, corrosion control and fluoridation.

Storage and Distribution

Following post RO treatment, the water discharges to a 1.0 MGD finished water storage tank which fills during periods of low water demand and provides storage for operational equalization and fire protection. The water is pumped from the finished water storage tank to the distribution system by four horizontal split case high service pumps. The high service pumps are controlled by a local pressure transducer at the RO WTP site. Water additionally passes through a finished water flow monitor before leaving the site for quantity tracking and FDEP reporting.

The water distribution system providing treated water to customers is comprised of approximately 340,000 linear feet (LF) of watermain ranging from 2- to 12-inches with over 600 isolation valves and 115 fire hydrants.

A deep injection well is utilized as the permitted disposal method for the concentrate (brine) generated during the RO water treatment process. The injection well system will consist of a Class I Injection Well, monitoring well, 1.5 MGD concentrate storage tank and pumping facilities.

Permit and physical information for the finished water and concentrate storage tanks are summarized in Table 2.2.

Table 2.2 Storage Tanks

Storage Facility	FDEP Facility ID	Volume (MG)	Diameter (Feet)	High Water Elevation (Feet)	Finished Floor Elevation (Feet)	Material
Finished Water	5260050	1.0	75.0	56.8	26.5	Concrete
Concentrate	5260050	1.5	-	-	26.5	Concrete

- Denotes missing data

2.1.2 PRIVATE WELL SYSTEMS

Similar to other municipalities within the State of Florida, the City of Labelle has not been able to provide water to all developed areas within the service area. There are several reasons for this: the cost of infrastructure to serve an area may have exceeded the benefits, both economic and environmental; the low density or sparseness of construction did not make centralized water systems feasible; or areas were developed well before an organized utility department was established. The result of this, and commonly the only choice remaining for homeowners and developers, is the use of a private well system.

It is estimated that less than 10% of the City residents utilize private wells. Based on an evaluation of the existing water distribution system in the available GIS data and a comparison with established residential developments in the City many of the private well users are south of Cowboy Way and along SR80 south of Helm Road.

2.1.3 MAJOR WATER TRANSMISSION SYSTEM

The primary goal of the Water Master Plan is to evaluate the condition and needs of the existing water system and plan for future growth. A comprehensive assessment of all components of the water system is not necessary to achieve these goals in an effective manner. As such, 4Waters collaborated with City staff to define the components of the water system which represent the major backbone of the water treatment and distribution system including water mains, storage, pumps, and the WTP. In total, these components of the system have been termed the Major Water Transmission System (MWTS). All the components of the MWTS are public and are maintained by the City.

The limits and components of the MWTS are described in Table 2.3. Additionally, Figure 2.1 depicts the limits of the MWTS.

Table 2.3 Entire and Major Water Transmission System

Entire System Water Treatment Plants	MWTS Water Treatment Plants	Entire System Ground Storage Tanks	MWTS Ground Storage Tanks	Entire System Watermain Length (Feet)	MWTS Watermain Length (Feet)	MWTS Watermain Size Range (Feet)	MWTS Watermain Size Range (Inch)
1	1	1	1	339,628	2 to 12	226,747	2 to 12

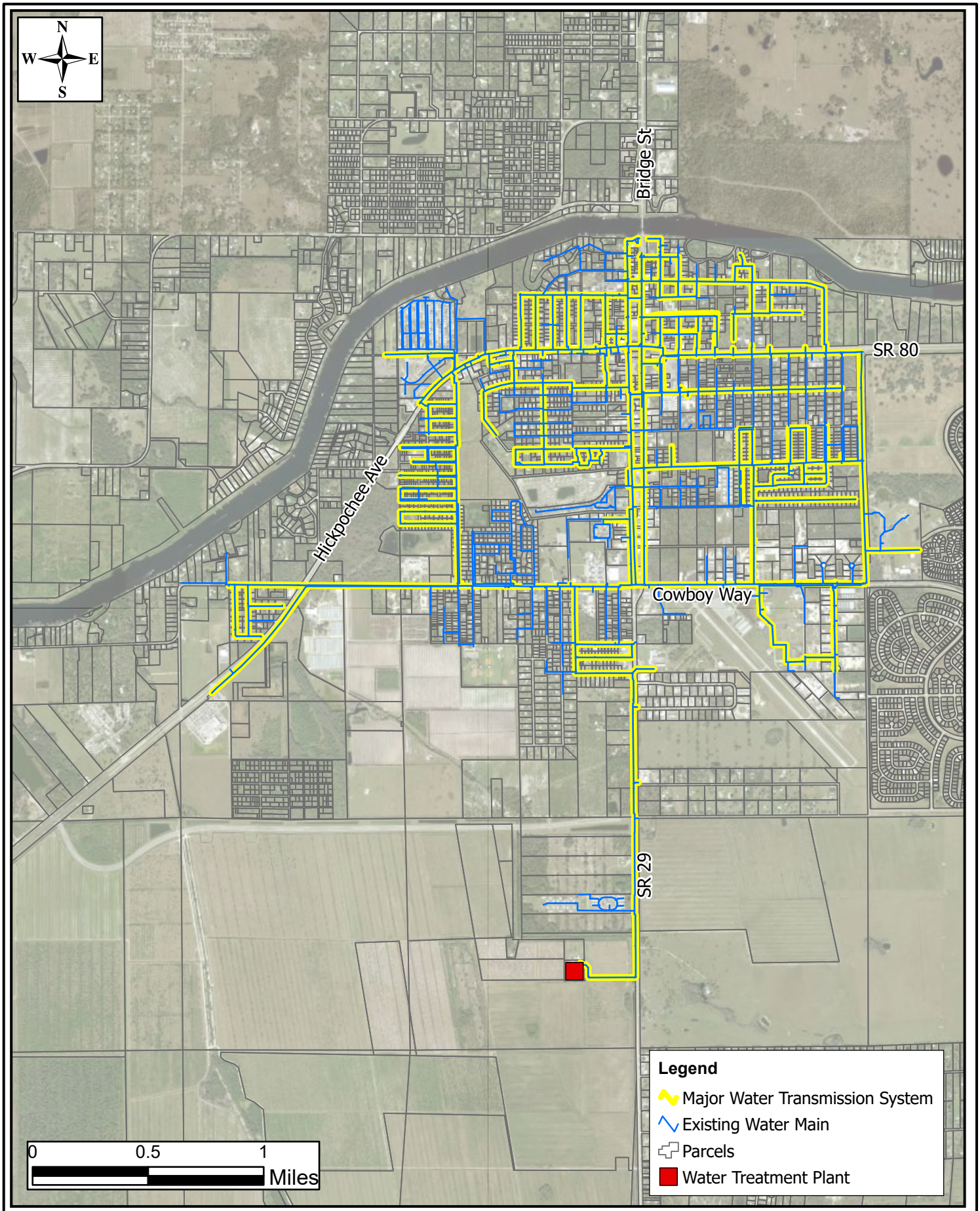


Figure 2.1 Major Water Transmission System

LaBelle, FL

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2.2 POPULATION AND WATER GENERATION RATES

2.2.1 BASE POPULATION FOR WATER SYSTEM AREA

Development of a base or existing population is critical to the Water Master Plan, as it is used for the determination of a per capita water demand, which forms the basis for future water demand projections. Table 2.4 below shows the 2023 population. 4Waters examined existing historical data including customer billing accounts and available GIS data including parcels, zoning/land use type, aerial imagery, and water meter locations to determine an overall number of households within the water service area. The 2023 population is in line with the historical customer billing account numbers provided by the City, which can be found in Appendix C.

Table 2.4: Water Service Area Population

Water System	Service Area 2023 Population
City of LaBelle	5,263

2.2.2 HISTORIC WATER PRODUCTION RATES

The total monthly flow in million gallons (MG) and monthly average daily flow (monthly ADF) water production for the water system from January 2021 through December 2022 is provided in Table 2.5. The monthly ADF valves for the City WTP is provided from monthly water production records. Per the CUP the maximum monthly withdrawal from the Upper Floridan Aquifer is 33.55 MG. Based on the information provided in the table, LaBelle did not exceed this withdrawal rate during the two-year period shown.

Table 2.5: Historic Water Production

Date	ROWTP Monthly ADF (MGD)	ROWTP Total Monthly Flow (MG)
Jan-21	0.62	19.19
Feb-21	0.62	17.33
Mar-21	0.64	19.79
Apr-21	0.64	19.11
May-21	0.66	20.32
Jun-21	0.62	18.46
Jul-21	0.60	18.47
Aug-21	0.60	18.49
Sep-21	0.60	18.49
Oct-21	0.63	19.54
Nov-21	0.62	18.51
Dec-21	0.64	19.82
Jan-22	*	*
Feb-22	0.67	18.75
Mar-22	0.66	20.58
Apr-22	0.66	19.85
May-22	0.65	20.05
Jun-22	0.62	18.47
Jul-22	0.62	19.19
Aug-22	0.66	20.55
Sep-22	0.65	19.43
Oct-22	0.68	21.05
Nov-22	0.67	20.09
Dec-22	0.68	21.10
2021 AADF (MGD)	0.62	
2022 AADF (MGD)	0.66	

Numbers based on Monthly Operating Reports

**Data Unavailable*

Future Average Daily Flow projections are based on population projections and the calculated per capita water demand usage. However, to determine the future Maximum Daily Flow (MDF) it is necessary to identify the maximum day water production and calculate a maximum day to average day ratio. The Average Day and Maximum Day recorded water production for the City of LaBelle is provided in Table 2.6.

Table 2.6: Average and Maximum Day Historic Water Production

Date	Average Day Production (MGD)	Maximum Day Production (MGD)
Jan-22	*	*
Feb-22	0.67	0.73
Mar-22	0.66	0.72
Apr-22	0.66	0.72
May-22	0.65	0.78
Jun-22	0.62	0.65
Jul-22	0.62	0.69
Aug-22	0.66	0.73
Sep-22	0.65	0.79
Oct-22	0.68	0.74
Nov-22	0.67	0.71
Dec-22	0.68	0.84
Average/Maximum	0.66	0.84

**Data Unavailable*

The Maximum Day Factors (MDF) were calculated for the system by dividing the overall Maximum Day Production by the annual ADF for 2022 as provided in Table 2.6.

The Peak Hour Flow (PHF) factor was calculated for the system by multiplying the maximum factor on the composite diurnal curve (1.33) by the Maximum Day Factor. The MDF and PHF for the system is presented in Table 2.7. The diurnal curve is further described in the following section.

Table 2.7: Maximum Day and Peak Hour Factors

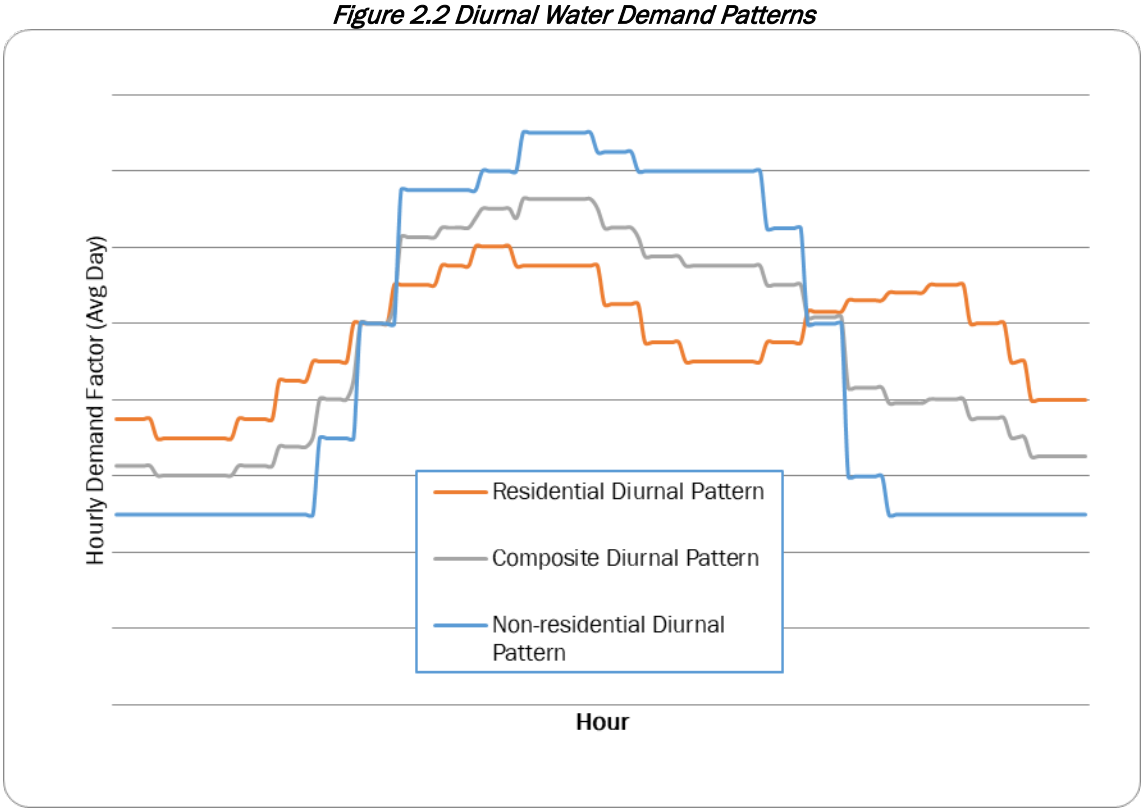
Water System	MDF Factor	PHF Factor
City of LaBelle	1.28	1.71

A typical range of peaking coefficients in the U.S. for MDF and PHF are 1.5 to 3.5 and 2.0 to 7.0, respectively. These coefficients are published in the *Water Distribution System Handbook*, Larry W. Mays, 2000. The MDF and PHF are lower than the typical range, which indicates that the water demand in the system is relatively consistent throughout the year, with minimal spikes in usage.

2.2.3 DAILY DEMAND

Water demands vary throughout the day and can be significantly different among residential and commercial users. Daily demand variations are typically shown on a diurnal demand curve, which plots the percentage of daily demand versus time, hourly, over a 24-hour period. The residential curve developed by American Water Works Association (AWWA Manual M32, 1989) was utilized as a starting point. Model scenarios for planning purposes were performed using a single composite diurnal pattern applied to aggregated water demand projections. Figure 2.2 displays the diurnal pattern developed and employed for this study.

Figure 2.2 Diurnal Water Demand Patterns



2.2.4 SEASONAL CHANGES

Water demands for the water system appear to have a seasonal component to them. While there are no large swings in water demand, there appears to be a slight decrease in usage in the summer months. The rainy season in Florida runs from May to October, so a decrease in demand could be connected to a decrease in irrigation needs during the summer months. The hydraulic model scenarios included modeling of maximum day conditions, which exceed the peak demands experienced during the high seasonal use.

2.2.5 WATER USAGE PER CAPITA

Development of a per capita value is critical to the Master Plan Update, as it is used for the determination of the projected future water usage rates through 2042. The per capita water usage was evaluated by dividing the monthly average production/consumption for the service area by the base water population. The water usage per capita rate for the service area is provided in Table 2.8.

Table 2.8: Water Usage Per Capita Rate

Per Capita Rate (gpc/d)
121

The 121 gallons per capita per day (gpcd) is in line with the adopted level of service in the City's 2024 Comprehensive Plan.

2.2.6 NON-REVENUE WATER

In any water system there is some unaccounted-for water use or what is more recently referred to by AWWA as non-revenue water. In simple terms non-revenue water is the difference between the total water supplied to the water system from water production facilities and the amount of metered water consumption. There are several reasons for water not being accounted for, including system leakage, meter inaccuracies and un-metered hydrant flushing activities.

The Florida Administrative Code (FAC) Chapter 62-40 requires that the Water Management Districts minimize unaccounted for water losses as a part of their ongoing water conservation efforts. The South Florida Water Management District (SFWMD) passes this requirement along to CUP holders in their service area. As a part of the water conservation requirements of the application, applicants and CUP holders are strongly encouraged to enact a water loss reduction program if water losses exceed 10%.

The results of the water loss audit results for City operations staff for 2021 and 2022 indicate losses at or below 10%. Detailed information concerning the water loss calculations is provided in Appendix C.

One of the primary tasks of the Water Master Plan is the general evaluation of the City's existing facilities relating to water production, treatment and distribution. These evaluations included field inspections and staff interviews to understand completed CIP projects and system improvements in addition to any concerns or needs. A summary of the field evaluations and status of the facilities is detailed in the following Sections.

4Waters utilized assessment forms to compile the field data gathered for the RO WTP and production well components and documented conditions with photographs. The site assessment documentation is provided in Appendix B and D.

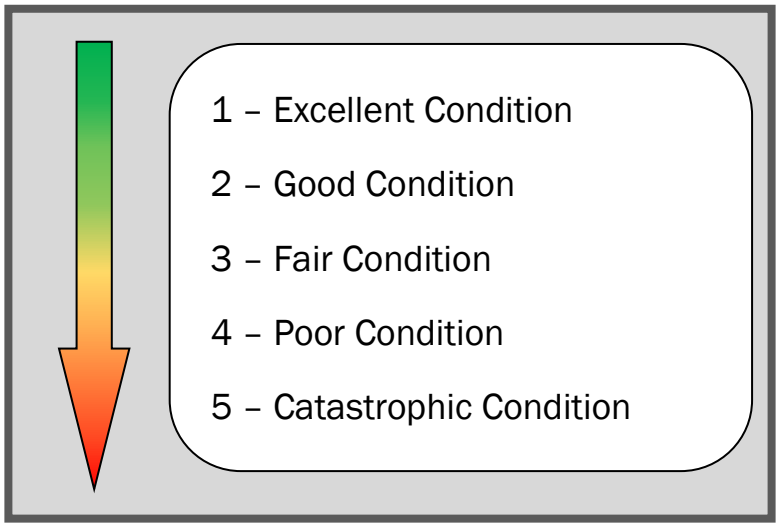
Charles Cobb with Chatham Engineering, Inc., a professional electrical engineer, accompanied 4Waters staff on the field inspections and provided the electrical and controls system assessments. Charles Cobb regularly provides electrical engineering design and evaluation services and is familiar with City's standards, staff and facilities. Deficiencies identified by Charles Cobb are included in the summaries in Section 3.2, and the full electrical assessment reports and recommendations are provided in Appendix D.

3.1 COMPONENT ASSESSMENT EVALUATION SYSTEM

Probability of Failure Scoring

Based on the visual inspections of the facilities and the information gathered from City management and operations staff, each water component was evaluated. A numerical ranking system with a scale of 1 to 5 was used to rate the civil, mechanical, and electrical condition of the facilities. This ranking is representative of the Probability of Failure for each facility. On this scale, 1 is indicative of a facility in apparent excellent operational condition with no visible mechanical or electrical issues or code violations. A score of 5 indicates significant civil, mechanical, or electrical problems at a facility which impedes operation or efficiency of the system and which will likely cause complete and imminent failure of the system. A facility with a score of 4 or 5 would be recommended for immediate attention.

Figure 3.1 Component Assessment Scoring



The focus of the assessments is the ability of a facility to meet its operational requirements and to determine any necessary capital improvements and a schedule for upgrade. Hydraulic analysis and evaluation of the water facilities has been conducted and is described in Sections 5.0 – Water Systems Hydraulic Model. The combination of the field and hydraulic assessments has been utilized to develop an overall Probability of Failure assessment score for a facility and the necessary rehabilitation efforts.

A risk assessment which incorporates the Probability of Failure score is used to prioritize the water projects and is presented in Section 6.0 Master Plan Implementation of the report.

3.1.1 ROUTINE PREVENTATIVE MAINTENANCE

Routine preventative maintenance is a vital element of achieving efficient operations and maintaining the assets of a utility system. The goal of preventative maintenance is to preserve and enhance equipment reliability by replacing worn components in a just-in-time manner to extend the life of the equipment and preclude failure. Preventive maintenance activities include equipment checks, partial or complete overhauls at specified periods, oil changes, lubrication, etc., and possibly altering conditions at a facility to enhance system efficiency. Additionally, during routine maintenance and inspections, staff can record equipment deterioration levels and appropriately schedule work orders to replace or repair worn parts prior to system failure.

Long-term benefits of preventive maintenance include:

- Improved system reliability.
- Decreased cost of replacement.
- Decreased system downtime.
- Better spares inventory management.

Long-term effects and cost comparisons usually favor preventive maintenance over performing maintenance actions only when the system fails. The City has routine preventative maintenance programs implemented for the water system and is currently working to enhance these capabilities through the use of contract operations provided by Woodard & Curran and by creating an asset management system to better utilize available information and assess the risk of component failure and necessary preventative measures.

Routine preventative maintenance was not a primary focus of the facility assessments although the general condition is reported in the summary reports in Appendix B and D. Unless a lack of routine preventative maintenance was evident by the poor condition of a facility or component and warranted inclusion on a CIP, it was not included in the assessment lists in sections below.

3.2 WATER SYSTEM COMPONENTS

The following sections summarize the assessments of the physical condition and capacity of the water production and treatment facilites, storage tank and distribution system. The WaterGEMs hydraulic model of the water system as described in Section 5.0 provides additional information on the hydraulic condition of the system and the capability of the water system to meet the flow and pressure requirements of the users. Recommendations for rehabilitation capital improvements are provided in Section 6.0 Master Plan Implementation.

3.2.1 WATER PRODUCTION AND TREATMENT FACILITIES

4Waters and Chatham Engineering with City water facility operators conducted field inspections of the RO WTP and two water production wells. 4Waters conducted the civil and mechanical evaluations and Chatham Engineering conducted the electrical system evaluations. The civil and mechanical assessments evaluated the pumps, piping, storage facilities, aeration equipment, wells, chemical feed systems, buildings and site conditions. The electrical assessments evaluated the electrical service, generator, generator disconnect, automatic transfer switch, generator fuel storage, well disconnect, well pump electrical, high service pumps, power distribution equipment, lighting, and SCADA system at the facilities. A summary of the noted deficiencies is provided below for the WTP and production well sites.

Overall the facilities which were visited were generally secure, well maintained, and the sites were neat and clear. It appears that good housekeeping measures are maintained along with important routine maintenance efforts such as monthly cleaning of the cascade aerators.

RO WTP		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	2.0	**1.5**

The RO WTP was constructed in 2015 and includes RO pretreatment, RO treatment membrane skid equipment, chemical injection equipment, finished water and concentrate storage and a deep injection well.

Civil/Mechanical

- Excessive corrosion on DIP high service pump discharge piping.
- Leaking seal water on high service pumps and shelter roof has damage from previous storm event.
- Corrosion at chemical injection points and degasifier blower.
- Chemical equipment shed should be enclosed to protect chemical pumps and electrical equipment. Chemical storage and metering equipment is reaching the end of its useful life.
- Corrosion on piping at stormwater pumping station.

Electrical

- The RO WTP electrical system is in excellent condition with engraved nameplates or typed circuit directory cards. All grounding is correct. The surge protection is of good quality and fully operational.
- Site recommendations are to provide signage at each pump stop button indicating which feeder or Motor Control Center starter serving the equipment and where it is located.
- Replace LED display on chemical feed equipment and protect from direct sunlight to prevent future failure.
- Lighting - good condition in the RO building, however emergency lighting should be added under the high service pump shelter.

Well #2		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	1.5	**2.0**

Well #2 was constructed in 2015 and includes a well pump, raw water discharge piping, electrical equipment building, electrical controls and generator.

Civil/Mechanical

- Well site #2 is in good condition with the exception of corrosion on DIP well head piping.
- Raw water sample tap lacks nylon plug

Electrical

- The well electrical equipment is in good condition with the exception of the automatic transfer switch, which was likely damaged by lightening. At time of site visit there was heavy carbon residue on the ATS compartment and the wiring harness connector plugs had been damaged by arcing.
- The generator engine exhaust stack exits the weather enclosure through the top of the generator.
- The generator shelter roof is in close proximity to the engine exhaust and there is notable carbon deposits on the underside of the structure.
- Of concern is the potential for short-cycling of the engine exhaust back to the fresh air intakes and the potential heating of the roof structure should the generator have to run for an extended period. It is recommended that the roof be removed or a window be provided that will allow the exhaust to vent to atmosphere without restriction.
- Need ability to connect portable generator at well site to provide emergency power source.

Well #3		
Overall Facility Probability of Failure Score:	**Civil/Mechanical**	**Electrical**
	1.5	**1.5**

Civil/Mechanical

- Well site #3 is in good condition with the exception of corrosion on DIP well head piping and leak around casing.

Electrical

- The well electrical equipment is in excellent condition with on minor recommendations noted at the time of the site visit.
- The generator engine exhaust stack exits the weather enclosure through the top of the generator.
- The generator shelter roof is in close proximity to the engine exhaust and there is notable carbon deposits on the underside of the structure.
- Of concern is the potential for short-cycling of the engine exhaust back to the fresh air intakes and the potential heating of the roof structure should the generator have to run for an extended period. It is recommended that the roof be removed or a window be provided that will allow the exhaust to vent to atmosphere without restriction.
- Need ability to connect portable generator at well site to provide emergency power source.

3.2.1.1 CITY SOURCE WATER ASSESSMENT

As noted in Section 2.1, the source water for the two wells that are operated and maintained by the City is groundwater that is pumped from the upper Floridan Aquifer. The Upper Floridan Aquifer is often used as a primary water source for the public water supply, for agricultural uses, and industrial uses when surface waters are not available.

Largest concern with the Upper Floridan is the susceptibility to saltwater intrusion with increased drawdown of the continued usage. If usage of the groundwater within the Floridan Aquifer is at an unsustainable rate, saltwater can migrate towards the areas where groundwater is being pumped out. While saltwater intrusion is not currently a concern for the City, it is something to be aware of in the event it does become an issue in the future as a result of sea level rise and the continued migration of saltwater inland.

3.2.1.2 WATER PRODUCTION FACILITY AVAILABLE CAPACITY

Section 2.2.1 provides an analysis of the historic water production for the water system over two-year period from January 2021 through December 2022 to assess the current annual average daily flow (AADF) and the change in AADF during the analysis period. This information was utilized to develop the per capita water usage for the water system as described in Section 2.2.4.

Table 3.1 below provides a comparison of the historic and permitted monthly flow over the recent two-year period of 2021 through 2022 to assess available capacity for the wells and the water system. Based on the calculated historic water production rates, the wells and water system as a whole currently have sufficient available permitted groundwater withdrawal capacity. The monthly flow for each 12-month period from January through December of 2021 and 2022 are provided in Table 3.1. The data indicates water production/consumption increased 5% from 2021 to 2022. Based on the 2021/2022 monthly, the City water system is currently utilizing 57 to 59% of the permitted water system monthly groundwater withdrawal capacity.

This analysis is based strictly on water production records and does not assess any water losses in the system which could, if rehabilitated, reduce the necessary water production rate. An evaluation of the available capacity of the water production facility equipment and the distribution system is provided in Section 5.0 Water System Hydraulic Model.

Table 3.1 Water System Historic and Permitted Monthly ADF

Date	ROWTP Total Monthly Flow (MG)
Jan-21	19.19
Feb-21	17.33
Mar-21	19.79
Apr-21	19.11
May-21	20.32
Jun-21	18.46
Jul-21	18.47
Aug-21	18.49
Sep-21	18.49
Oct-21	19.54
Nov-21	18.51
Dec-21	19.82
Jan-22	*
Feb-22	18.75
Mar-22	20.58
Apr-22	19.85
May-22	20.05
Jun-22	18.47
Jul-22	19.19
Aug-22	20.55
Sep-22	19.43
Oct-22	21.05
Nov-22	20.09
Dec-22	21.10
Average Monthly (MG)	**19.42**
Maximum Monthly (MG)	**21.10**
Average Monthly (MG) - 2021	**18.96**
Average Monthly (MG) - 2022	**19.92**
Permitted Water System Withdrawal Limits Monthly (MG)	**33.55**

Numbers based on Monthly Operating Reports

Numbers based SFWMD CUP for Upper Floridian Aquifer

**Data Unavailable .*

3.2.2 WATER STORAGE CAPACITY AND CONDITION

3.2.2.1 CITY AVAILABLE WATER STORAGE CAPACITY

The City's water system only utilizes ground storage tanks (GST); there are no elevated storage tanks in the system. Section 2.1.1. Water Treatment Plant provides information on the location and specifications of the storage tanks for the City's water system. A summary of the water system storage capacity is provided in Table 3.2 below.

Table 3.2 Storage Tank Capacity and Requirements

Total No. of GSTs	Total GST Volume (MG)	2 Hr Combined Peak Hr Domestic + Fire Flow (MGD)	Excess Capacity Over Regulatory Suggestions (MG)
1	1.00	1.35	-0.35

Peak Hour is based on an average of the peak hourly flow from 2021 and 2022 based on peaking factor applied to AADF
Fire flow of 1,000 gallons/minute

Determining the proper quantity of water storage is a balance between ensuring sufficient water is available for typical water demands and fire protection and avoiding excessive storage which can lead to slow turnover from tanks and result in deteriorated water quality. There are several guidelines for developing a suitable storage capacity. In Florida, the Florida Department of Environmental Protection (FDEP) states that it depends on the specific water system's needs, but generally, it should be enough to cover peak demand during emergencies, typically calculated based on a percentage of the average daily water production under Regulation 62-555 Operation and Maintenance of Public Water Systems.

Table 3.2 above presents the total storage capacity of the City's water system and the required storage volume based on FDEP suggestions which are based on peak hourly flow + fire flow. The 2021 and 2022 well production records were utilized to calculate the flow quantities. Based on this evaluation, the City's water system has a deficit of 350,000 gallons for the existing customer base.

Further evaluation of the growth and development during the 20 year period is presented in Sections 4.0 Future Conditions (necessary capacity) and 5.0 Water System Hydraulic Model (recommended storage construction) of the Master Plan.

3.2.2.2 CITY WATER STORAGE FACILITY CONDITION

The FDEP requires inspection for structural and coating integrity and cleaning of finished water storage tanks every five years. In 2020, US EPA addended the Revised Total Coliform Rule (RTCR) to include finished water storage facility inspection requirements or recommendations which will likely be implemented by states. The US EPA State Implementation Guidance – Final document for the Revised Total Coliform Rule was issued June 2020. The goal of the rule change is to have public water systems periodically inspect the interior and exterior of their finished water storage facilities, at a minimum, and to correct any sanitary defects found which if not remedied can result in breaches and accumulation of sediment, animals, insects, and other contaminants which can lead to public health issues.

The City already implements such inspections, maintenance and repairs at their ground storage tank with outside contractors. The tank inspection and cleaning are considered to be an operation and maintenance effort and accordingly have not been included in the capital improvement plans and program.

3.2.3 CITY WATER DISTRIBUTION SYSTEM

3.2.3.1 CITY WATER MAINS

As presented in Section 2.1.3, the Major Water Transmission System (MWTS) includes approximately 42.9 miles of water mains. Limited information is available on the existing water main materials and is primarily listed on printed maps kept by the City or is known directly by operations staff. The City's Water GIS includes limited information on water main material. Although it can be assumed that much of the City's water system consists of Polyvinyl Chloride (PVC), the water system in the older areas of the City were installed in the early 1940's and likely consist of other materials such as Transite (Asbestos Cement), Ductile Iron, Cast Iron, Galvanized Steel, and possibly concrete. Based on typical industry standards, the older water main and associated joint materials are nearing the end of the design useful life. The useful life of water main varies by material and is impacted by multiple factors including physical conditions of the installation – pipe bedding, pipe wall thickness, type of joint, inadequate thrust

restraint, poor installation practices; environmental conditions – corrosive soils or aggressive groundwater, stray currents causing electrolytic corrosion; or operational conditions such as changes in water pressure, leakage which undermines bedding, or low velocity or dead-end water mains.

Common failure modes for Transite pipe include circumferential breaks, longitudinal splits, and pipe degradation in aggressive groundwater; Cast Iron pipe failure modes include corrosion through holes, circumferential breaks, and longitudinal breaks; and Steel pipe failure is typically related to corrosion through holes.

4Waters recommends that the City develop a water main rehabilitation program with an initial goal to capture available information on water main materials and water main breaks from operations staff knowledge and paper maps into the City's Water GIS. Based on the findings, an implementation plan for water main replacement and potential upsizing can be developed to focus on improving reliability, pressure, and fire flow capabilities. An initial focus on replacement of undersized and Transite water main pipes is recommended. Although much of the undersized water mains are assumed to be 2-inch Galvanized, there are also backbone areas of the water distribution system which are undersized and unable to provide the necessary flow and pressure levels of service desired.

The City is implementing a Septic to Sewer Conversion program and could focus in these service areas as installation of new water mains could simultaneously take place with installation of centralized sewer systems while the roadway is opened up.

3.2.3.2 CITY WATER METERS AND VALVES

It is recommend the City implement a Water Meter Replacement program to assist with reducing non-revenue water within the water systems. The water meter replacement program will assist with changing out aging waters meters which are prone to operating more slowly and may not measure all the water passing through the meter which results in reduced revenues. With the age of the City's water system, it is anticipated that many of the water meters are operating outside of the American Water Works Association's (AWWA) recommended accuracy standards and therefore recording lower than actual water consumption which in turn results in an ineffective and reduced recovery of revenue by the City. The new water meters should have automated meter reading (AMR) capabilities which provide increased customer service by removing human error from visual meter readings, provide a more predictable meter reading schedule, allow instantaneous download of consumption data to the billing software, and allow for proactive notification of leaks or increased consumption patterns consequently also leading to water conservation improvements in the water system.

Water Meter Replacement Program (FY2024+)	Probability of Failure Score	3.0
• Replace all 5/8" and 1" water meters in system with new AMR capable meters • Replace large commercial service and production meters • Purchase equipment for drive-by meter reading		

In addition to a Water Meter Replacement program it recommended that the City implement a Water Valve Replacement program. Due to the age of the City's water system many of the water distribution valves have ceased in the open or closed position. This program will inventory, exercise and replace water valves to allow for improved system isolation and pressure throughout the system.

Water Valve Replacement Program (FY2024+)	Probability of Failure Score	4.5
• Exercise and catalog all valves in the system (~600) • Replace any inoperable valves (~140)		

3.2.3.3 CITY LEAD SERVICE LINES

In December 2020, the US Environmental Protection Agency (EPA) issued revisions to the Lead and Copper Rule (LCR) which requires all public water systems, whether large or small, to develop a service line inventory unless they can demonstrate that they have no lead service lines (LSLs). Subsequent revisions extended the deadline for the development of the inventory to October 16, 2024. The goal of the rule revisions is to reduce lead in drinking water. The EPA has directed states and systems to prioritize developing lead service line inventories and understand that should lead be found the piping it will need to be replaced. With this understanding it is recommended that the City implement a Lead Service Line Identification and Replacement program.

Lead Service Line Identification Program (FY2024 +)	Probability of Failure Score	3.0
• Investigate water service laterals which could not be determined as "non-lead" during the inventory. • Anticipated to require excavation/test hole exploration on both public and private side of the water meter.		

Lead Service Line Replacement Program (FY2027+)	Probability of Failure Score	3.0
• Complete replacement for water service lines identified as lead or galvanized requiring replacement. Replacement required on both sides of the water meter. • State funding with significant principal forgiveness is anticipated; City will apply after completion of inventory.		

4.0 – FUTURE CONDITIONS

The 2014 Water Supply Work Plan for the City of LaBelle focused on expanding the service area and improving existing infrastructure to maintain the proposed level of service for the community. In 2019, the City of LaBelle updated their Comprehensive Plan from 2011 to address an amendment to the water supply. Apart from the water supply update, there are very few updates or new information available relating to population projections. The zoning and future land use was however updated in a 2023 Comprehensive Plan update. More current sources of information were sought for the 2023 Water Master Plan including recent Planned Use Developments (PUDs) and the updates to the zoning and future land use.

The above-mentioned documents provide a reliable source of past and projected population data that was utilized as a part of the 2023 Water Master Plan. The following sections will discuss projected land use and anticipated development trends that were used to develop the projected population numbers and corresponding water demands.

4.1 PROJECTED LAND USE

There are diverse land uses throughout the City of LaBelle and the surrounding area that present their own demands for the City's water system. The City has been working to improve their water quality as well as strengthening and expanding the water system within the City limits. While this is still an achievable goal for the City, there is an additional need to expand the system to allow sufficient capacity for the planned future connections and uses as the City continues to grow and annex surrounding areas. There are several large areas in and around the City of LaBelle that are under PUDs.

The City of LaBelle is likely to see growth through infill and redevelopment with some areas under PUDs. Areas to the south and southwest of the City are mostly agricultural with several areas that have been accepted under PUDs to be developed as single-family and multi-family residential and commercial developments.

4.2 ANTICIPATED DEVELOPMENT TRENDS

The City of LaBelle breaks down its land areas by their designated uses in its 2023 Comprehensive Plan. The following sections describe the different types of land uses in the City of LaBelle's Comprehensive Plans with particular focus on the character of the land uses and the vision of the future development in those areas. This information is summarized briefly below and is presented as it guides a foundation for the development of population projections and water demand projections for the 20-year Master Plan study period from 2023 – 2043.

4.2.1 RESIDENTIAL

According to the City of Labelle Comprehensive Plan, there is 6,282 acres with developable residential uses. The areas with residential land uses have the following land classification breakdown:

- Residential Suburban – 10.4%
- Residential Urban – 2.8%
- Outlying Mixed Use – 4.2%
- Downtown District – 0.9%
- Old Groves Mixed Use – 5.1%
- South LaBelle Community – 76.6%

Between these residential land uses, the occupancy rate of the acreage breaks down into:

- Occupied – 18.3%
- Vacant – 81.7%

The high vacancy rate of the acreage is due to the annexation of the South LaBelle Community, which is primarily undeveloped. The residential zoning areas are scattered throughout the City.

To minimize sprawl that could occur and to strengthen the central core of LaBelle, residential unit density was increased for land use categories that are central to the survival and redevelopment of the core of LaBelle and reduced for land use categories where development is not a priority. With the current zoning structure, the Comprehensive Plan states that there should be sufficient accommodations for the projected population while encouraging development in areas that should help the community thrive.

4.2.2 COMMERCIAL

According to the City of Labelle Comprehensive Plan, there is 1,449 acres with developable commercial uses. The areas with commercial land uses have the following land classification breakdown:

- Outlying Mixed Use – 7.9%
- Downtown District – 3.9%
- Old Groves Mixed Use – 0.7%
- Commercial – 29.8%
- South LaBelle Community – 57.8%

Between these commercial land uses, the occupancy rate for these areas breaks down into:

- Occupied – 28.5%
- Vacant – 71.5%

These vacant commercial areas are located entirely in the Outlying Mixed Use and the South LaBelle Community areas. For rural towns of this size, 15 to 18 percent of the land should be for commercial development. The Comprehensive Plan states that the City has 1,280 acres for commercial use, or 14%, with 81% of this commercial land vacant. In order to keep up with the expected growth in population, the City will need to add an additional 183 acres of commercial land on top of the entire 1,280 acres by 2025.

The commercial zoning is concentrated along the State Road 80 and State Road 29 corridors. The corridor along SR29 includes the Downtown District, which is intended as a mixed-use zoning area to encourage the development of a compact downtown and enhance the historic area of the City.

4.2.3 INDUSTRIAL

According to the City of Labelle Comprehensive Plan, there is a total of 560 acres with developable industrial uses. The areas with industrial land uses have the following land classification breakdown:

- South LaBelle Community – 53.6%
- Industrial – 46.4%

Between these commercial land uses, the occupancy rate breaks down into:

- Occupied – 23.4%
- Vacant – 76.6%

These vacant commercial areas are located entirely in the Outlying Mixed Use and the South LaBelle Community areas. The industrial zoning is concentrated in the southeast corner of the City proper. Since most of the industrial properties are broken up into relatively small properties for this use, the City has had difficulty attracting new industrial development to the area.

Figure 4.1 below shows the future land use map and anticipated development trends as depicted in the 2023 Comprehensive Plan.

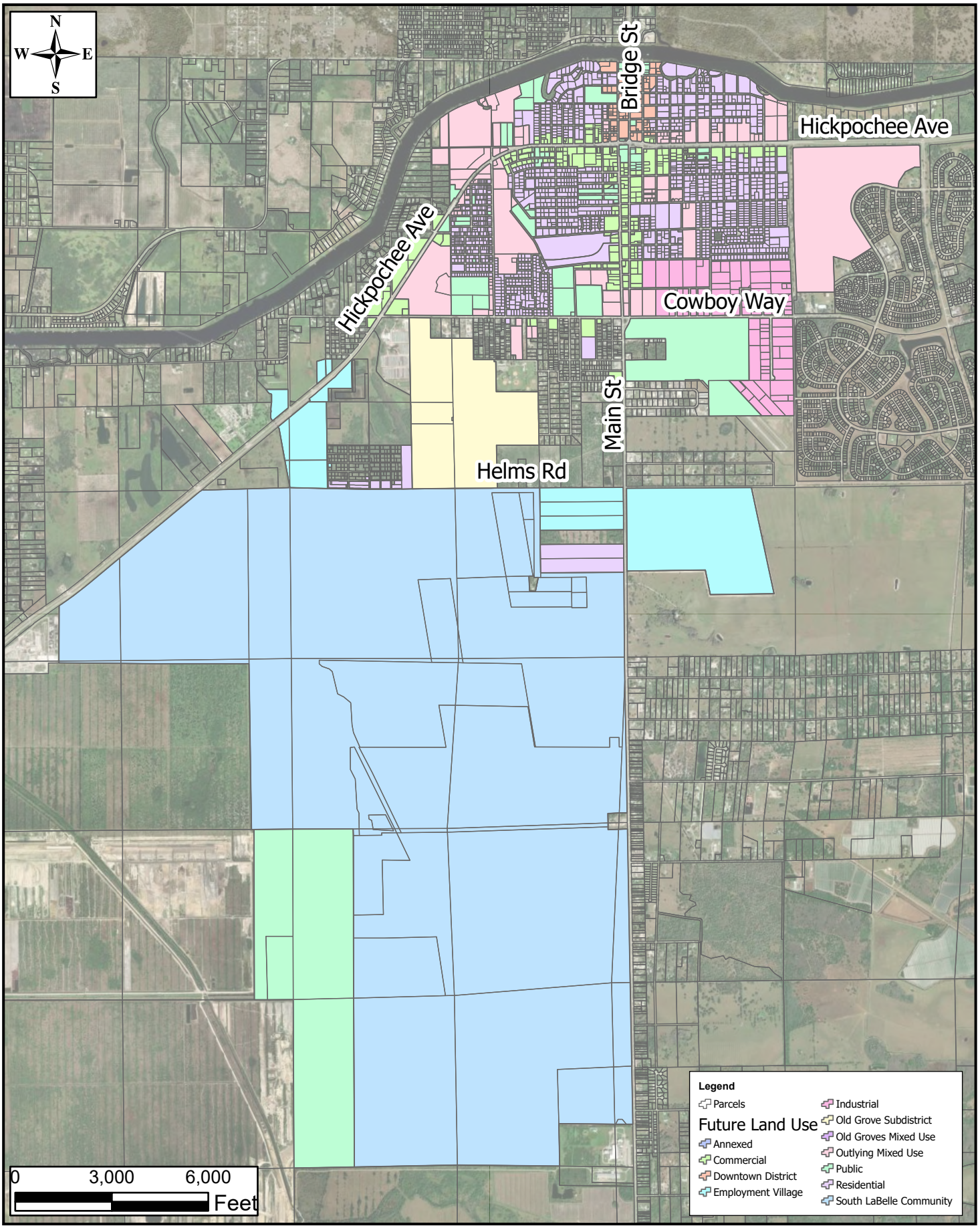


Figure 4.1 Future Land Use

LaBelle, FL

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

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4.3 PROJECTED POPULATION FOR THE SERVICE AREA

4.3.1 METHODOLOGY

The following sections describe the general methodology used to develop the population projections for the various water service area for the 20-year planning period. The complete accounting of the population projections is provided in Appendix C.

Several types of information were gathered to develop a comprehensive method of projecting the future development growth areas and associated populations for the water service area. The foundation for all the projections was the 2023 City of Labelle Comprehensive Plan. Additionally, 4Waters regularly corresponds with community stakeholders through development plan reviews and Hendry County.

Other sources of information that were used include the Labelle GIS databases and discussions with City staff.

All of this information was compiled and evaluated to determine the population projections for the 20-year study period. The population projections for each 5-year planning window were developed by using a linear interpolation between the 2023- and 2043-time frames.

4.3.2 KEY DEVELOPMENT AREAS

While the Comprehensive Plan was primarily used for the projections, it is still important to have an understanding of the key planned development areas (PUDs) and how they are geographically located throughout the City. The below sections provide a high-level description of some of the key development areas within the City. These areas will include the following:

- State Road 80 Corridor
- Private Well Conversion
- Helms Road
- Core City

As the State Road 80 Corridor Key Development Areas have not been included in the plan to this point, they will be discussed first.

4.3.2.1 STATE ROAD 80 CORRIDOR KEY DEVELOPMENT AREAS

There are several areas along State Road 80 that are considered key development areas: Old Florida RV Resort, SOFLO, Murphy's Landing, Cottonstrip PUD, River Landings, River Bend, Original Bryan Paul PUD, Brian Paul PUD, and Tractor Supply PUD. Much of the information gathered on these developments was provided by the Planning and Community Development Director for Hendry County.

The Old Florida RV Resort is a recently approved 160-acre development. It is designed for 444 RV lots, welcome center with sports courts, community amenity center, and ten acres of designated for future commercial development. Construction is expected to be completed by the end of 2024. It is important to note that with this development there is the plan for water and sewer main extensions down SR80 to the Hendry County line. These extensions will open up the corridor and allow for connection of developments along SR80, which otherwise would not have a viable connection to the City system. Some of these areas will need to be annexed into the City.

The SOFLO development is a 48-acre property south of State Road 80 on Townsend Canal Road. The planned development is centered around the Primera Science Center. This area is planned for 20 multi-family residential units, 160,000 square feet of office use, and 180,000 square feet for other uses such as animal enclosure buildings and a research facility.

Murphy's Landing is a roughly 210-acre area that is abutted to the north by the Caloosahatchee River and State Road 80 to the south. The property is divided by the Townsend Canal. The proposed usage for the development is 890 single-family residential units as well as 80,000 square feet of commercial use.

There are two large PUDs within the development area that are for commercial developments. The Cottonstrip PUD proposes to provide about 8 acres of commercial usage on a 15-acre property. The property has been partially built out with about 350,000 square feet of commercial area remaining for development. The property approved for the PUD is located at the intersection of State Road 80 and Double J Acres Road. The Tractor Supply PUD is a roughly 40-acre parcel at the intersection of Huggetts Road and State Road 80. It proposes to provide about 87,120 square feet for commercial use.

River Landings and River Bend are two large developments in the area. They are both RV resorts that offer RV lots that offer associated single-family residences on a portion of the lots. River Landings is a 33-acre parcel with 66 RV lots, and River Bend is a roughly 120-acre parcel with 315 RV lots. Both developments currently have onsite water treatment and wastewater treatment but have requested to be able to tie into the City's system.

Two PUDs are located near County Road 78A and State Road 80: Original Bryan Paul PUD and Bryan Paul PUD. The two PUDs include 1,443 residential units which are to be a mix of single- and multi-family and RV as well as 177,000 square feet of commercial usage. The Original Bryan Paul PUD was established in 2005, but no work has been done since that time. In 2017, the Bryan Paul PUD was established adjacent to the Original Bryan Paul PUD, but similarly, no work has been done in the subsequent years.

4.3.2.2 PRIVATE WELL CONVERSION

In the City, approximately less than 10% of the City residents utilize private wells as noted in Section 2.1.2. These areas are scattered throughout the City and connection of the private well users to the central system should be a high priority during the 20-year period as it will have a great impact on public health. The areas in proximity to the existing City water system will be incorporated in the water usage projections to better predict the expected needs for the existing water system.

4.3.2.3 HELM ROAD KEY DEVELOPMENT AREAS

There are several areas along Helms Road that are considered key development areas: Arbours at South LaBelle Village PUD, Old Groves PUD, Jack Paul PUD, Liberty Village PUD, Ben Moore South of Walmart, and Simmons Property. In 2020, the Arbours at South LaBelle plan was adopted for a 61-acre property located on Helms Road. The proposed development is to include up to 400 multi-family or townhouse residential units as well as any areas for accessory residential uses and recreational areas. This area is a part of the "South LaBelle Community" future land use area.

The Old Groves Mixed-Use PUD is north of Helms Road and the South LaBelle Community within an area that is designated as the Employment Village. The area encompasses approximately 335 acres. The PUD is proposed to include a total of 1,249 dwelling units, a maximum of 80,000 square feet of commercial property, and a community / recreation area.

In 2021 the City adopted the Jack Paul PUD which is located west of SR29 and south of Helms Road with the intended use of industrial and commercial. Liberty Village PUD is south of Helms Road within the "South LaBelle Community" future land use area. The total area under the PUD is approximately 280 acres. The proposed development is to include 971 single-family dwelling units and 60,000 square feet of commercial retail and office use. The development is also to include a golf course.

Ben Moore South of Walmart is a proposed development where there is not currently an approved PUD. Based on available information, it is to include 130 single-family units. It is located north of Helms Road and south of the Huggets Road and the State Road 80 intersection.

The Simmons Property is a large tract of land north of Helms Road near SR29 with the intended use of residential, commercial, and natural areas.

4.3.2.4 CITY OF LABELLE KEY DEVELOPMENT AREAS

The development areas within the City of LaBelle proper differ from those that are discussed in the State Road 80 Corridor Key Development Areas and the Helm Road Key Development Areas due in fact that the areas that are planned as PUDs or subdivisions are limited by land availability and the existing street layout. As such, the number of dwelling units or square footage for commercial uses are lower than those seen outside of the City of LaBelle. There are several areas throughout the City of LaBelle that are considered key development areas: Shady Oaks / Sandy Oaks, Kutty Multi-Family Development, City Village PUD, Birkland PUD, Belle Arbor, and LaBelle Riverside PUD. The Shady Oaks / Sandy Oaks subdivision is a proposed development located on Shady Oaks Avenue roughly a tenth of a mile from Live Oak Lane and abuts the Caloosahatchee River on the northern edge of the development. There are 53 single-family dwelling units plated to be constructed on the 5.95-acre parcel.

The Kutty Multi-Family Development is located north of Seminole Avenue and west of Oak Street. It is anticipated to include 20 duplex dwelling units. The City Village PUD is located on the Lee Street, Broward Avenue, Missouri Street, and Rover Street block within the City of LaBelle. The PUD includes a total of 36 dwelling units constructed as duplexes on a 3.9-acre parcel. The PUD is currently under construction.

The Birkland PUD is a proposed development that is currently under review for a zoning change. The proposed development is to be located at the intersection of State Road 80 and Fort Thompson Avenue. The PUD, as currently planned, is to include 128 multi-family dwelling units as well as 40,000 square feet for commercial uses.

The Belle Arbor subdivision is located north of State Road 80 and west of Shady Oaks Avenue. Phase one of the development includes construction of 44 single-family dwelling units which is currently under way. The plan for the site currently includes a future phase of 24 additional single-family dwelling units as well as an outparcel for future residential development and two outparcels for future commercial developments.

The LaBelle Riverside PUD is to include 93 multi-dwelling family units with a community center and 5,000 square feet for commercial use. The 9.35-acre parcel is located to the south of East Cowboy Way and a quarter of a mile west of Dr. Martin Luther King Jr. Boulevard.

Figure 4.2 presents the development areas within the City of LaBelle and the surrounding area that could develop during the 20-year planning period of this study. These growth projections and development areas form the basis for the water system expansion capital improvement plans developed in this report.

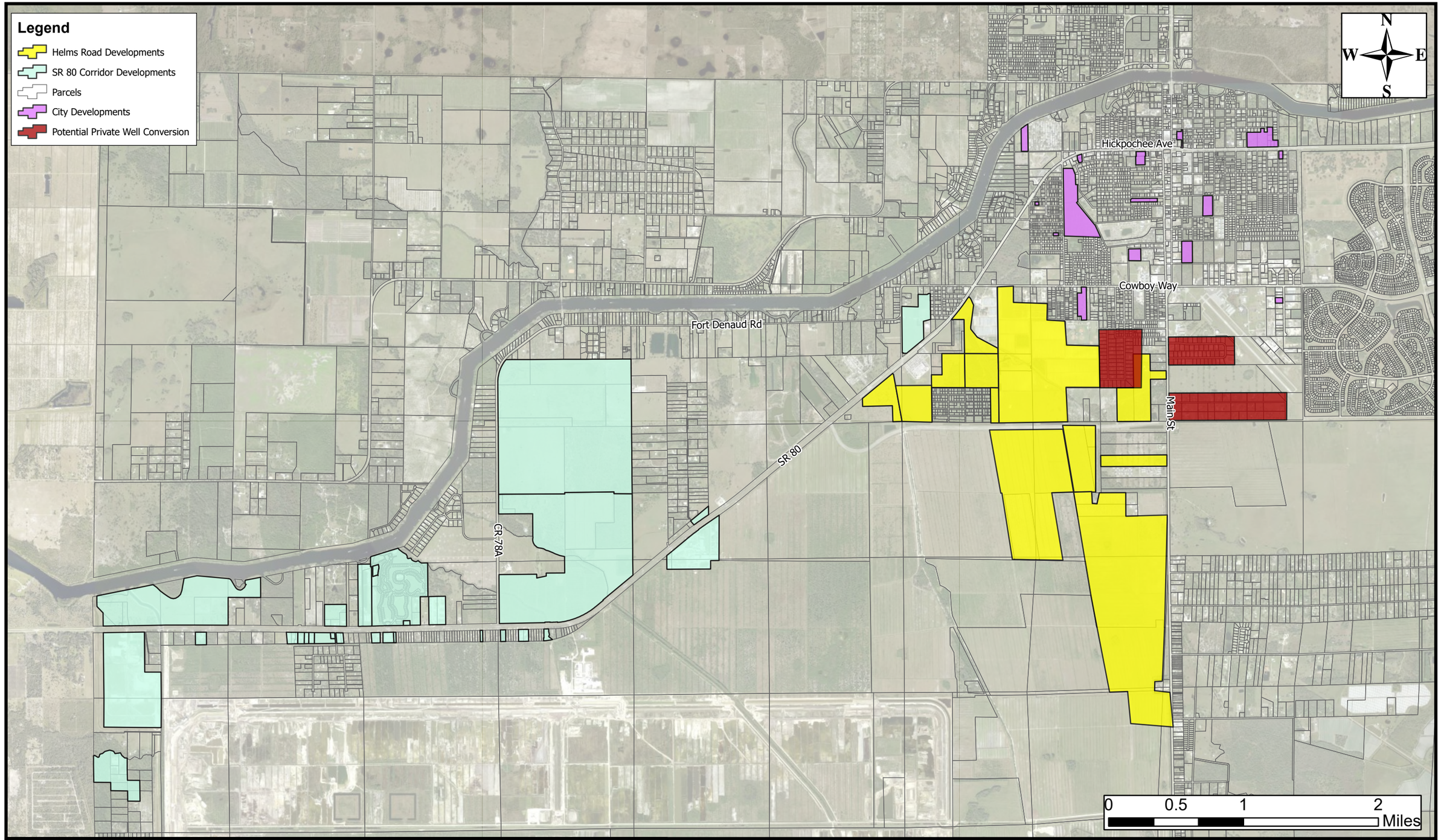


Figure 4.2 : Proposed Developments

LaBelle, FL

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4.3.3 PROJECTED POPULATION FOR WATER SYSTEM SERVICE AREAS

Table 4.1 provides the base 2022 water population in people which are currently connected to the existing water system and the five-year increment projected water populations for the total proposed service area, which were derived from information found in the 2023 Comprehensive Plan. These will be used to develop the projected water generation rates for the 20 year study period.

Table 4.1 Population Projections for Water Service Areas

Year	Population
2023	5,263
2027	7,281
2032	9,417
203	12,916
2042	15,682

It is important to note that with the SR80 corridor opening up from the Old Florida RV Resort water and sewer main extensions, large existing and buildout developments such as RiversBend and River Landing are anticipated to connect. Development along this corridor could allow for rapid increases in population numbers and are reflected in the 5 to 10 year planning windows. It is estimated that Old Florida RV Resort, RiversBend and River Landing could add a population of over 1,500 customers.

4.4 PROJECTED WATER DEMANDS

The projected water demands for the service area of the Water Master Plan are presented below along with an analysis of the remaining available production capacity at the existing water treatment plant. Any need for expansion of the existing water treatment plant or construction of new facilities is also addressed in the following sections.

4.4.1 PROJECTED AVERAGE DAILY WATER DEMANDS

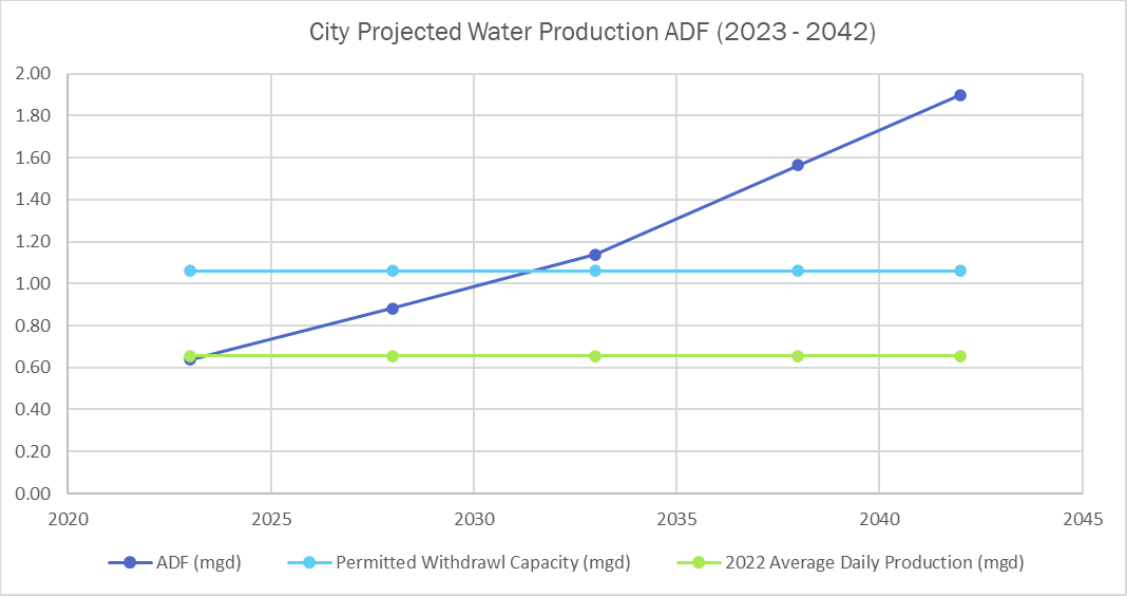
The per capita water demand developed for the water service area is 121 gallons per day per capita (gpc/d) as described in Section 2.2.4. The projected water demands for the service area for the period from 2026 to 2041 were determined by multiplying the respective populations and per capita water demands for the service area.

As previously noted, the projected water demands for the City of LaBelle and future developments have been divided into five-year increments: 2023 – 2027, 2028 – 2032, 2033 – 2037, and 2038 – 2042, to allow for more accurate and efficient planning of the necessary water infrastructure. Table 4.3 presents the projected incremental average daily water demands.

Table 4.2 Projected Water Demands

Year	Average Daily Water Demand (GPD)
2023	0.64
2027	0.88
2032	1.14
203	1.56
2042	1.90
Permitted Well Withdrawals (AADF)	1.06 MGD
Total Storage Volume (GST)	1.0 Mgals

Figure 4.3 City Projected Water Demands



The demands presented in Table 4.3 represent average daily flow. The maximum day and peak hourly factors for the water projections are the same as presented in Section 2.2.1 as they represent true peaking factors within the community.

The permitted groundwater withdrawal limits on an annual average daily basis are also provided in Table 4.3. Based on the projections, the City of LaBelle has sufficient capacity through the 5-year window but will need to develop additional wells and upgrade or construct new water treatment plants to meet the needs of its population base through the 20-year period.

The current water storage capacity in million gallons is additionally shown above in Table 4.3 for the water system. The City of LaBelle will exceed its storage capacity between the 5-year and 10-year window.

The results of the hydraulic model can be utilized to determine the need and location for any additional groundwater wells or source water. The recommended capacity and location for additional water production facilities and storage is presented in Section 5.0.

4.5 PROJECTED STATUS OF PRIVATE WELLS

Private Wells

Similar to other municipalities within the State of Florida, the City of LaBelle has not been able to provide public water to all developed areas within the service area. This could have occurred for several reasons such as the cost of infrastructure to serve an area may have exceeded the benefits, both economic and environmental; the low density or sparseness of construction did not make watermain extensions feasible; or areas were developed well before an organized utility department was established. In the City, there are several areas where private wells continue to be used as noted in Section 2.1.2. These areas are scattered throughout the City and connection of the private well users to the central system should be a high priority during the 20-year period as it will have a great impact on public health.

The areas in proximity to the existing City water system were incorporated in the water usage projections to better predict the expected needs for the existing water system. Private well users outside the City limits were additionally evaluated for the potential usage at future water treatment facilities.

4.6 WATER PROJECTS RELATED TO FUTURE GROWTH

Under Section 3.0, the condition of the existing water system was assessed, and the information gathered on this system was then used to develop a hydraulic computer model of the water system. After development and calibration of the model, the ability of the existing water system to meet the needs of the existing and future water customer bases was evaluated. The description of the model development, calibration, and assessment of the hydraulic capability of the water system are described in Section 5.0.

The projected water demands developed in the sections above were then added to the hydraulic model to assess the ability of the system to serve the projected needs of the system and to determine upgrades or expansions which need to be made. Therefore, Section 5.0 provides a description of the recommended expansion projects necessary for future growth of the water service areas over the 20-year planning period. This section addresses the recommended location and capacity of groundwater wells, water treatment plants, storage tanks, booster pumping systems, water mains, and private well conversion for the water system.

5.0 – WATER SYSTEM HYDRAULIC MODEL

The goal of Section 5 is to provide an overview of the purpose and methodology for developing a hydraulic model for the water transmission and distribution system in support of future capital improvements planning and prioritizing efforts. The developed model was used to simulate flows within the transmission and distribution system under existing and future conditions. The results of the various scenario outputs were used to evaluate the overall performance of the current system and identify capital improvement and expansion alternatives to support the future service population.

The water model was created in WaterGEMs platform developed by Bentley, which has an added integration with Environmental Systems Research Institute's (ESRI) ArcGIS software environment and improved interaction with GIS data.

5.1 WATER SYSTEM MODEL METHODOLOGY

A primary goal of the Water Master Plan is to evaluate the condition and needs of the existing water system, to eliminate redundancies in the systems and pool resources to correct existing deficiencies and plan for future growth and expansion of the service areas.

A comprehensive assessment of all components of the water system is not necessary to achieve these goals in an effective manner. As such, 4Waters collaborated with City staff to define the components of the water system which represent the major backbone of the water distribution and transmission system including pipes, storage and pumping station and includes valves and fire hydrants where necessary for calibration and master planning purposes. In total, these components of the systems have been termed the Major Water Transmission System (MWTS). The water systems' geometry and connectivity are based on City's GIS data. Additional facility information and operational details were obtained from as-built drawings and City staff "institutional knowledge."

The City MWTS is composed of approximately 226,750 LF of water mains ranging in size from 2- to 12-inches, high service pumps and one elevated storage tanks.

The GIS water main base data was "scrubbed" to repair connectivity issues and remove pipe splits at valves and fittings (for pipe of same size, material and age, where available). During this process private water mains and distribution piping not significantly affecting the hydraulic performance of the major system, such as closed-loop subdivision piping were removed. The result was a more streamlined, skeletonized representation of the major water transmission and distribution network for the water system.

The skeletonized pipes were assigned unique facility IDs that could be used to relate the GIS pipe features to the model pipe elements and provide a gateway for exchanging pipe attributes and model results. Once IDs were assigned, the pipes were imported into the model and the pipe size and material, if available, were populated or updated in the element data table. Junction nodes were added or verified at intersection and pipe connections and the network was checked and repaired connectivity errors not corrected in the preliminary scrubbing and skeletonizing steps.

The ground storage tank location was then imported into the model and high service pumps and facility site piping were digitized and attributed with size and material from as-built drawings and sketches. Pump performance curves obtained from City staff, pump manufacture representatives and online research were input and the pumps were programmed with control protocols provided by the City.

5.2 WATER MODEL INPUTS

Each component of the model requires a variety of information, at a minimum, to perform the hydraulic calculations. WaterGEMs data objects are grouped as physical and non-physical. Physical objects refer to those network elements that can be visually shown on a map in the WaterGEMs workspace. The

physical objects used for this model are junctions (pressure nodes), storage units (reservoir/tanks), conduits (water mains) and pumps.

Non-physical objects represent supplementary characteristics and processes within the study area. The non-physical objects include pump curves and time patterns. Pump curves permit flow to vary with different head conditions. Time patterns allow external demands to vary in a periodic fashion. They consist of a set of adjustment factors applied as multipliers to a baseline demand flow rate. In this case the time pattern acts as a diurnal curve, representing demand uses on the system throughout the day. The diurnal curve utilized mimics the widely accepted diurnal curve developed by the American Water Works Association (AWWA).

WaterGEMs provides a note attribute on each individual component to enter and store supplemental model related information concerning installation dates, field notes and how data was achieved. In addition to being stored with the feature, all supplemental information was kept on record as a hard copy. Water model construction information is provided in Appendix E.

5.2.1 GIS DATA

The water facility GIS data imported into the model included water mains and fire hydrants. Most water main features were attributed with pipe diameter and material. Where this information was not provided, assumptions were made based on contiguous infrastructure.

Other GIS data layers, including roads, address locations, topography, aerial orthoimagery and tax parcel base data were used during model development for mapping, geocoding and spatial analysis. The model inputs including storage tank data and high service pump info, were primarily based on water management system inspections or conversations with City staff. The GIS data only provided the locations of these facilities.

5.2.2 STORAGE TANK

Table 5.1 lists the key storage tank data collected, calculated or approximated, and used in the model. The tank was modeled as a reservoir as this feature represents a type of storage node and represents the starting point of water entering the system.

Table 5.1 Water Storage Tank Model Data

Facility Name	Facility ID	Ground (ft)	Height to Top of Tank (ft)	Tank Bottom Elevation (ft)	Volume (MG)	Diameter (ft)
LaBelle ROWTP	1	27	57	27	1.00	75

5.2.3 HIGH SERVICE PUMPS

4Waters visited the RO WTP and gathered high service pump (HSP) information as well as suction and discharge piping information. The data was collected from the pump base plates or from conversations and with City staff. Pump performance curves were obtained using serial numbers recorded from the plates. The manufacturer's pump curves used in the model are provided in Appendix E.

The performance data provided from the manufacturer's pump curves was adequate for developing and calibrating the hydraulic model for general system evaluation and master planning; however, actual pump performance tests results would improve calibration and provide more accurate operational model.

Control protocols were applied to each of the pumps in the model based on set points provided by City staff. These set points correspond to specific local pressure transducer readings at the RO WTO site.

WaterGEMS pump control interface was used to program ON/OFF control for each pump using system pressure to match the facility's actual control schema.

Minor loss coefficient, "k", values were input for the facility piping of the HSPs to account for minor losses associated with valves and bends. The minor loss is often negligible in a large-scale water system. However, "k" values can have a significant impact on head losses at high velocities, such as those just leaving a pump. This in turn plays a role in where the pump operates on its pump curve.

5.2.4 WATER MAINS

The GIS water main data was scrubbed and skeletonized as described previously in Section 5.1 and used to develop the framework for the MWTS model. Service laterals and smaller distribution lines were not included on the modeled systems. The water mains quantities which made up the model is summarized in Table 5.2.

Table 5.2 Total Lengths of Water Main in City Hydraulic Model

Pipe Diameter (in)	Total per Diameter (ft)
2	23,521
3	2,326
4	23,081
6	57,635
8	33,774
10	19,459
12	66,921
Total (ft)	226,717
(mi)	43

5.2.5 HYDRANTS

During the model calibration stage, it was necessary to identify the locations of fire hydrants throughout the distribution systems. The City provided Fire Hydrant GIS data which identifies approximate locations of all hydrants within the system. This information was used in the calibration of the model.

5.2.6 TOPOGRAPHY

GIS contour data was provided in the units of feet, referenced to the North American Datum of 1983 (NAD83).

5.2.7 NODAL DEMANDS

During the Master Plan, the City provided 4Waters with customer account information and billing data for the period from 2022 for all water customers in the City. The billing data was utilized and spatially referenced to model pipe and nodes to represent water usage in the model.

5.3 EXISTING CONDITIONS MODEL AND CALIBRATION

5.3.1 CALIBRATION

A total of 11 fire hydrant tests were conducted in August 2022 and results were provided to 4Waters. The locations of the hydrant test were strategically designated on larger diameter water mains that were spread throughout the systems so that the major areas in each system were represented.

Fire hydrant tests provide pressure data within the system under static conditions (no hydrant flowing) and stressed conditions (fully open flow at the hydrants). Each test consisted of a flowed hydrant where the flow is measured, and a residual hydrant where the static pressure and residual pressure are measured. This test data was used in conjunction with recorded boundary conditions to calibrate parameters such as pipe roughness, "C" or minor losses. The purpose of calibration is to adjust the model so that it simulates actual system behavior. This is achieved by trying to match the model and observed pressures under normal and stressed operating conditions. The fire hydrant test results are provided in Appendix E and shown in Table 5.3.

Table 5.3 Fire Hydrant Testing

Pair No.	Hydrant Id	Flowed or Static Hydrant?	Date	Modeled Static (psi)	Field Static (psi)	Field Static (feet)	Modeled Residual (psi)	Field Dynamic Residual (psi)	Field Dynamic Residual (feet)	Modeled Flow Presure (psi)	Field Flow Pressure (psi)	Field Flow (gpm)
1	960 Main Street	Flowed	08/23/22								15	650
	930 South Main Street	Static			54	125		14	32			
2	Belle Arbor	Flowed	08/23/22								20	750
	Belle Arbor @ Freindship Circle	Static			64	148		42	97			
3	50 N Bridge Street	Flowed	08/23/22								10	530
	Bridge St & Oklahoma St.	Static			62	143		24	55			
4	31 South Lee Street	Flowed	08/23/22							-30	20	750
	21 Lee Street	Static			61	141		26	60			
5	608 South Bridge Street	Flowed	08/23/22								15	500
	Lincoln and Bridge Street	Static			54	125		28	65			
6	1012 Miller Street	Flowed	08/23/22								25	650
	Highway 80 and MLK	Static			64	148		42	97			
7	760 Cowboy Way	Flowed	08/23/22								20	750
	770 E Cowboy Way	Static			60	139		28	65			
8	1025 Commerc Drive	Flowed	08/23/22							-30	18	650
	1276 Commerce	Static			60	139		22	51			
9	780 MLK and Cowboy Way	Flowed	08/23/22								25	500
	MLK & West Lincoln	Static			55	127		28	65			
10	600 South Elm Street	Flowed	08/23/22								15	650
	561 East Lincoln Ave	Static			62	143		22	51			
11	606 Greentree	Flowed	08/23/22								20	750
	303 Greentree	Static			62	143		50	116			

For the water model calibration, the model was run in extended period simulation (EPS) mode for a 24 hour period. System pressures at residual hydrant test pressures were compared with model results and the C-factor and minor loss coefficients were adjusted throughout the system to bring the calculated and observed system pressures flows trends in closer agreement with one another. This adjustment process was iterated until a level of confidence was achieved in the model and the model reasonably predicted system behavior. After an acceptable set of roughness adjustments, the results were transferred to developing the existing conditions model.

5.3.2 EXISTING CONDITIONS MODEL

To evaluate overall performance and level of service, three separate simulations were conducted for the water system; average daily flow, (ADF), maximum daily flow (MDF), peak hourly flow (PHF) and fire flow plus MDF. This is a typical approach and these scenarios generally represent the most extreme demands on system hydraulics and components.

A peak hourly flow scenario was simulated by running the model for a 24-hour period and applying a peaking factor on the demand loading to determine any areas in the system with pressure drops below 30 psi.

The available fire flow was tested at various locations in each water system and were evaluated by running a 2 hour – 1,000 gpm fire flow. The fire flow simulations were run using MDF conditions with a minimum allowable pressure of 20 psi.

Based on information provided in Section 2, a maximum day factor of 1.28 was used. The fire flow locations were applied across the distributed systems in outlying areas, along major corridors and within subdivisions to evaluate overall system coverage.

Overall, the modeled City system performed satisfactory for ADF, MDF and PHF simulations with average pressures in the 35 - 55 psi range. The MDF plus fire flow conditions, however, resulted in a major deficit. As seen in Table 5.4, proper fire flow conditions cannot be achieved. Fire flow conditions are of extreme importance as they ensure the end user has adequate pressure and flow rate to service in the area in the event of an emergency and not require water boil notices.

Table 5.4 Existing Conditions Model Results

Scenario	ADF (PSI min/max)		MDF (PSI min/max)		PHF ((PSI min/max)		MDF + 2 Hour FF @ 1,000 on Cowboy Way at MLK (PSI min)	MDF + 2 Hour FF @ 1,000 on SR 80 and Ft Thompson (PSI min)	MDF + 2 Hour FF @ 1,000 on SR80 and DR MLK Drive (PSI min)	MDF + 2 Hour FF @ 1,000 at City Hall (PSI min)
Existing Conditions - Average System Pressures (psi)	48	52	46	52	36	52	4	3	7	6

In order to achieve proper fire flow conditions and ensure continued satisfactory ADF, MDF and PHF conditions, modifications, such as water main looping or interconnections will need to be made throughout the City.

An important item of note is that the system water storage quantity is incapable of meeting MDF plus fire flow conditions.

5.4 CITY EXISTING WATER SYSTEM DEFICIENCIES AND RECOMMENDATION SUMMARY

Water quality modeling was beyond the scope of this report but it should be noted that long dead-end transmission mains could experience low disinfection residual and other water quality issues during extended periods of low demand. It is also noted that level of service could be improved by water main looping or interconnections.

As shown in the previous section, the City model performed satisfactorily under ADF, MDF and PHF conditions, however there was area of concern with MDF plus fire flow conditions. Table 5.5 provides a summary of the City's water system upgrades necessary to serve the current customer population. The projects listed are only related to pumping and hydraulic capacities. Any projects related to the structural, electrical or physical elements of the facility have been addressed in Section 3.

Table 5.5 Near Term Model Recommendations: 2023 – 2027

Water Facility Component	Near Term Recommendations: 2023 - 2027
Helms Road/SR80 Water Loops	Install approximately 5,000 LF of new 12-inch water main along SR80 from East Cowboy to Miller Avenue
	Install approximately 14,100 LF of new 12-inch water main along Helms Road from SR80 to SR29
Hydrotank	Install hydrotank near intersection of Helms Road and SR80

Dead-end lines which regularly experience low flow conditions should flush periodically or be equipped with automatic flushing devices to ensure disinfection residual and other water quality parameters are maintained.

5.5 FUTURE CONDITIONS MODEL AND RECOMMENDATION SUMMARY

Once the determination of the existing water system deficiencies and selection of recommendations for rehabilitation were selected and the upgrades entered in to the model, the future conditions model was developed. The future conditions model is used to evaluate how well the system can serve growth in various areas and when expansions and upgrades to the system must be made – whether water main extensions or upgrades, new wells, or storage tanks.

The Water Master Plan spans a study period of 20 years during which four – five year population projections and corresponding water demands have been determined. Similar to the existing conditions model, the water system was evaluated to determine overall performance and level of service at four separate simulation scenarios – ADF, MDF, MDF + fire flow and PHF. All of the scenarios were modeled in a manner similar to the existing conditions scenario. For the ADF and PHF the minimum allowable pressure drop is 30 psi and for the MDF + fire flow simulations the minimum allowable pressure is 20 psi.

As discussed in Sections 2.1.2, similar to other municipalities within the Florida, the City has not been able to provide public water to all developed areas within the service area. This could have occurred for several reasons such as the cost of infrastructure to serve an area may have exceeded the benefits, both economic and environmental; the low density or sparseness of construction did not make watermain extensions feasible; or areas were developed well before an organized utility department was established. As such, several areas that utilize private wells within the water service systems were evaluated to determine physical vicinity to water infrastructure, age of private wells and overall likelihood and perception of a homeowner to connect to the City system and were identified with a CIP project.

The recommendations for water system expansion beyond the 5 year study period in the City are presented below in Tables 5.6. The improvements include private well conversion, water main upgrades and new storage tanks to serve the development with a high level of service and reliability. Any projects related to the civil, mechanical, electrical or physical elements of the facility have been addressed in Section 3.

Table 5.6.1 Near Term Recommendations: 2023 – 2027

Water Facility Component	Near Term Recommendations: 2023 - 2027
New Well Source & Treatment Upgrades	1,500 gpm Well with 150 Hp Pumps
	1.125 MGD Skid Expansion at existing RO WTP
Storage Tank and Land	1.0 MGD Elevated or Ground Storage Tank - Construct along Helms near existing well sites
Zone B Water Main Upgrades	Upgrades water mains in Zone B
Remaining Zones Water Main Upgrades	Upgrades water mains in Zones C, D, E, G, H, I and J

Table 5.6.2 – 20 Year Model Recommendations: 2038 – 2042

Water Facility Component	Long Term Recommendations: 2038 - 2042
Private Well Conversion	South of Cowboy Way and West of SR29 (Approximately 100)

6.0 – MASTER PLAN IMPLEMENTATION

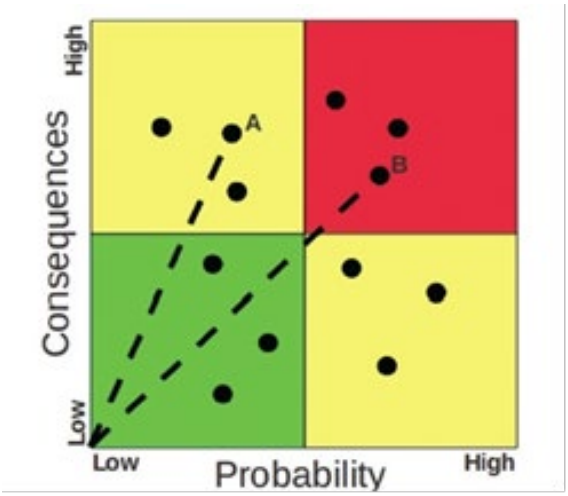
The culmination of the Water Master Plan is to provide a plan of implementation for the identified deficiencies and the proposed recommendations listed throughout the report. The Implementation Plan addresses both the Rehabilitation needs of the system to maintain and/or provide a desirable level of service for the current customer population (person) and also for the Expansion needs of the system to service growth and development in the service areas.

6.1 REHABILITATION CAPITAL IMPROVEMENT PLAN

The Water Rehabilitation Capital Improvement Plan (CIP) presented in the following section incorporates all deficiencies for the City as noted from the field assessments in Section 3.0 and the hydraulic modeling efforts presented in Section 5.0 for the water system. The purpose of the Implementation Plan is to address deficiencies in the system which need to be handled in the near-term future to provide an acceptable level of service to the existing customer base population (person). This Rehabilitation CIP Implementation Plan will provide the City with a method of systematically and thoroughly addressing the anticipated needs of the existing water system over the next 20 years. The critical deficiencies of the system have been placed in the near term, five (2023-2027) to ten (2028–2032) year periods with the issues anticipated to become more critical in the later portion of the study period pushed back to the 15 (2033-2037) and 20 (2038-2042) year periods. As with any capital improvement plan, these plans should be re-evaluated every five years.

6.1.1 CONSEQUENCE OF FAILURE AND RISK PRIORITIZATION

In order to provide a risk-based prioritization of the Rehabilitation CIP projects, a Consequence of Failure score was developed for each rehabilitation project. The Consequence of Failure score, similar to the Probability of Failure score, ranges from 1.0 to 5.0. The criteria for the Consequence of Failure score was developed by 4Waters and the associated matrix is included in Appendix B.



The matrix includes several factors to consider for developing the Consequence of Failure score including: Social/Community factors - public image (noise/odor/discharges), outage duration, customers affected, health and safety; financial factors – financial impact, operational/resource impact; and Environmental/Regulatory factors. A score of 1.0 indicates negligible or limited impact to these factors. If a facility fails it will have a score of 5.0 indicating potential severe impacts to public image, health and safety, financial resources, and/or consent order.

As noted, each rehabilitation project received a Consequence of Failure score which was then multiplied by the Probability of Failure score. This developed the Risk score which was used to prioritize the Rehabilitation CIP projects. The Consequence of Failure scores for the Rehabilitation CIP projects are provided in Appendix B.

6.1.2 WATER SYSTEM REHABILITATION CIP – ORDER OF MAGNITUDE COST

The following section provides the recommended rehabilitation improvements necessary to provide an acceptable level of service and reliability within the City system. These address improvements at the potable wells, RO WTP and in the water distribution system. The estimated Order of Magnitude Costs are provided with the rehabilitation items prioritized. Supporting detail of project scope and cost is provided in Appendix F and detailed location maps are provided at the end of this Section.

The estimated Order of Magnitude Costs of the projects included in the Water Rehabilitation Capital Improvement Plan are presented below. The tables also indicate the recommended priority and five year

period of recommended implementation of the projects. The estimated costs for the Water Rehabilitation CIPs include installation, contingency (20%), and engineering, permitting, and administration (15%) fees.

Table 6.1 Water Rehabilitation Capital Improvement Plan (2023 – 2027 Implementation Window)

Total Risk Score and Quadrant	Facility	Recommended Improvements (0-5 Yr) Description	Order of Magnitude Costs
18.00	**Meter and Valve Replacement**	Exercise and Replace valves to improve isolation and pressure throughout the system. AMR Water Meter Replacement project.	$ 775,000
18.00	**SR80 Water Main Improvements (East Cowboy to Miller Avenue)/Helms Road Watermain Improvments (SR80 to SR29)**	Install approximately 5,000 LF of new 12-inch water main along SR80 from East Cowboy to Miller Avenue Install approximately 5,000 LF of new 12-inch water main along Helms Road from SR80/SR29	$ 7,000,000
18.00	**Hydrotank**	Install hydrotank near intersection of Helms Road and SR80	$ 600,000
13.50	**Lead Service Line Identification**	Lead Service Line Inventory - Anticipated to require excavation/test hole exploration on both public and private side of the water meter	$ 500,000
13.50	**Lead Service Line Replacement**	Lead Service Line Replacement (Main to Meter and Meter to Customer)	$ 1,500,000
7.50	**VA Assessment**	VA Assessment	$ 150,000
9.00	**Portable Generator for Wells**	Install backup power source for drinking water wells	$ 150,000
6.00	**New Chemical Tanks and Pumping Skid**	Replace chemical and metering equipment that is approaching the end of its useful life	$ 300,000
Total Near Term (0-5 Yr) Water Rehabilitation CIP			**$ 10,975,000**

Table 6.2 Water Rehabilitation Capital Improvement Plan (2028 – 2032 Implementation Window)

Total Risk Score and Quadrant	Facility	Recommended Improvements (Long Term 5-10 Yr) Description	Order of Magnitude Costs
9.00	**Well 2 Upgrades**	Retrofit Generator Cover, Misc. Well Upgrades and New AC Units	$ 130,000
8.00	**Existing Shallow Well Abandonment**	Abandon 6 Existing Shallow Wells that used to feed Main Street WTP	$ 160,000
6.75	**Well 3 Upgrades**	Retrofit Generator Cover, Misc. Well Upgrades and New AC Units	$ 130,000
6.00	**Decommission Nano WTF (Main Street)**	Remove equipment at Nano WTF	$ 360,000
5.00	**Degasifier Equipment**	New Blower and Cleaning Pump	$ 60,000
Total Long Term (5- 10 Yr) Water Rehabilitation CIP Plan			**$ 840,000**

6.2 EXPANSION CAPITAL IMPROVEMENT PLAN

The City of LaBelle and Hendry County are anticipating growth and development within the 20 year period of this study, therefore this Water Master Plan addresses the long-term future needs of the water system to serve these new developments. The Water Expansion Capital Improvement Plans presented in the following sections incorporate all the upgrades necessary, on a broad basis, to provide water service to the developments that have been identified and to address conversion of private wells. Supporting detail of project scope and cost is provided in Appendix F.

The projects have been prioritized and are in order of need to address the growth and development accordingly. An attempt has been made to develop the Expansion CIP timeline in a reasonable manner such that Engineering, Design, Permitting and Construction can be completed as needed to serve anticipated development. It will be vital to proper planning to regularly coordinate the Expansion CIPs with the City so that the infrastructure needs can be properly addressed.

6.2.1 WATER SYSTEM EXPANSION CIP - ORDER OF MAGNITUDE COST

The estimated Order of Magnitude Costs of the projects included in the Water Expansion Capital Improvement Plan are provided below. The table also indicates the recommended priority and five year period of recommended implementation of the projects to meet the anticipated growth. The estimated costs for the Water Expansion CIPs include installation, contingency (20%), and engineering, permitting, and administration (15%) fees.

Table 6.3 Expansion Capital Improvement Plan

Overall Priority	Project Description	Implementation Year	Order of Magnitude Cost	Implementation Window Total
1	Zone B Water Main Construction	2023-2027	$ 1,832,744	
2	Storage Tank and Land/ Water Main Upgrades	2023-2027	$ 16,000,000	
3	New Well Source & Treatment Upgrades - 1,500 gpm Well with 150 Hp Pumps and 1.125 MGD Skid Expansion at existing RO WTP	2023-2027	$ 4,750,000	
5	3rd Clearwell Pump @ WTP	2023-2027	$ 75,000	
6	Zone C Water Main Construction	2023-2027	$ 2,319,643	$ 30,710,999
7	Zone D Water Main Construction	2023-2027	$ 966,030	
8	Zone E Water Main Construction	2023-2027	$ 1,765,508	
9	Zone G Water Main Construction	2023-2027	$ 1,931,113	
10	Zone H Water Main Construction	2023-2027	$ 483,714	
11	Zone I Water Main Construction	2023-2027	$ 587,247	
12	Zone F Water Main Construction	2033-2037	$ 690,000	$ 690,000
13	Private Well Conversion - South of Cowboy Way and West of SR29 (Approximately 100)	2038-2042	$ 2,500,000	$ 2,500,000
Total Water Expansion CIP				**$ 33,900,999**

6.3 FINANCIAL ELEMENT

This section provides an evaluation and discussion of project funding for the recommended Water Master Plan projects. The City of LaBelle maintains a public utility and relies primarily on user fee revenue billed monthly to its water customers. The City also earns revenue through miscellaneous customer services, penalties, and capital improvement fees collected from new development. As part of the Water Master Plan, Raftelis has developed a 20-year financial model to evaluate the adequacy of revenues to fund the Water Master Plan capital projects and ongoing operating expenses. At the time of publication of this report, Raftelis was working to evaluate the recommendations from the Rehabilitation and Expansion capital projects included in the first five years of this study as part of the fiscal year 2024 rate analysis and revenue sufficiency conducted for the City.

6.3.1 CAPITAL FUNDING

The Water Master Plan projects have three major funding sources:

1) Renewal and Replacement Fund ("R&R Fund"): This is a dedicated City fund for existing capital asset renewal and replacement.

2) Water Impact Fees: New development is required to pay impact fees to accommodate for the use of distribution and treatment capacity. Such funds are reserved by the City and dedicated to growth related projects.

3) State and Federal Grants: The City regularly pursues infrastructure grants from both State and Federal agencies such as State Revolving Fund, Community Development Block Grant, USDA Rural Development, the US Economic Development Agency. The available grants vary in amount and criteria and typically require matching funds for a portion of the grant amount.

6.3.2 REVENUE REQUIREMENTS

The financial element is primarily concerned with project funding as outlined above. These funding sources are integrated into a multi-year financial model to identify revenue sufficiency and debt service coverage trends. Two critical goals for the financial element are minimum year end reserves and debt service coverage.

6.3.3 REVENUE SUFFICIENCY CONCLUSIONS

An update to the financial model and revenue sufficiency conclusions for the City's anticipated operations and capital improvements and a comparison of the City's water rates in comparison to others in the region is provided in Appendix G.

7.0 – CONCLUSIONS AND RECOMMENDATIONS

The goal of the Water Master Plan is to assess the current "health" of the water system to ensure that it meets the needs of the community. The analysis intends to provide the City with a concise guide for planning near-term and long-term water system improvements with a focus on feasible solutions to water problems which balance the desired level of service to be provided with environmental, funding, and regulatory constraints.

In order to assess inefficiencies in the system, an evaluation of the major components of the water system was conducted that incorporated and extrapolated other various recent assessments conducted by the City including Facility Plan evaluations which resulted in development of Water Capital Improvement Plans to be used to support grant applications. Hydraulic models of the water system were developed and calibrated with the Bentley System WaterGEMs software package. Water usage rates were developed and extended to 2043 for the service areas based on an analysis of actual demands and treatment volumes, billing data, and population projections prepared by 4Waters with City involvement and information provided by PUDs and developers in the region.

The overall service area of the City's water system includes the existing City infrastructure limits and unserved areas within the City's boundary or within the annexation process. The service area has been delineated with this Water Master Plan, reference Figure 4.1.

7.1 CONCLUSIONS

One of the first tasks of the Master Plan as to assess the systems condition by performing field inspections of the major water transmission systems and evaluating the water treatment facility operating abilities.

The results of the facility inspections and the hydraulic model indicate that the water system is effectively operated and in relatively good condition. Typical issues with the RO WTP centered around the chemical disinfection system reaching the end of its useful life. Well #2 has appeared to have been struck by lighting and requires repair or replacement of the generator ATS. There is an indication from the hydraulic water modeling and information received from the City staff that there are water pressure, fire flow and resiliency concerns. The City has been awarded several grants and intends to install several water looping projects and increase water storage.

With the implementation and greater use of the City's asset management system, it is anticipated that data capture and assessment of facility condition information will be improved to ensure suitable maintenance is conducted to extend the life of the facilities. Additionally, this information can be utilized to identify those facilities approaching the end of design life or which are at risk of failure in advance so that the necessary improvements can be made to maintain system reliability.

7.2 RECOMMENDATIONS

In summary, the Water System CIP totals $45 million for the 20 year study period, although the majority are recommended for completion within the next ten years. A breakdown of the Water CIP can be seen below and are in line with the CIP totals presented in the Water Facilities Plan.

Table 7.1 Water System CIP (Five Year Increments)

CIP Category	0-5 Year (2023 - 2027)	5-10 Year (2028 - 2032)	10-15 Year (2033 - 2027)	15-20 Year (2038 - 2042)	Total
Rehabilitiaton	$ 10,975,000	$ 840,000	-	-	$ 11,815,000
Expansion	$ 30,710,999	$ 690,000	-	$ 2,500,000	$ 33,900,999
Total	$ 41,685,999	$ 1,530,000	$ -	$ 2,500,000	$ 45,715,999