# Morgan City

DRAFT Water Impact Fee Analysis
May 2023

ZIONS PUBLIC FINANCE, INC.

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# EXECUTIVE SUMMARY

An impact fee is a one-time fee imposed on new development activity to mitigate the impact of new development on capital facilities. In conjunction with this Impact Fee Analysis ("IFA"), Jones & Associates Consulting Engineers prepared the *Morgan City Corporation Culinary Water Capital Facilities Plan and Impact Fee Facilities Plan* (IFFP) dated September 2022. The IFFP forms the basis for this Impact Fee Analysis.

The recommended impact fee structure presented in this analysis has been prepared to satisfy the Impact Fees Act, Utah Code Ann. § 11-36a-101 et. seq., and represents the maximum impact fees Morgan City Corporation ("City") may assess. The City will be required to use revenue sources other than impact fees to fund any projects that constitute repair and replacement, cure any existing deficiencies, or increase the level of service for existing users.

## Water Service Levels

Level of service (LOS) defines the water capital facility demands that a typical Equivalent Residential Connection (ERC), will require and should pay for with impact fees. The IFFP defines existing and proposed service levels as the minimum standards established by the Utah Division of Drinking Water and set forth in more detail in Table 7 of this IFA.

## Water Service Area

There is one service area for culinary water that encompasses the boundaries of Morgan City.

## Excess Capacity

Three facilities have existing excess capacity: the 700 East Booster, Landmark Tank and the Mahogany Ridge Booster. The actual cost of these facilities at the time of purchase was $1,144,293. New growth will consume the remaining capacity and is responsible for $446,550 of total costs; new development by 2030 will consume over 84 percent of the total remaining capacity and is therefore responsible for $377,051 of the actual costs. [1]

## New Improvements

Seven new water projects, at a total cost of $9,219,230, are required to be constructed by 2030 in order to meet the demands of new growth. Growth within the next 10 years is responsible for $1,961,100 of these costs.[2]

## Water System Impact Fee Calculation

The gross impact fee, before credits, is $7,361.68 per ERC. However, credits must be made to this amount so that double payment does not occur for new development.

[1] Source: Morgan City Impact Fee Facilities Plan, p. 27

[2] Total impact-fee eligible costs of $1,657,061 have been adjusted to inflation year costs of $1,961,100 using an annual construction cost inflator of 3 percent.

TABLE 1: GROSS IMPACT FEE PER ERC BEFORE CREDITS

| SUMMARY OF IMPACT FEE COSTS | Amount |
|---|---|
| Existing Excess Capacity | $1,169.24 |
| New Construction | $6,081.42 |
| Consultant Costs | $111.02 |
| **Subtotal before Credits** | **$7,361.68** |

The IFFP identifies that a portion of the new construction projects are needed to benefit existing residents. Therefore, new development cannot be expected to pay the entire impact fee and then also contribute over time, through increased water rates, to projects that benefit existing residents. The IFFP allocates $558,804 of new construction costs as benefits to existing development. This is adjusted to $633,617 in construction year costs. Therefore, credits against the gross impact fee have been made as follows, spread over an 8-year period through 2030.

TABLE 2: CREDIT CALCULATIONS – NEW PROJECTS BENEFITTING EXISTING DEVELOPMENT

| Year | Payment per Year | ERCs | Payment per ERC | NPV* |
|---|---|---|---|---|
| 2023 | $79,202.12 | 1,806 | $43.86 | $265.14 |
| 2024 | $79,202.12 | 1,844 | $42.95 | $234.54 |
| 2025 | $79,202.12 | 1,883 | $42.06 | $203.32 |
| 2026 | $79,202.12 | 1,923 | $41.19 | $171.43 |
| 2027 | $79,202.12 | 1,964 | $40.33 | $138.81 |
| 2028 | $79,202.12 | 2,005 | $39.50 | $105.42 |
| 2029 | $79,202.12 | 2,048 | $38.68 | $71.19 |
| 2030 | $79,202.12 | 2,091 | $37.88 | $36.07 |
| TOTAL | $633,616.99 | | | |

*NPV = net present value discounted at 5 percent

Credits must also be made for the City's water outstanding debt which will be paid off in 2028.

TABLE 3: CREDIT CALCULATIONS – OUTSTANDING DEBT

| Year | Principal | Interest | Total P&I | Amount Benefitting Existing Development | ERCs | Payment per ERC | NPV* |
|---|---|---|---|---|---|---|---|
| 2022 | $73,250 | $7,345 | $80,595 | $49,144 | 1,769 | $27.79 | $148.85 |
| 2023 | $74,357 | $6,238 | $80,595 | $49,144 | 1,806 | $27.21 | $128.50 |
| 2024 | $75,480 | $5,115 | $80,595 | $49,144 | 1,844 | $26.65 | $107.72 |
| 2025 | $76,620 | $3,975 | $80,595 | $49,144 | 1,883 | $26.10 | $86.45 |
| 2026 | $77,777 | $2,818 | $80,595 | $49,144 | 1,923 | $25.56 | $64.68 |
| 2027 | $78,952 | $1,643 | $80,595 | $49,144 | 1,964 | $25.03 | $42.36 |
| 2028 | $66,702 | $460 | $67,162 | $40,953 | 2,005 | $20.42 | $20.42 |

*NPV = net present value discounted at 5 percent

Residential fees will be charged on a per door basis, with single-family homes charged the equivalent of a 3/4" meter size. The City may choose to average maximum fees over a 3-5 year period for ease of collection.

TABLE 4: MAXIMUM IMPACT FEES, 2023-2028

| Water Fees by Meter Size | AWWA Ratio | Adjusted AWWA Ratio | Max Fee 2023 | Max Fee 2024 | Max Fee 2025 | Max Fee 2026 | Max Fee 2027 | Max Fee 2028 |
|---|---|---|---|---|---|---|---|---|
| 3/4" | 1.00 | 0.60 | $4,172.48 | $4,203.25 | $4,234.68 | $4,266.81 | $4,299.71 | $4,332.84 |
| 1" | 1.67 | 1.00 | $6,968.04 | $7,019.43 | $7,071.91 | $7,125.58 | $7,180.51 | $7,235.84 |
| 1.5" | 3.33 | 1.99 | $13,853.79 | $13,996.82 | $14,101.48 | $14,208.49 | $14,318.03 | $14,428.35 |
| 2" | 5.33 | 3.19 | $22,174.39 | $22,403.33 | $22,570.83 | $22,742.11 | $22,917.45 | $23,094.03 |
| 3" | 10.00 | 5.99 | $41,602.97 | $42,032.51 | $42,346.78 | $42,668.13 | $42,997.09 | $43,328.39 |
| 4" | 16.67 | 9.98 | $69,352.16 | $70,068.19 | $70,592.08 | $71,127.77 | $71,676.14 | $72,228.43 |

# CHAPTER 1: OVERVIEW OF THE WATER IMPACT FEES

## Summary

An impact fee is intended to recover the City's costs of building water system capacity to serve new residential and non-residential development rather than passing these growth-related costs on to existing users through rates. The Utah Impact Fees Act allows only certain costs to be included in an impact fee so that only the fair cost of expansionary projects or existing unused capacity paid for by the City is assessed through an impact fee.

## Costs to be Included in the Impact Fee

The impact fees proposed in this analysis are calculated based upon:

- Excess capacity in the City's water system;
- New capital infrastructure that will serve new development; and
- Professional and planning expenses related to the construction of system improvements that will serve new development.

The costs that cannot be included in the impact fee are as follows:

- Costs for projects that cure system deficiencies;
- Costs for projects that increase the LOS above that which is currently provided;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

## Utah Code Legal Requirements

Utah law requires that communities and special districts prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities/districts give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. The City has retained Zions Public Finance, Inc. (ZPFI) to prepare this Impact Fee Analysis in accordance with legal requirements.

### Notice of Intent to Prepare Impact Fee Analysis

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Plan (Utah Code §11-36a-503). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA by posting notice.

### Preparation of Impact Fee Analysis

Utah Code requires that each local political subdivision, before imposing an impact fee, prepare an impact fee analysis. (Utah Code 11-36a-304).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis which is required to:

(1) An impact fee analysis shall:

(a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;

(b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;

(c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;

(d) estimate the proportionate share of:
  (i) the costs for existing capacity that will be recouped; and
  (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and

(e) identify how the impact fee was calculated.

(2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:

(a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;

(b) the cost of system improvements for each public facility;

(c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;

(d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;

(e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;

(f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;

(g) extraordinary costs, if any, in servicing the newly-developed properties; and

(h) the time-price differential inherent in fair comparisons of amounts paid at different times.

### Certification of Impact Fee Analysis

Utah Code states that an Impact Fee Analysis shall include a written certification from the person or entity that prepares the Impact Fee Analysis. This certification is included at the conclusion of this analysis.

# CHAPTER 2: IMPACT FROM GROWTH UPON THE CITY'S FACILITIES AND LEVEL OF SERVICE

*Utah Code 11-36a-304(1)(a)*

## Projected Water Demands

The table below shows ERC growth projections which will place additional demand on the City's water system. The City's water system served 1,769 ERCs equivalent residential connections (ERCs) in 2022. These ERCS are projected to grow to 2,091 ERCs by 2030; therefore, the growth between 2022 and 2030 is expected to be 322 ERCs.

TABLE5: GROWTH IN DEMAND

| Year | ERCs |
|---|---|
| 2022 | 1,769 |
| 2023 | 1,806 |
| 2024 | 1,844 |
| 2025 | 1,883 |
| 2026 | 1,923 |
| 2027 | 1,964 |
| 2028 | 2,005 |
| 2029 | 2,048 |
| 2030 | 2,091 |
| Growth in ERCs, 2022-2030 | 322 |

*Source: Morgan City Culinary Water Impact Fee Facilities Plan, p. 10*

## Existing and Proposed LOS Analysis

Level of service (LOS) defines the capital facility demands that a typical Equivalent Residential Connection (ERC) will require and should pay for with impact fees. The IFFP defines existing and proposed service levels as follows per ERC based on minimum standards from the Utah Division of Drinking Water.

TABLE 6: SERVICE LEVELS

| Component | Measurement | Minimum Indoor Requirement | Minimum Outdoor Requirement |
|---|---|---|---|
| Source | Peak Day | 800 gpd/ERC for Peak Day Demand | 2.80 gpm/irrigated acre |
| | Annually | 146,000 gallons/ERC for Average Yearly Demand (0.45 ac-ft/ERC) | 1.23 ac-ft/irrigated acre |
| Storage Facilities | Volume | 400 gallons/ERC + emergency storage + fire storage | 1,873 gal/irrigated acre |
| Distribution System | Pressures | 20 psi during conditions of fire flow and peak day demand, 30 psi during peak instantaneous demand, 40 psi during peak day demand | |

*Source: Morgan City Culinary Water Capital Facilities Plan, p. 8*

# CHAPTER 3: IMPACT ON CAPACITY FROM DEVELOPMENT ACTIVITY

*Utah Code 11-36a-304(1)(b)(c)*

## Excess Capacity and Deficiency

There is excess capacity in the City's existing water sources. New development can be charged a buy-in fee, as part of the overall impact fee, for the capacity it consumes. The cost of the three facilities with excess capacity is $1,144,293, based on actual cost at time of purchase. Approximately 61 percent of existing capacity ($697,743) is consumed by existing development. That leaves 39 percent ($446,550) of capacity for new growth. All of the excess capacity for the Landmark Tank and the Mahogany Ridge Booster will be consumed by new development by 2030. However, new development of 322 ERCs by 2030 will consume 9.6 percent of the additional capacity of 3,357 ERCs by 2030, or $7,385.59 of the cost allocated to growth.

TABLE 7: CONSUMPTION OF EXCESS CAPACITY

| Capital Facility | Historical Cost | Amount Attributable to Growth | Allowable Cost | Current Usage | Additional Capacity | Total Capacity | Amount of Capacity Use by 2030 |
|---|---|---|---|---|---|---|---|
| 700 East Booster (2003) | $115,270 | 67% | $76,885 | 1,375 | 3,357 | 4,732 | $7,385.59 |
| Landmark Tank (2004) | $819,039 | 30% | $243,255 | 4,938 | 94 | 5,032 | $243,255 |
| Mahogany Ridge Booster (2012) | $209,984 | 60% | $126,410 | 142 | 215 | 357 | $126,410 |
| **TOTAL** | **$1,144,293** | | **$446,550** | | | | **$377,051** |

# CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

*Utah Code 11-36a-304(1)(b)(c)*

The means by which the City will meet growth demands include constructing the following projects as set forth in the Impact Fee Facilities Plan. This will occur through requiring new development to pay for its fair share of existing excess capacity consumed over the next 10 years as well as paying for its fair share of new construction projects.

Seven new capital facility construction projects are needed by 2030 in order to meet the demands of new growth. For the purpose of calculating impact fees, capital costs are allocated by the amount of capacity consumed by new development by 2030. Therefore, the total cost to be used in the calculation of impact fees is $1,961,100.

TABLE 8: NEW CONSTRUCTION IMPROVEMENTS

| Project # | Description | ERCs Served | Cost to New Growth | Impact Fee Eligible within 10 Years | Proposed Budget Year | Cost in Construction Year |
|---|---|---|---|---|---|---|
| 1 | Purchase NMWUA system | 3,357 | $117,920 | $17,598 | 2023 | $18,126 |
| 2 | Park well chlorination | 3,357 | $140,700 | $20,998 | 2023 | $21,628 |
| 3 | North Morgan tank | 3,357 | $5,096,046 | $760,536 | 2027 | $881,670 |
| 4 | Aquifer storage & recovery | 3,357 | $444,000 | $66,263 | 2024 | $70,298 |
| 5 | Sunset Dr. waterline loop | 72 | $428,530 | $428,530 | 2028 | $511,687 |
| 6 | Well siting study | 3,357 | $110,000 | $16,416 | 2026 | $18,476 |
| 7 | New drinking water well 2 | 3,357 | $2,323,230 | $346,720 | 2030 | $439,215 |
| | **TOTAL** | **20,214** | **$8,660,426** | **$1,657,061** | | **$1,961,100** |

*Source: Morgan City Culinary Water Impact Fee Facilities Plan, p. 31*

# CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

## Maximum Legal Water Impact Fee per ERC

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future and actual cost of existing system improvements that benefit new growth that can be recouped through impact fees. The impact fee for existing assets must be based on actual costs while the fees for construction of new facilities can be based on reasonable future costs of the system.

The maximum impact fee includes buy-in costs for existing, excess capacity as well as the cost of construction of new facilities.

## Buy-In to Existing, Excess Capacity

There is existing, excess capacity in the source system. New development should be required to pay a buy-in fee for its fair share of the excess capacity consumed over the next 10 years. Actual costs have been used in this analysis. Based on the ERCs served through 2030, the buy-in cost is $1,169.24 per ERC.

TABLE 9: PROPORTIONATE SHARE ANALYSIS, EXISTING EXCESS CAPACITY

| Excess Capacity | Amount |
|---|---|
| Total Actual Cost | $1,144,293 |
| Amount to New Growth | $446,550 |
| Amt to new development, 2022-2030 | $377,051 |
| Growth in ERCs, 2022-2030 | 322 |
| **Cost per ERC** | **$1,169.24** |

## New Construction

Total new improvement costs attributable to new development by 2030 (with inflationary costs added) will reach $1,961,100.

TABLE 10: PROPORTIONATE SHARE ANALYSIS, NEW IMPROVEMENTS

| New Construction Costs | Amount |
|---|---|
| Impact-fee eligible costs | $1,961,100 |
| Growth in ERCs, 2022-2030 | 322 |
| **Cost per ERC** | **$6,081.42** |

## Consultant Costs

The Impact Fees Act allows for fees charged to include the reimbursement of consultant costs incurred in the preparation of the IFFP and IFA.

TABLE 11: PROPORTIONATE SHARE ANALYSIS – CONSULTANT COSTS

| Consultant Costs | Amount |
|---|---|
| Jones | $30,000 |
| ZPFI | $5,800 |
| Total Consultant Costs | $35,800 |
| Growth in ERCs, 2022-2030 | 322 |
| **Cost per ERC** | **$111.02** |

## Impact Fee Fund Balance

Based on information provided by the City, there are no unspent funds remaining in the culinary water impact fees account and therefore no offsetting credit needs to be made.

## Calculation of Gross Fee

The gross impact fee includes costs for buy-in to existing, excess capacity, new construction and consultant costs. Credits for the portion of new projects that benefit existing development, as well as outstanding debt, must still be made.

TABLE 12: PROPORTIONATE SHARE ANALYSIS – GROSS FEE

| SUMMARY OF IMPACT FEE COSTS | Amount |
|---|---|
| Existing Excess Capacity | $1,169.24 |
| New Construction | $6,081.42 |
| Consultant Costs | $111.02 |
| **Subtotal before Credits** | **$7,361.68** |

## Credits Against Impact Fees

Credits must be calculated for the portion of future improvements that will benefit existing development as well as for the City's outstanding culinary water debt. This is necessary so that new development does not pay twice – once through an impact fee and once through increased rates to pay for existing new capital projects that benefit existing development.

Based on the IFFP, $558,804 of the total new construction costs will benefit existing development. This number has been adjusted to construction year costs of $633,617. While impact fees should pay for new development's share of the new projects, rates will need to be raised in order to cover the costs associated with the projects that benefit existing development. Therefore, credits must be made so that new development does not pay twice.

The following credits are based on the assumption of increased rates over an 8-year period to pay for the portion of new construction projects that benefit existing development. Impact fees should be sufficient to cover the costs attributable to new development.

TABLE 13: CREDITS ON NEW CONSTRUCTION – PROJECTS BENEFITTING EXISTING DEVELOPMENT

| Year | Payment per Year | ERCs | Payment per ERC | NPV* |
|---|---|---|---|---|
| 2023 | $79,202.12 | 1,806 | $43.86 | $265.14 |
| 2024 | $79,202.12 | 1,844 | $42.95 | $234.54 |
| 2025 | $79,202.12 | 1,883 | $42.06 | $203.32 |
| 2026 | $79,202.12 | 1,923 | $41.19 | $171.43 |
| 2027 | $79,202.12 | 1,964 | $40.33 | $138.81 |
| 2028 | $79,202.12 | 2,005 | $39.50 | $105.42 |
| 2029 | $79,202.12 | 2,048 | $38.68 | $71.19 |
| 2030 | $79,202.12 | 2,091 | $37.88 | $36.07 |

*NPV = net present value discounted at 5 percent

Credits for outstanding debt are made as follows:

TABLE 14: CREDITS ON OUTSTANDING DEBT

| Year | Total Principal & Interest | Amt Benefitting Existing | ERCs | Payment per ERC | NPV* |
|---|---|---|---|---|---|
| 2022 | $80,595 | $49,144 | 1,769 | $27.79 | $148.85 |
| 2023 | $80,595 | $49,144 | 1,806 | $27.21 | $128.50 |
| 2024 | $80,595 | $49,144 | 1,844 | $26.65 | $107.72 |
| 2025 | $80,595 | $49,144 | 1,883 | $26.10 | $86.45 |
| 2026 | $80,595 | $49,144 | 1,923 | $25.56 | $64.68 |
| 2027 | $80,595 | $49,144 | 1,964 | $25.03 | $42.36 |
| 2028 | $67,162 | $40,953 | 2,005 | $20.42 | $20.42 |

*NPV = net present value discounted at 5 percent

The maximum impact fee per year is calculated by taking the gross fee and subtracting the appropriate credits, by year, for new projects that will benefit existing development and for any outstanding debt.

Residential fees will be charged on a per door basis, with single-family homes charged the equivalent of a 3/4" meter size. The City may choose to average maximum fees over a 3-5 year period for ease of collection.

TABLE 15: MAXIMUM IMPACT FEES, 2023-2028

| Water Fees by Meter Size | AWWA Ratio | Adjusted AWWA Ratio | Max Fee 2023 | Max Fee 2024 | Max Fee 2025 | Max Fee 2026 | Max Fee 2027 | Max Fee 2028 |
|---|---|---|---|---|---|---|---|---|
| 3/4" | 1.00 | 0.60 | $4,172.48 | $4,203.25 | $4,234.68 | $4,266.81 | $4,299.71 | $4,332.84 |
| 1" | 1.67 | 1.00 | $6,968.04 | $7,019.43 | $7,071.91 | $7,125.58 | $7,180.51 | $7,235.84 |
| 1.5" | 3.33 | 1.99 | $13,853.79 | $13,996.82 | $14,101.48 | $14,208.49 | $14,318.03 | $14,428.35 |
| 2" | 5.33 | 3.19 | $22,174.39 | $22,403.33 | $22,570.83 | $22,742.11 | $22,917.45 | $23,094.03 |
| 3" | 10.00 | 5.99 | $41,602.97 | $42,032.51 | $42,346.78 | $42,668.13 | $42,997.09 | $43,328.39 |

| Water Fees by Meter Size | AWWA Ratio | Adjusted AWWA Ratio | Max Fee 2023 | Max Fee 2024 | Max Fee 2025 | Max Fee 2026 | Max Fee 2027 | Max Fee 2028 |
|---|---|---|---|---|---|---|---|---|
| 4" | 16.67 | 9.98 | $69,352.16 | $70,068.19 | $70,592.08 | $71,127.77 | $71,676.14 | $72,228.43 |

## CERTIFICATION

Zions Public Finance, Inc. certifies that the attached impact fee analysis:

1. includes only the cost of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;

2. does not include:
    a. costs of operation and maintenance of public facilities; or
    b. cost for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;

3. offset costs with grants or other alternate sources of payment; and

4. complies in each and every relevant respect with the Impact Fees Act.