

  
***Grand Lakes***  
**Municipal Utility Districts**

# DISTRICT DAY OUT

**Grand Lakes**  
**MUD 1**

**Grand Lakes**  
**MUD 2**

**Grand Lakes**  
**MUD 4**

# Grand Lakes Development

Trendmaker Development in 1997 established the MUDs

- Grand Lakes MUD 1
- Grand Lakes MUD 2
- Grand Lakes MUD 4

*There is no Grand Lakes MUD 3*



Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

**DISTRICT  
DAY OUT**



# MUD Overview

## Definition and Function

Municipal Utility Districts (MUDs) are governmental entities formed to provide essential services like water, waste management, and drainage in areas where municipalities may not service.

Homeowners Associations (HOAs) manage community standards and amenities.



Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

**DISTRICT  
DAY OUT**

# MUD vs HOA: Understanding the Difference

## MUD: Municipal Utility District



Created by local government

Provides water, sewer, drainage, and other public utilities

Funds collected through taxes

Residents elect board members

*Grand Lakes*  
Municipal Utility Districts

## HOA: Homeowners Association



Created by developers or property owners

Maintains common areas, enforces rules and regulations

Funds collected through monthly or yearly dues

Residents elect board members or vote on decisions

Grand Lakes **MUD 1** Grand Lakes **MUD 2** Grand Lakes **MUD 4**

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# Primary Function

**Water**



**Drainage**



**Waste Water**





## Where does your water come from?



### Surface Water

Surface water in Grand Lakes mainly comes from Lake Houston, via the North Fort Bend Water Authority (NFBWA), which ensures an adequate supply for community needs. This water is treated and utilized for various household requirements.



### Groundwater Wells

Groundwater wells are also a vital source of water, specifically in areas with limited surface supplies. They supplement the community's overall water portfolio, especially during peak demands.



# EyeOnWater App & Emergency Alerts



EyeOnWater®



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ANDROID APP ON  
Google play

- **Accurate Measurement with Remote Reading**
- **Real-Time Monitoring and Leak Detection**
- **Billing Transparency**
- **Saving Water Saves Money**

Grand Lakes **MUD1** Grand Lakes **MUD2** Grand Lakes **MUD4**

**DISTRICT  
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# ***PAPE-DAWSON ENGINEERS***



*Serving Grand Lakes since the beginning!*

Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

**DISTRICT  
DAY OUT**



# FIRM PROFILE



- Founded in 1965
- More than 1,500 professional staff
- Top-ranked engineering and surveying firm
- **We represent over \_\_\_\_ MUDs in the Houston Metro area**
- Our Mission: To be the most respected engineering firm in our geographic and technical areas of practice.

## KEY STRENGTHS

- Extensive Local Levee Design Experience
- Staff Longevity
- Technology
- Responsive
- Trusted Owner's Representative



**ENR Texas & Louisiana**  
#2 Surveying and Mapping, 2023  
#3 in Civil Engineering, 2024



**Awarded every year since 2012.**

Award based on achievement in profitability, management, and turnover.



**300+**  
**LOCAL STAFF**

Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

**DISTRICT  
DAY OUT**



## Legend

- WP BOUNDARY
- WWTP BOUNDARY
- GRAND LAKES WCID
- GRAND LAKES 1, 2 & 4



Grand Lakes **MUD 1** Grand Lakes **MUD 2** Grand Lakes **MUD 4**

**DISTRICT  
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LAPIS CREEK LN

HIGHLAND FALLS LN

Regional Water Plant No. 1

Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

**DISTRICT  
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Regional Water Plant No. 2

CINCO CROSSING LN

FRY RD

Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

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Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

Grand Lakes  
**MUD 4**

**DISTRICT  
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## North Fort Bend Water Authority

The NFBWA built the District reuse plants and charges Grand Lakes for the reuse water used for community area irrigation and lakes. This many benefits of the reuse plant include:

- Environmental Conservation – less fresh ground water used for irrigation and lake water
- Economic Advantages – reuse water is less expensive than freshwater
- Agricultural Benefits
- Sustainability

NFBWA water comes from Lake Houston





# Partnership with the NFBWA

cont.

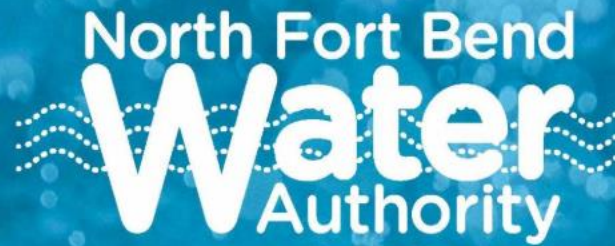
## North Fort Bend Water Authority

### Collaboration Benefits

The partnership with the North Fort Bend Water Authority (NFBWA) emphasizes sustainable practices by providing water reuse for irrigation and maintaining the lakes, enriching community resources.







Provide. Conserve. Educate.

[www.nfbwa.com](http://www.nfbwa.com)

Grand Lakes **MUD1** Grand Lakes **MUD2** Grand Lakes **MUD4**

**DISTRICT  
DAY OUT**



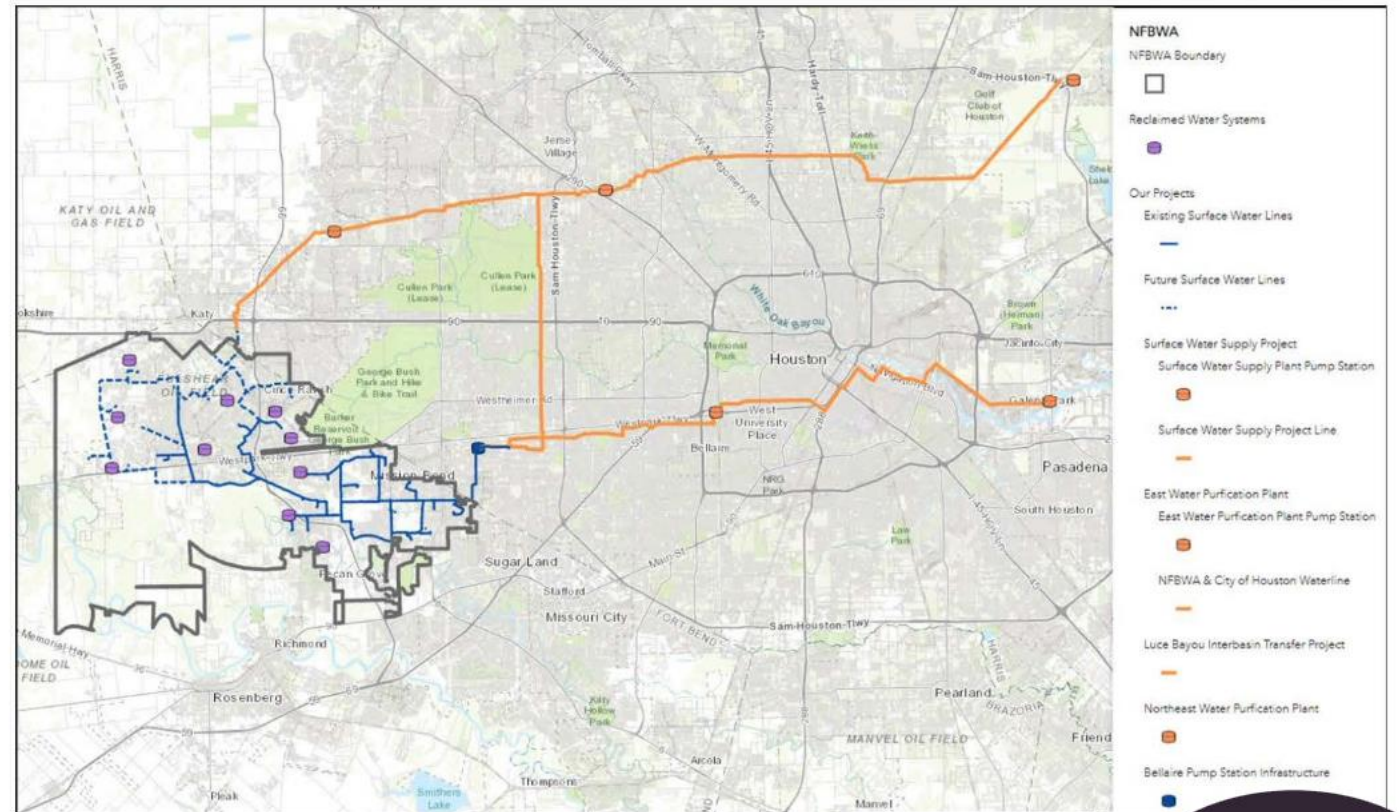
# Groundwater to Surface Water Conversion

## Current Projects

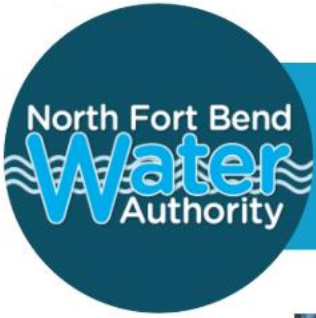
- Luce Bayou Interbasin Transfer Project
- Northeast Water Purification Plant
- Surface Water Supply Project
- Internal transmission lines to connect future water plants

## Past Projects

- NFBWA's Bellaire Pump Station and transmission lines
- 50 miles of internal transmission lines







# Alternative Water Supply Programs



Grand Lakes  
**MUD 1**

Grand Lakes  
**MUD 2**

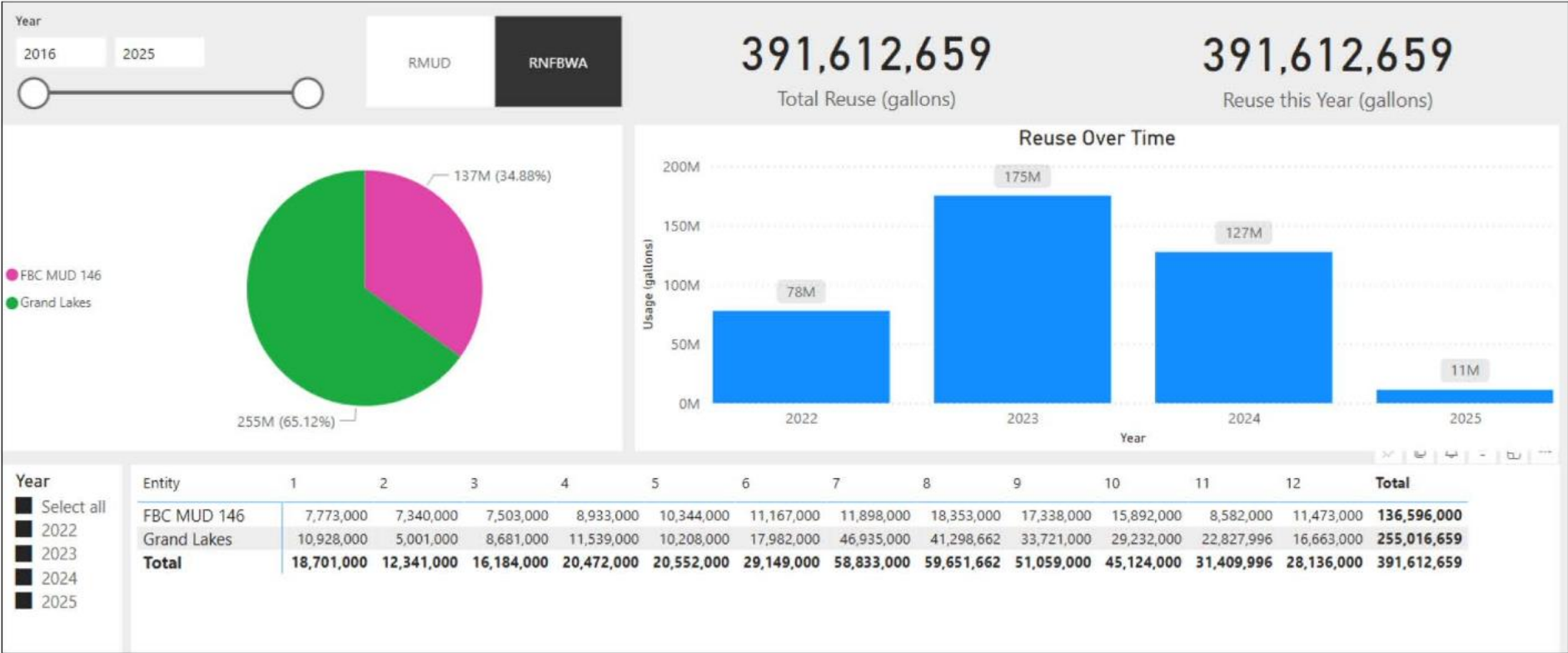
Grand Lakes  
**MUD 4**

**DISTRICT  
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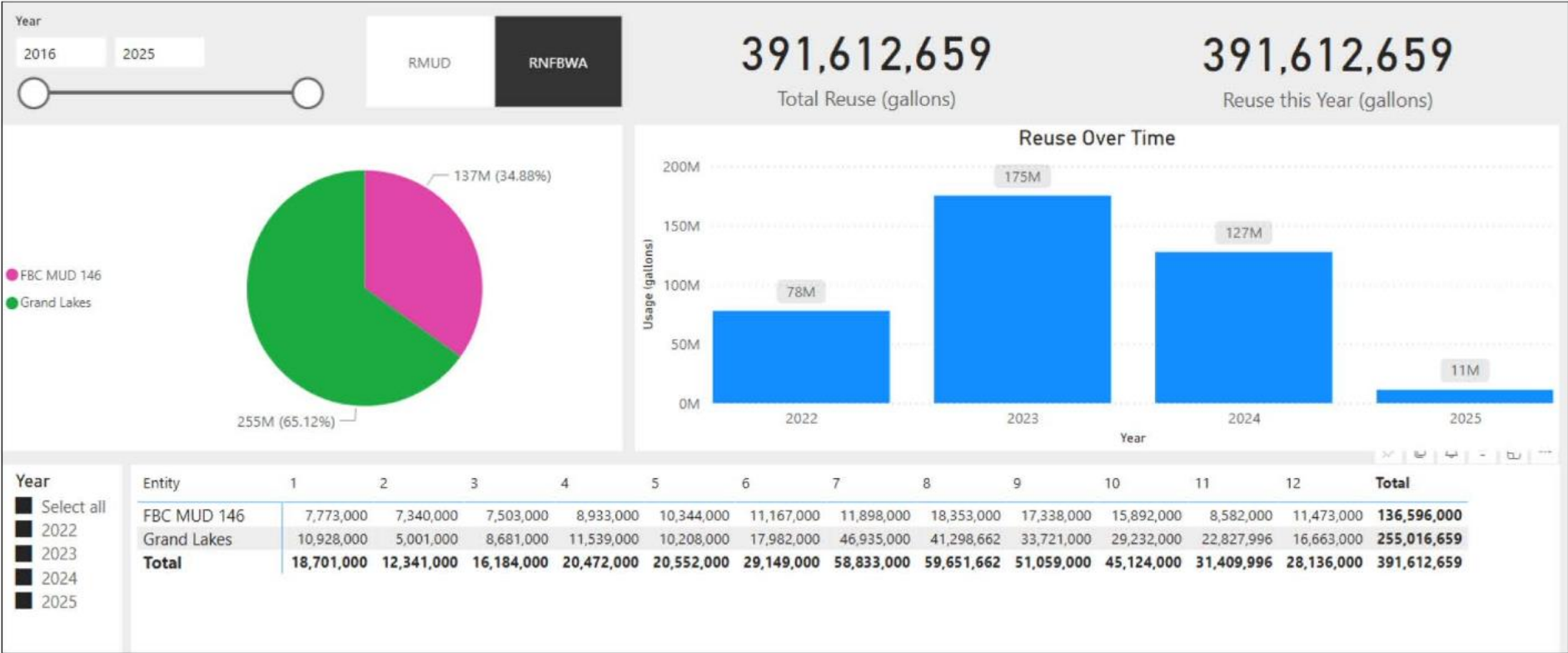
# Reuse Usage Summary - NFBWA Owned







# Reuse Usage Summary - NFBWA Owned





# MUD - Led Community Projects

## Waste Collection



## Sheriff and Constable Coverage

## Street Lights Costs



## Community Irrigation



# MUD - Led Community Projects

cont.

## Perimeter Brick Fence

Constructed in 2021, enhancing community aesthetics and security.

## Peek Road Sidewalk

Provides safe pedestrian access across busy streets, increasing walkability.

## Lazy River Road Sidewalk

Renovated for improved recreational use, ensuring a vibrant community space

## Formal Park Rehab





**THANK YOU GRAND LAKES**

Meet with District consultants

**Grand Lakes MUD 1**   **Grand Lakes MUD 2**   **Grand Lakes MUD 4**

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