



November 9, 2021

Notice is hereby given of a Special Meeting of Nacogdoches City Council to be held on the above date at the C.L. Simon Recreation Center, 1112 North Street, Nacogdoches, Texas, beginning at 4:00 p.m. for the purpose of considering the following agenda items.

Some City Council Members may attend via videoconference but a quorum of the City Council and the Presiding Officer will be present at the above-stated physical location. The meeting will be streamed live at <https://www.nactx.us/21> There will be an opportunity for the public to comment on agenda items either by teleconference or in person in Council Chambers.

Members of the public who wish to submit comments on a listed agenda item must contact the City Secretary's office by email at vinsonj@nactx.us or by calling 936-559-2506 and providing their name, telephone number and relevant agenda item upon which they wish to speak. All requests to make comments must be received by 12:00 p.m. on November 9, 2021. For all timely requests received, staff will call the submitted phone numbers directly during the meeting when the corresponding item comes up for comment. NOTE: The incoming phone call from City staff will be an unfamiliar number.

**PLEASE LIMIT PRESENTATIONS TO THREE MINUTES
(UNLESS PRIOR APPROVAL IS OBTAINED)**

1. CALL TO ORDER.
2. PLEDGE OF ALLEGIANCE.
3. OPEN FORUM. Open Forum is an opportunity for citizens to speak about items not listed on the agenda. In order to address City Council please complete the Open Forum Form and submit it to the City Secretary prior to the start of the meeting. In accordance with the Texas Open Meetings Act, City Council shall not discuss, deliberate, or make any decisions on items discussed during Open Forum. Comments are limited to 3 minutes per person. Open Forum is limited to the first 5 citizens who submit an Open Forum Form.
4. WORK SESSION. Items included under Work Session are intended to provide opportunities for City Council to study and discuss various issues, and gather and analyze information. Council will not take formal action on matters presented at a work session, but may direct staff to place items relating to the matter on future agendas for formal consideration.
 - A. Receive a report, hold a discussion and give staff direction regarding the City's Capital Improvement Projects.
 - * Wastewater (Director of Public Works)
 - * Water (Director of Public Works)
5. ADJOURN.



Jan Vinson, City Secretary



This agenda is posted as required under G. C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact Attorney General of Texas at 1-800-252-8011; City Secretary at 936/559-2506 or visit City of Nacogdoches web site at www.nactx.us.

CERTIFICATION

I certify the notice of meeting was posted in the directory outside of City Hall, 202 E. Pilar Street, Nacogdoches, Texas on November 2, 2021 at 1:30 p.m. and remained posted until meeting convened.

Jan Vinson, City Secretary



City Council Meeting

Date: November 9, 2021

Agenda Item: 4.A.

PRESENTER: Steve Bartlett, Public Works Director

ITEM/SUBJECT: Receive a report, hold a discussion and give staff direction regarding the City's Capital Improvement Projects.

* Wastewater (Director of Public Works)

* Water (Director of Public Works)

SUMMARY/BACKGROUND: The City's infrastructure issues have been an ongoing discussion with City Council, our residents, businesses, and city staff.

The leadership team will be sharing their professional opinions on the infrastructure priorities for the next 5-6 years. Staff will also be presenting the challenges of cost escalations, supply chain issues, and labor shortages. Work Session dates and topics are as follows:

November 8 - Fire Department and Airport

November 9 - Water and Wastewater

November 29 - Public Works

November 30 - Community Services, City Hall and Animal Control

The City has received several million dollars from the American Rescue Plan Act of 2021 (ARPA), the bond market still has very favorable interest rates, and most general fund debt will be paid off in late 2022. There is still uncertainty about the final status of the federal infrastructure bill being debated in Congress as this may infuse additional funds for infrastructure to local and state entities. The city should also aggressively seek grants from the state and federal governments.

There is no expectation that the City Council will make any major decisions at these meetings. At the December 7, 2021 regular City Council meeting, the Finance Director will summarize the discussions of the previous CIP Work Sessions along with requesting how City Council would like staff to advance these efforts. This could mean providing more information and holding additional work sessions, forming a committee to examine and prioritize the projects, the hiring of consultants to complete feasibility studies and financial analysis, pursuing land acquisition, and/or another direction that the City Council may want to pursue.

FINANCIAL:

No financial impact associated with this item

COUNCIL PRIORITIES: THIS AGENDA ITEM IS CONSISTENT WITH THE FOLLOWING CITY COUNCIL PRIORITIES

Infrastructure

CITY CONTACT: Steve Bartlett, Director of Public Works

bartletts@nactx.us
936-559-2522

ATTACHMENTS: 1. Water Wastewater - CIP PowerPoint



Capital Improvement Projects FY:2023-2027

Workshop Meeting 11/9/2021: **Water and Wastewater**

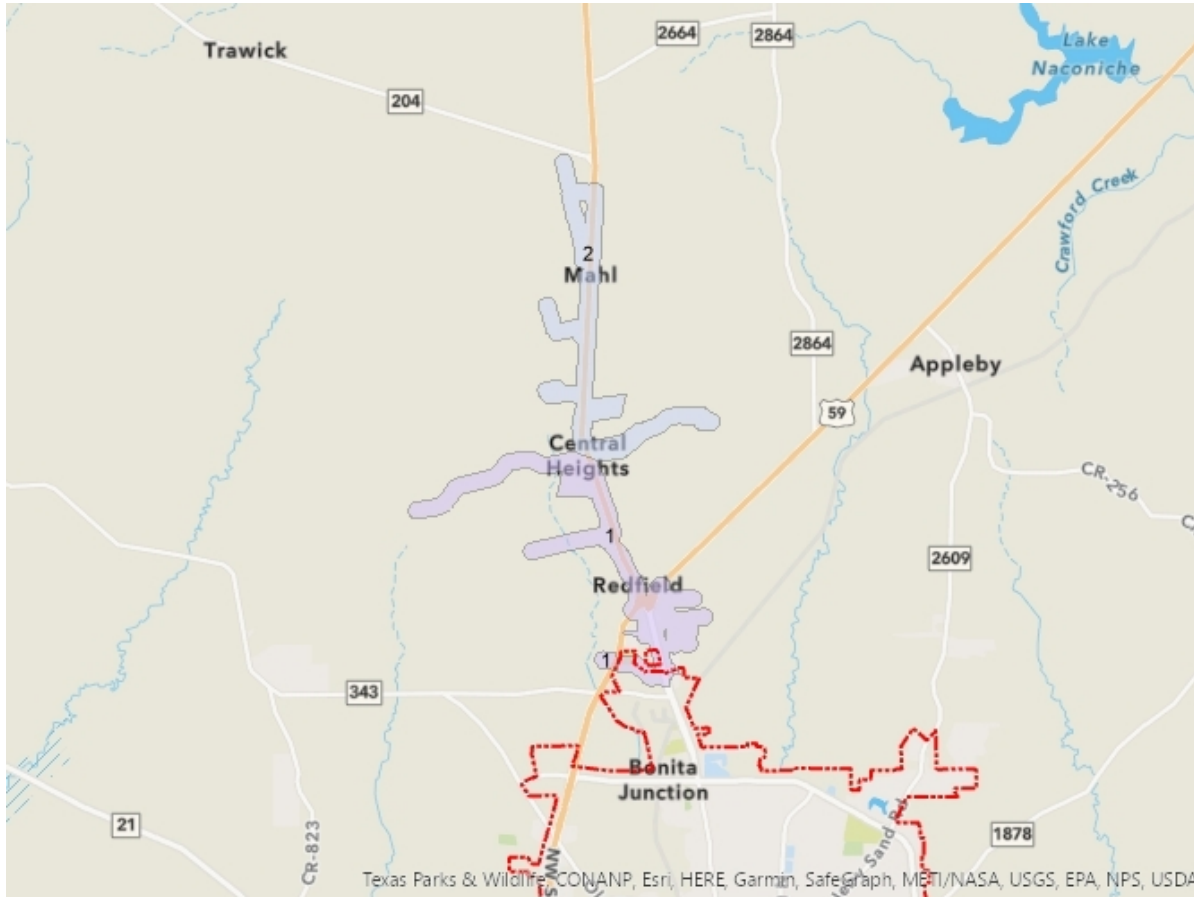
WATER & WASTEWATER UTILITIES

KEY POINTS

- 1. Prior CIP items were mostly cash funding**
- 2. Staff prioritized projects**
- 3. Project schedules were filtered based on fund balance**
- 4. Maintenance has been deferred for long time**
- 5. Projects generally reactive, not proactive**
- 6. Costs and material availability are a challenge**

WATER SYSTEM PROJECTS

Central Heights Water Distribution System



\$3,100,000

- Water line & pump upgrades
- Took over in 2000
- Spent several million in repairs
- System needs more
- Compliance issues
- Undersized lines
- Limited availability
- No annexation
- Tier 2 Priority

Water Line Additions, Replacements & Developer Reimbursements



\$10,300,000

- For unidentified immediate needs
- Emergency repairs
- Unplanned Developer requests
- Double budget from prior years to \$2 mil
- Cash projects

Tier 1 Priority

Major Water Line Repairs



\$5,000,000

- For planned projects
- Replacement
- Upgrades
- Capital Water Line Needs Study
- Cash, Grants, or Financed

Tier 1 Priority

Water Well Rehabilitation



\$1,250,000

- Water Well work-over & repair
- One well per year
- Previously done upon failure
- Resilience
- Cash funded

Tier 1 Priority

Central Heights Elevated Storage Tank



\$1,300,000

- New Elevated Tank
- Help resolve pressure problems
- Size and exact cost to be determined
- Extend power outage resiliency
- Cash, Grant, or financed

Tier 3 Priority

N. Middle Plane Elevated Storage



\$1,600,000

- **New Elevated Tank**
- **Help resolve pressure problems in North/Central areas**
- **Size and exact cost to be determined**
- **Extend power outage resiliency**
- **Cash, Grant, or financed**

Tier 2 Priority

SSPS – SWPS Interconnect

(Lake Water to Well Water)



\$2,000,000

- 24" waterline
- Connect South Side Pump Station to Southwest Pump Station
- Emergency interconnection only
- Extend power outage resiliency
- Financed

Tier 2 Priority

SCADA Replacements & Upgrades (*Water System*)



\$900,000

- Supervisory Control and Data Acquisition
- System Technology is obsolete
- Two proprietary systems – conflicts
- Programming & replacement parts scarce
- High risk of system outages
- Needs & cost to be determined

Tier 1 Priority

SWPS Transmission Line Replacement (*Lake Water*)



\$4,550,000

- Concrete Cylinder Pipe Replacement
- Staff cannot repair
- Specialty contractor is required
- Critical component for water supply
- High risk of system outages
- Financed

Tier 1 Priority

SWTP Filter Rehab

(Lake Water Treatment Plant)



\$875,000

- Water filter media replacement
- Necessary every 10-15 years
- Critical for good water quality
- Periodic reoccurring cost
- Cash

Tier 2 Priority

City-Wide AMI Replacement



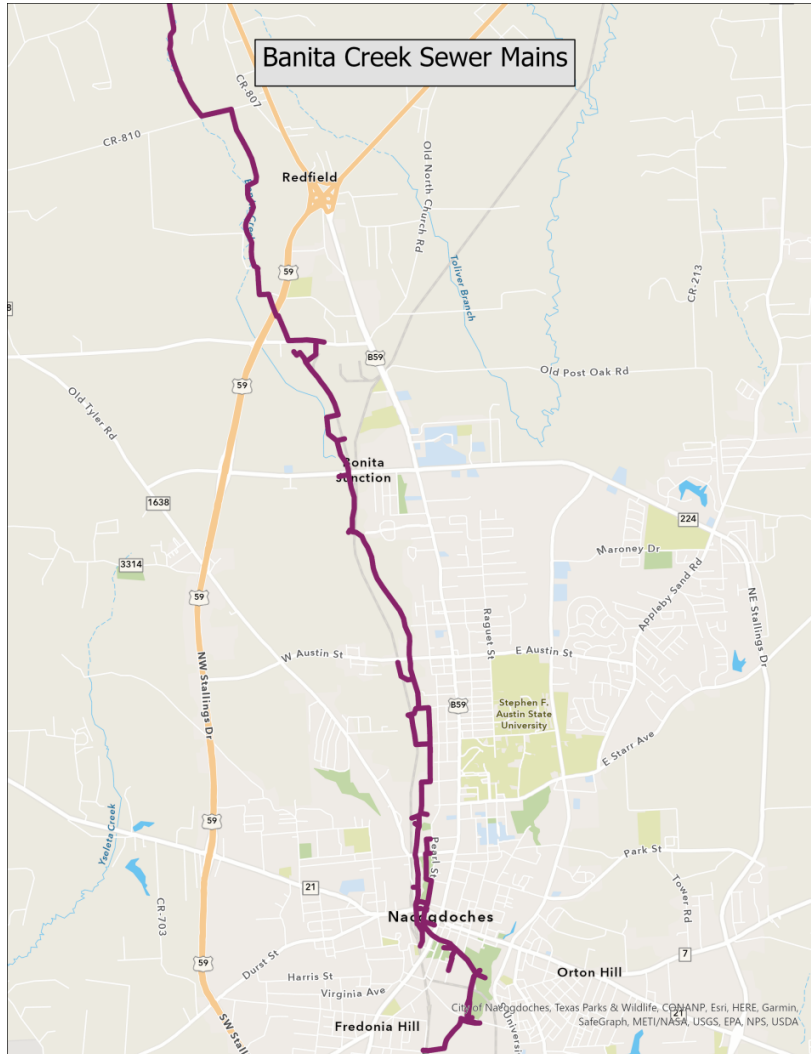
\$4,772,000

- **Advanced Metering Infrastructure (AMI)**
- **Water meter replacement (50%).**
- **Transmitter replacement (100%)**
- **Current system is 13 yr old**
- **New meters generate more accurate readings**

Tier 1 Priority

WASTEWATER SYSTEM PROJECTS

Banita Creek Sewer Line Replacement

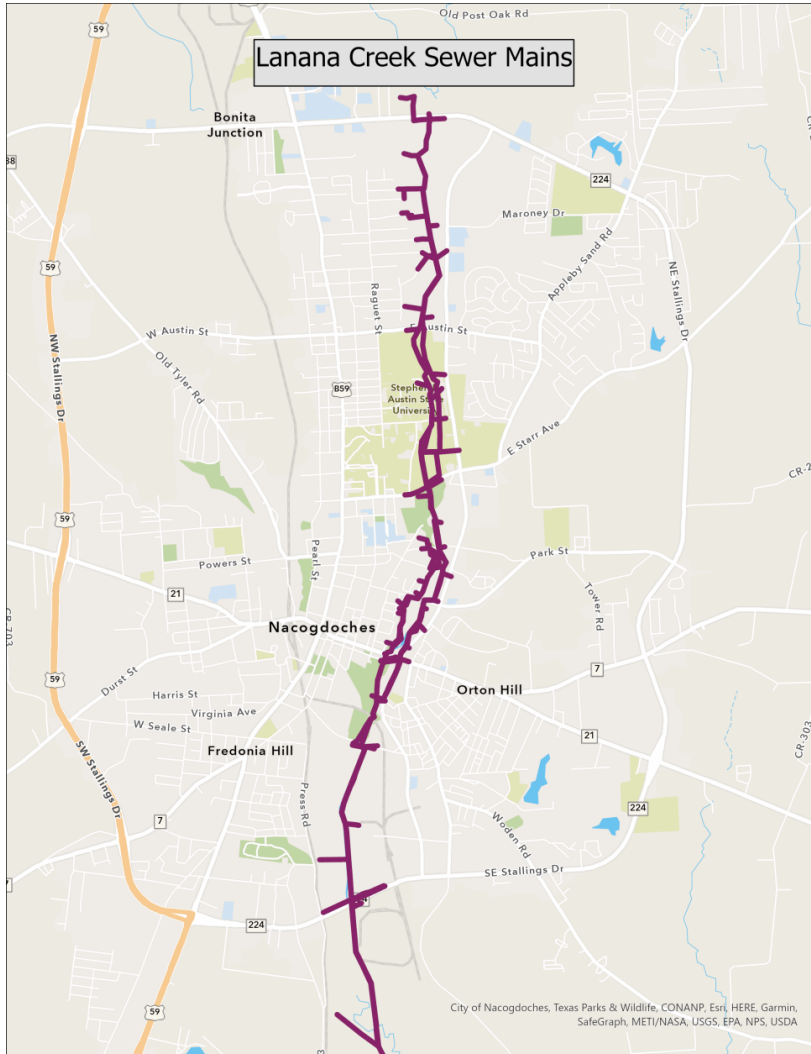


\$14,250,000

- **Trunk Sewer Line Replacement**
- **Multiple failures. Old concrete pipe – acid erosion.**
- **Exist. 18”- 24” dia**
- **Upsize and design for 100 year life**
- **Requires some new easements**
- **Financed**

Tier 1 Priority

Lanana Creek Sewer Line Replacement



\$16,400,000

- **Trunk Sewer Line Replacement**
- **Multiple failures. Old concrete pipe – acid erosion.**
- **Exist. 18”- 48” dia**
- **Upsize and design for 100 year life**
- **Requires some new easements**
- **Financed**

Tier 1 Priority

Sewer Line Additions, Replacements & Developer Reimbursements



\$10,300,000

- For unidentified immediate needs
- Emergency repairs
- Unplanned Developer requests
- Double budget from prior years to \$2 mil
- Cash projects

Tier 1 Priority

TDS and Phosphate Plant Upgrades (*Sewer Treatment*)



\$2,100,000

- Treatment Plant upgrades for solids and phosphate removal
- Anticipated changes in permit regulations
- Scope and costs to be determined
- Pilot study underway
- Cash, Financed

Tier 3 Priority

Clarifier Rebuild

(Sewer Treatment Plant)



\$1,150,000

- Rebuild wearable components of each clarifier (4)
- Rebuild 1 unit every 2 years
- Necessary to meet regulatory standards
- Cash

Tier 2 Priority

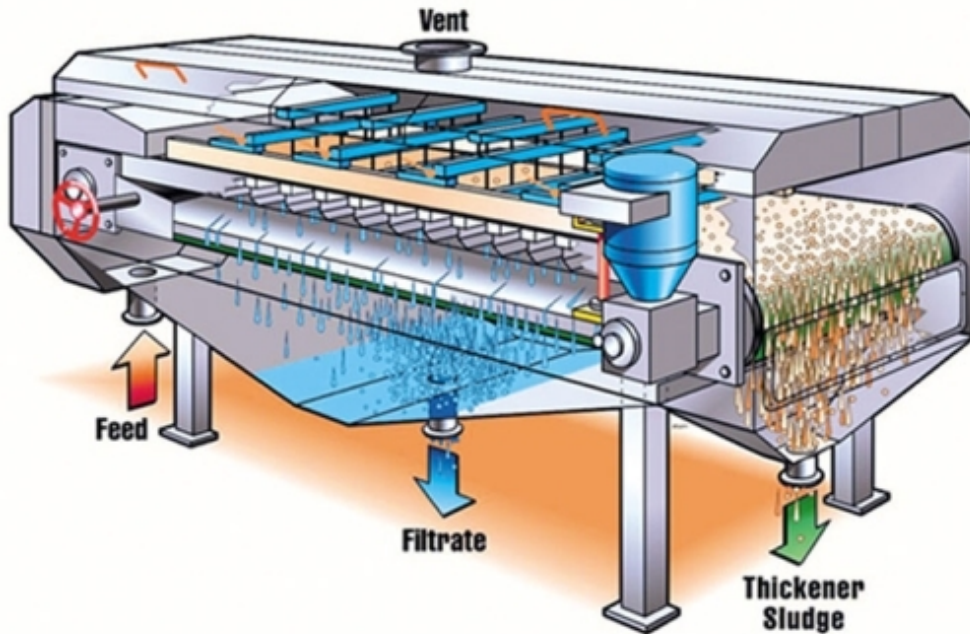
Sludge Thickener System

(Wastewater Treatment Plant)

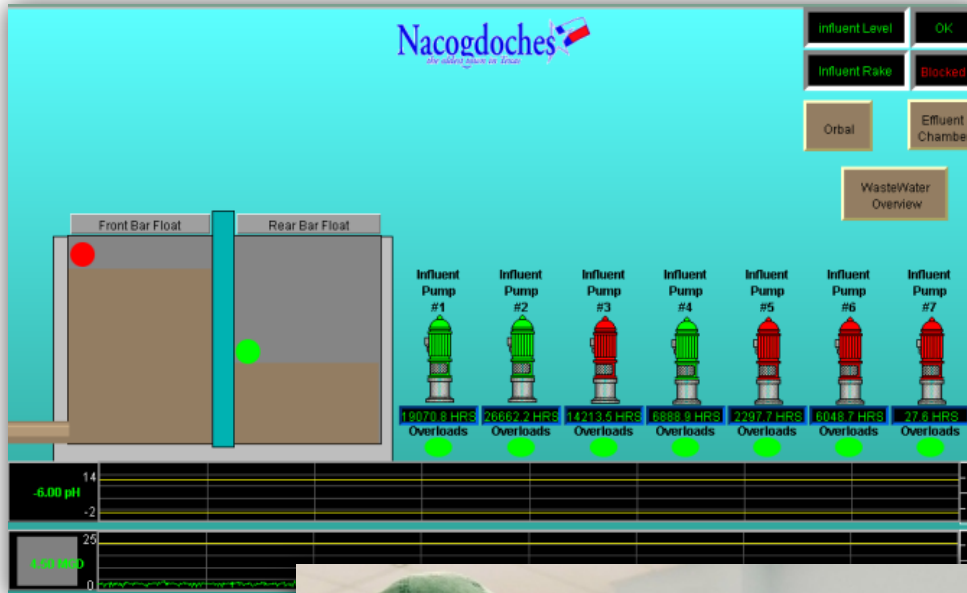
\$775,000

- **Densifies waste sludge**
- **Less landfill disposal volume**
- **Increase efficiency and reduce costs**
- **Cash**

Tier 3 Priority



SCADA Replacements & Upgrades (*Wastewater System*)



\$900,000

- Supervisory Control and Data Acquisition
- System Technology is obsolete
- Two proprietary systems – conflicts
- Programming & replacement parts scarce
- Assessments underway
- Cash

Tier 1 Priority

Diffused Air Conversion for Digester *(Wastewater Treatment Plant)*



\$870,000

- Improvements for sludge reduction system
- Reduces landfill waste volumes
- Increases efficiency
- Lower maintenance cost
- Design assessment underway
- Cash

Tier 3 Priority

Belt Press Building

(Wastewater Treatment Plant)



\$1,350,000

- Existing building is deteriorating
- New building structure
- New electrical
- 2017 Feasibility Study – 3 options
- Cash, Financed

Mobilization, Site Work

\$39,000 - \$131,000

New Building

\$117,500 - \$224,500

Electrical

\$212,500 –

228,000

Demolition

\$87,500 - \$215,000

Misc. (Temp. Items)

\$160,000 -

▶ \$260,000

Contingency

\$111,600 - \$119,850

Tier 1 Priority