



Environment and Climate Change
Environmental Stewardship Division
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April 30, 2025
Client File No.: 1071.10
Our File No.: S-972, S-1146, EMS
020-17-08-11-00
020-17-08-11-0N

Attention: Agnes Wittmann, Director

**RE: QUARTERLY PROGRESS REPORT FOR NEWPCC UPGRADES
JANUARY 1 – MARCH 31, 2026**

This report summarizes progress on the North End Sewage Treatment Plant (NEWPCC) upgrades, operating under Environmental Act Licence No. 2684 RRR, from January 1 to March 31, 2026.

1. INTERIM CHEMICAL PHOSPHOROUS REMOVAL FACILITIES

Update on items from last report:

- [Figure 1](#) in the Appendix shows the locations of the ferric chloride dosing points.
 - Dosing into Location 3 was increased to take advantage of the Ultraviolet (UV) system being offline. These included the following increases:
 - 27% of the consultant's recommended dose on January 7, 2025.
 - 40% of the consultant's recommended dose on January 24, 2025.
 - 55% of the consultant's recommended dose on February 4, 2026.
 - 85% of the consultant's recommended dose on February 18, 2026
 - In March, dosing into Location 3 was adjusted due to spring flooding conditions, rising soluble ferric concentrations in the final effluent, and the reinstatement of the UV system. The dose at Location 3 was adjusted to:
 - 65% of the consultant's recommended dose on March 12, 2026.
 - 40% of the consultant's recommended dose on March 17, 2026.
 - 65% of the consultant's recommended dose on March 20, 2026
 - 45% of the consultant's recommended dose on March 26, 2026.
 - Dosing at Location 4 remained 10% of the recommended consultant dose; no adjustments were implemented due to the focus on Location 3.
 - The WAS pipe was repaired on January 28, 2026.
 - Dosing at Location 5 resumed on January 16, 2026 and continued through February and March. Dosing is intermittent and depends on the amount of sludge received at NEWPCC.
- The average final effluent phosphorous level over the reporting period was 3.6 mg/L, which is down from 3.8 mg/L from the previous reporting period. Phosphorus concentrations were high in January and early February but decreased significantly in late February and March due to the higher ferric chloride dosage resulting in a total phosphorus concentration as low as 0.9 mg/L.
- [Figure 2](#) in the Appendix provides historic 30-day rolling average total phosphorus effluent levels from August 21, 2021 to March 2026.

- [Figure 3](#) in the Appendix provides historic annual total phosphorus effluent loads from 2004 to March 2026.
- [Table 1](#) in the Appendix provides the estimated effluent phosphorous concentrations throughout various stages of the NEWPCC upgrades.

Next steps:

- Continue to review and optimize dosing rates based on operating conditions. During the next quarter, spring flood conditions will have a significant influence on dosing adjustments.
- Monitor the impact of ferric chloride dosing on the new UV system.

2. HEADWORKS FACILITIES

An overall site plan for the headworks project is provided in [Figure 4](#) in the Appendix.

Update on items from last report:

- Tunnels and Chambers: Connection of the flushing water to the H1 Chamber to allow for leak testing and pump run tests is complete. Installation of the H1 Chamber coatings, pouring of the liner wall, and placement of flowable concrete fill in the base of the Y5 Chamber is complete. Installation of the roof for the H1 Chamber continues.
- Raw Sewage Pumping Station: Energization of electrical panels, leak testing of slide gates and stop logs, and installation of pump shafts and guards is complete. Installation of piping, insulation, ducting, cabling, drywall, and painting is ongoing.
- Grit Building: Installation of the public announcement speakers is complete. Installation of piping, railings, ducting, cabling, gas detection, and electrical equipment is ongoing. Pressure testing of various systems is ongoing.
- Fine Screening Area: Installation of the sluice conveyors and ducting is complete. Installation of cabling, piping, gas detection, and electrical equipment is ongoing.
- Solids Handling and Mechanical Rooms: Installation of air curtains and waste bin scales is complete. Installation of piping, ducting, cabling, gas detection, and painting is ongoing.
- Y4 Gallery Connection: Installation of piping, cabling, and fire alarm system is ongoing.
- Main Control Building: Installation of piping insulation, sump pump system, cabling, ceiling grid, drywall, electrical equipment, and painting is ongoing.
- Standby Generator Building: Installation of diesel fuel system is complete. Installation of cabling, gas detection, and fire safety systems is ongoing.
- Fuel Storage System: Installation of access stairs is complete. Diesel tanks have been filled with fuel. Installation of cabling is ongoing.
- Odour Control Facility: Installation of supply fans and ducting is complete. Testing of piping, electrical, and ancillary equipment is ongoing.
- Area Y: Water main tie-in, installation of the north storm water detention system, and natural gas connection is complete. Installation of land drainage piping and construction of roads and sidewalks is ongoing.
- Existing NEWPCC Grit Area Modifications: Modifications to the existing Grit Area are complete and Grit Tanks 2 and 3 were returned to service.

- UV Upgrade: The UV system was reinstated March 13, 2026. After the UV system was reinstated, an operating issue with an existing UV gate channel actuator was identified. The existing UV gate actuator was replaced on March 31, 2026. Preliminary results indicate the new UV system is meeting licence limits.

Next steps:

- Tunnels and Chambers: Installation of the roof for H1 Chamber.
- Raw Sewage Pumping Station: Functional testing of pumps and motors and installation of piping, insulation, ducting, electrical, gas detection, drywall, and painting.
- Grit Removal Building: Continue installation of piping, railings, ducting, cabling, gas detection, and electrical equipment. Complete pressure testing.
- Fine Screening Area: Continue installation of cabling, piping, gas detection and electrical equipment.
- Solids Handling and Mechanical Rooms: Continue installation of piping, ducting, cabling, gas detection, and painting.
- Y4 Connection Gallery: Continue installation of piping, fibre, and fire alarm cabling.
- Main Control Building: Continue installation of piping insulation, sump pump system, cabling, ceiling grid, drywall, electrical equipment, and painting.
- Standby Generator Building: Continue installation of cabling, gas detection, and fire alarm systems.
- Odour Control System: Continue testing of piping, electrical, and ancillary equipment.
- Area Y: Continue installation of land drainage piping and construction of roads and sidewalks
- Existing NEWPCC Grit Area Modifications: No further work required. Modifications are complete.
- UV Upgrade: Ongoing monitoring to confirm licence compliance. Upgrades to the facility continue and are expected to be completed in fall 2026.

Schedule update:

- The current project schedule is provided in [Table 2](#) in the Appendix.

3. BIOSOLIDS FACILITIES

Update on items from last report:

- The Development Partner is in the Intermediate Design Period and continues to work towards Stage Gate #3.
- The NEWPCC Piping Installation, Soil Remediation, and Site Compound Development construction achieved Substantial Performance on January 12, 2026.
- The land drainage system (LDS) construction has commenced.
 - The Heritage Resource Impact Assessment report was approved by Heritage Resource Branch on January 9, 2026.
 - The LDS subsurface railway crossing was approved by Canadian Pacific Kansas City (CPKC) on March 30, 2026.
- The Northwest Interceptor (NWI) Lining was completed on March 5, 2026.

Next steps:

- The Development Partner will finish the 60% design, Class 2 cost estimate, and Stage Gate #3 by the end of Q2 2026.
- If the above is acceptable to the City, the Design Build Agreement for the construction of the Biosolids Facilities will be awarded and executed with Red River Biosolids Partners in Q3 2026.
- Construction of the temporary power for construction is anticipated to be substantially complete by Q3 2026.
- Construction of the LDS is anticipated to be substantially complete in Q4 2026.

Schedule Update:

- The current project schedule is provided in [Table 3](#) in the Appendix.

4. NUTRIENT REMOVAL FACILITIES

Update on items from last report:

- RFP Step 2 was posted January 26, 2026. Site visits and contract review meetings for all Shortlisted Proponents occurred.
- External funding discussions to support the project are ongoing.

Next steps:

- Continue the RFP Step 2 process, including additional site visits and contract review meetings. The anticipated proposal submission deadline is June 19, 2026.
- Continue seeking external funding to support the project.
- Continue discussions with CPKC for the temporary surface crossing, including submission of additional supporting information.
- Progress the contaminated soils remediation plan.

Schedule Update:

- The current project schedule is provided in [Table 4](#) in the Appendix.

5. NEWPCC UPGRADE PLAN UPDATE

The Province provided a letter on March 20, 2026 on the NEWPCC Upgrade Plan Update indicating the extension to the completion date of the NEWPCC Upgrade project from 2030 to 2032 was approved subject to conditions and adjustments.

Should you have any questions, please contact me at 204-986-5210 or by email at cwiebe@winnipeg.ca.

Sincerely,

Cynthia Wiebe, P. Eng., CAMP
Manager of Engineering Services

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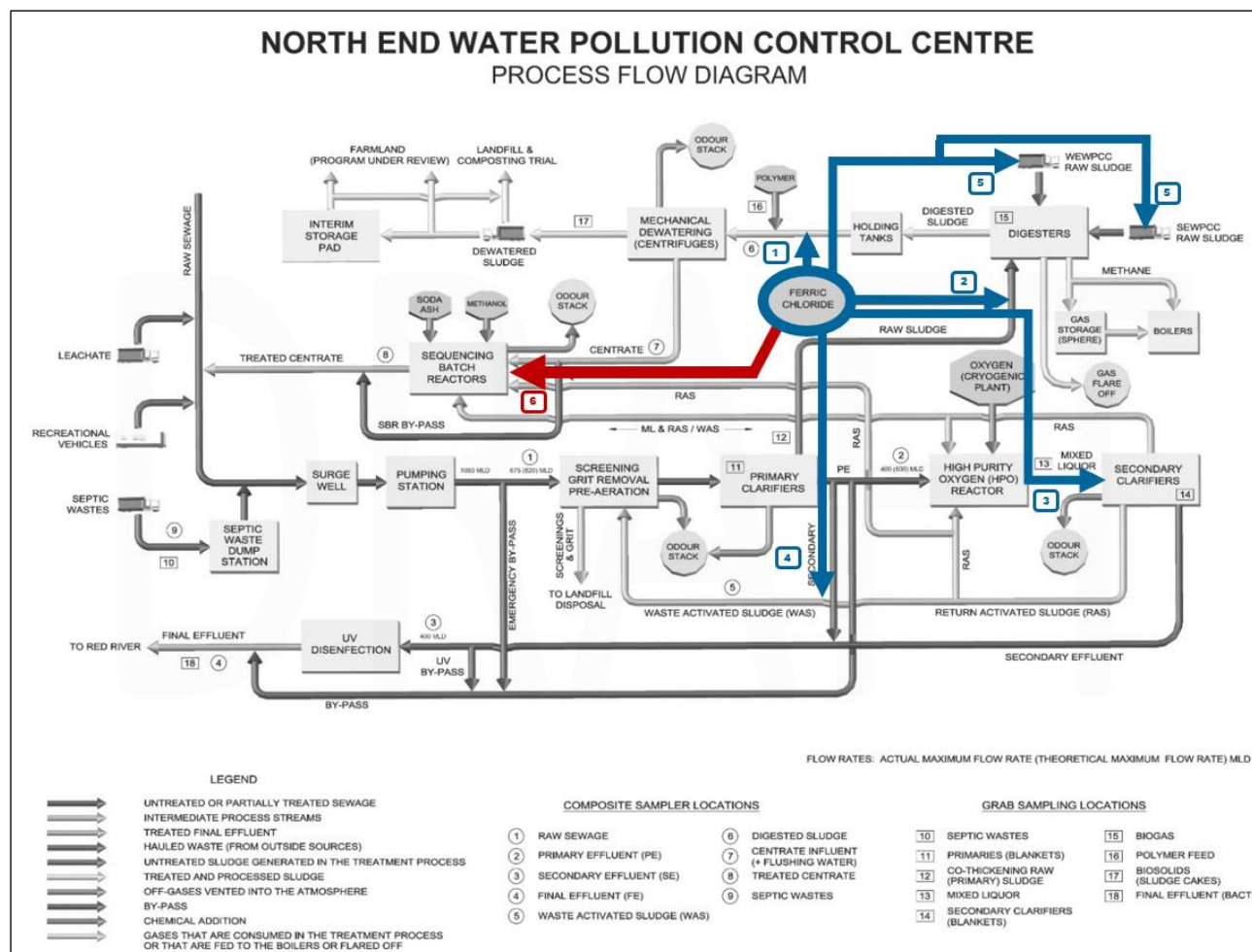


Figure 1: NEWPCC Ferric Chloride Dosing Points

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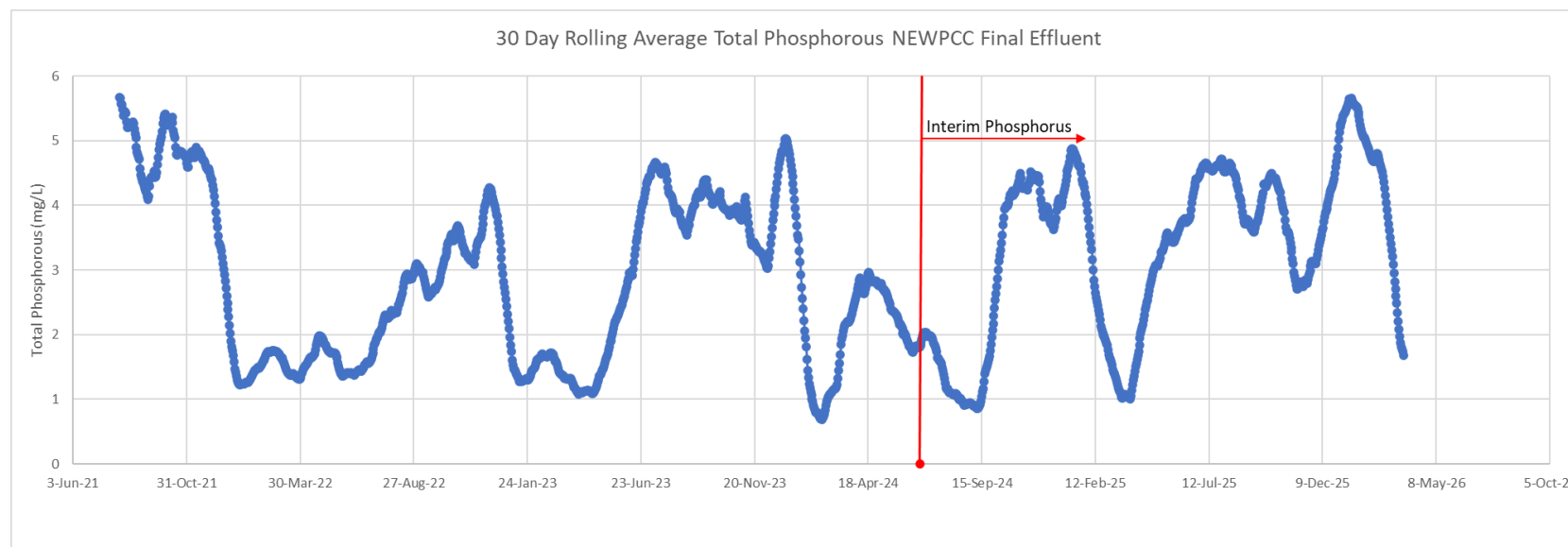


Figure 2: 30-Day Rolling Average Total Phosphorous in the NEWPCC Final Effluent from Aug 21, 2021 to March 26, 2026.

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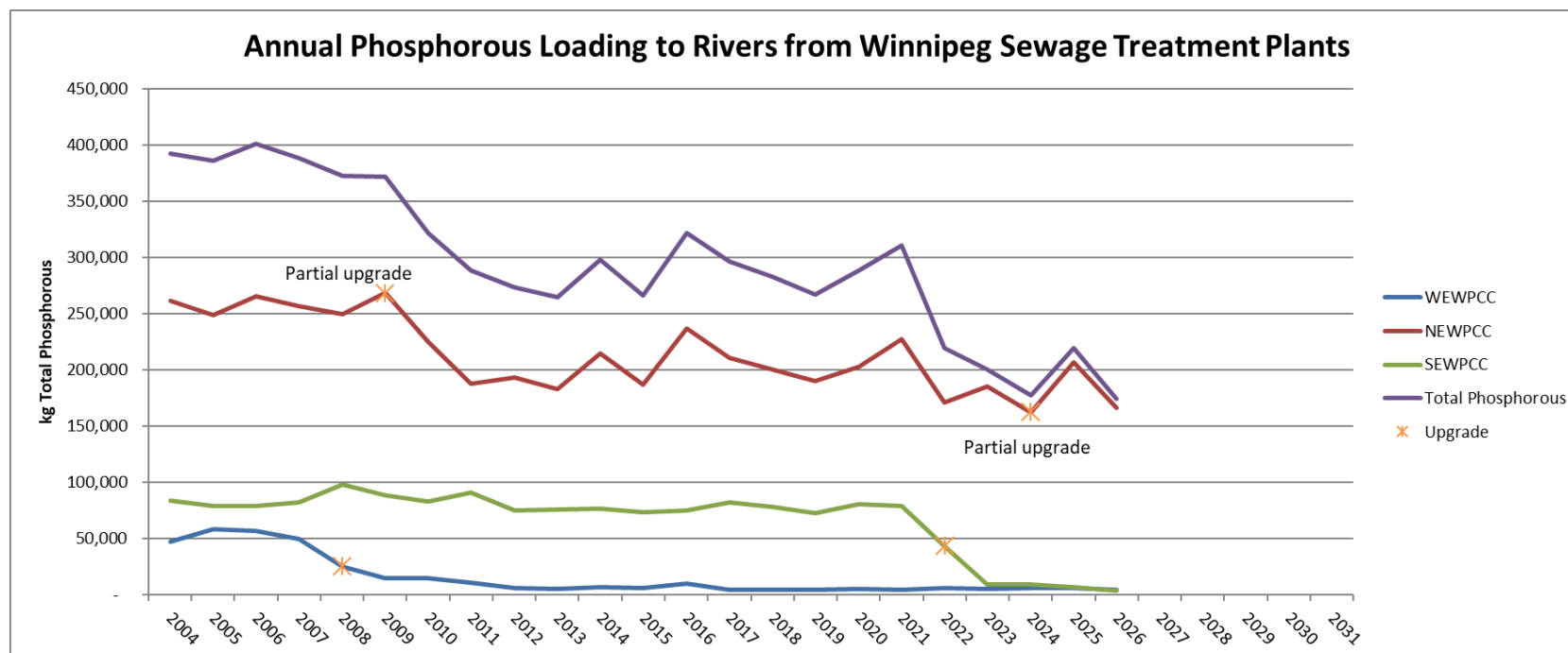


Figure 3: Historic Annual Total Phosphorus Effluent Loads from 2004 to December 31, 2026; Loads current to March 26, 2026. An estimate based on historical data has been made for March 26, 2026 to December 31, 2026.

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Table 1: Estimated Phosphorous Concentrations through NEWPCC Upgrade Stages

Stage	Period	Estimated Total Phosphorous Concentration in NEWPCC Final Effluent ^{1,2}	Monitoring Data: Total Phosphorous (NEWPCC Final Effluent)
Stage 1: Phosphorous reduction with existing infrastructure	Until Aug 2021	Approximately 4.0 to 4.5 mg/L on average	3.6 mg/L (Average from 2017 – 2021)
Stage 2: Maximized phosphorous reduction through optimization with existing infrastructure	Aug 2021 to Jun 24, 2024	Approximately 3.5 mg/L on average	2.5 mg/L (Average from 2022 to June 24, 2024)
Stage 3: Phosphorous reduction with Interim Chemical Phosphorous Facilities	Jun 25, 2024, to Dec 2030	Approximately 2.5 to 3.0 mg/L on average ³	3.3 mg/L (Average from June 25, 2024 to March 26, 2026)
Stage 4: Phosphorous reduction with commissioned Biosolids Facilities	Jan 2031 to Jan 2032	1 mg/L until Jan 2032 ⁴	
Stage 5: Ongoing phosphorous reduction with commissioned Nutrient Removal Facilities	TBD	1 mg/L	

¹ Based on the 'NEWPCC Interim Phosphorous Removal and Detail Review and Bench Scale Testing Report, December 2020

² The modelled data is a conservative estimate of total phosphorous concentrations. The model was developed based on historical wastewater loadings and factored in the projected impacts of upgrades at SEWPCC. Actual results are dependent on many variables, such as:

- the overall health and performance of the treatment bacteria
- the performance of various processes
- wet weather flow
- changes in development
- industrial activity (especially high strength industry)
- ongoing capital improvements

Phosphorous concentrations in the final effluent are reported in the NEWPCC's monthly compliance reports and can be found online at winnipeg.ca/wwcompliance.

³ Phosphorous levels may increase as City growth consumes sludge processing capacity

⁴ Phosphorous levels may increase after January 2032 dependent on sludge loading levels (assuming maximum sludge generating scenario)

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Table 2: Headworks Facilities – Project Milestones

Task Description	% Complete**			Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
	Jan	Feb	Mar			
Procurement and Contract Award	100%			Jun 30, 2021		Jun 11, 2021
DB Mobilization Complete	100%			Dec 31, 2021		Dec 15, 2021
30% Design	100%			Dec 14, 2021		Dec 14, 2021
60% Design	100%			Sep 30, 2022		May 22, 2024
90% Design	100%			Jan 23, 2023	Nov 30, 2024	Oct 29, 2024
IFC Design	100%			Apr 17, 2023	Jan 30, 2025	Jan 6, 2025
Driven Piles (All Areas)	100%			Aug 19, 2022		Mar 14, 2023
Secant Piles (H2, H1, Y5)	100%			Sep 29, 2022		Jan 13, 2023
Microtunneling (H1 to H2 and H1 to Y5)	100%			Dec 20, 2022	Feb 28, 2025	Mar 24, 2025
Generator Building, Structural and External Finishes	100%			Mar 14, 2023	May 30, 2025	May 30, 2025
Standby Generators, Install	100%			Aug 3, 2023		Oct 30, 2022
Raw Sewage Pumping Station (H2), Concrete	100%			Aug 7, 2023	May 30, 2025	May 31, 2025
H1 Chamber	80%	85%	88%	Sep 5, 2023	Aug 28, 2026	
Standby Generator Facility and Fuel Storage System	98%	99%	100%	Sep 15, 2023	Mar 5, 2026	Mar 3, 2026

Table 2: Headworks Facilities – Project Milestones continued...

Task Description	% Complete**			Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
	Jan	Feb	Mar			
Grit Removal System, Install	100%			Sep 18, 2023	Jul 31, 2024	Jul 19, 2024
Y5 Chamber	50%	50%	50%	Dec 7, 2023	Aug 28, 2026	
Raw Sewage Pumps, Install	100%			Jan 23, 2024	Nov 25, 2024	Oct 23, 2024
Fine Screens, Install	100%			Mar 26, 2024	Jan 17, 2025	Nov 25, 2024
Headworks Building, Structural and External Finishes	100%			Jun 7, 2024	Aug 27, 2025	Aug 27, 2025
Odour Control System, Install	80%	85%	100%	Jul 8, 2024	April 1, 2026	Mar 31, 2026
Civil Works and Landscaping	71%	72%	72%	Jul 26, 2024	Aug 28, 2026	
Headworks Building, Complete	92%	93%	100%	Nov 5, 2024	Mar 31, 2026	Mar 31, 2026
Commissioning	0%			Mar 31, 2025	July 24, 2026	
Decommissioning – Original Equipment	0%			May 14, 2025	Aug 31, 2026	
Raw Sewage Testing*	0%			May 29, 2026		
Interim Completion*	0%			Jul 24, 2026		
Substantial Completion*	0%			Jun 30, 2025	Aug 31, 2026	

*These are the only milestones that are contractual and cannot slide without penalty

**Data source: Red River Solution's Monthly Report

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Table 3: Biosolids Facilities – Project Milestones

Task Description	% Complete			Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
	Jan	Feb	Mar			
Updated Preliminary Design and Procurement Strategy	100%			Dec 31, 2021	Apr 1, 2022	Apr 14, 2022 Council Approved Jul 21, 2022
Post RFP Step 1 (Following Council Approval for a PDB procurement strategy)	100%			Jul 13, 2023		Jul 14, 2023
Shortlist Proponents	100%			Sep 30, 2023	Dec 4, 2023	Dec 1, 2023
Post RFP Step 2	100%			Oct 31, 2023	Dec 4, 2023	Dec 11, 2023
Contract Award of Development Phase Agreement (DPA)	100%			Jun 30, 2024	Sep 27, 2024	Sep 23, 2024
DPA Stage Gate 1 – Start-Up Period	100%			Feb 6, 2025		Jan 31, 2025
DPA Stage Gate 2 – Preliminary Period	100%			Sep 12, 2025	Dec 12, 2025	Dec 12, 2025
DPA Stage Gate 3 – Intermediate Period	29%	43%	57%	Apr 20, 2026	Jun 22, 2026	
Contract Award of Design Build Agreement	0%			Sep 18, 2026		
Substantial Completion				TBD following DBA – by Dec 31, 2030		

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Table 4: Nutrient Removal Facilities - Project Milestones

Task Description	% Complete			Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
	Jan	Feb	Mar			
Nutrient Removal Technology Selection	100%			Oct 19, 2023		Oct 12, 2023
Updated EPD	100%			Jun 30, 2024	Oct 18, 2024	Oct 21, 2024
Revised Class 3 Cost Estimate	100%			Sep 30, 2024	Nov 15, 2024	Nov 12, 2024
Procurement – Post RFP Step 1	100%			Aug 22, 2025		Aug 22, 2025
Procurement – Shortlist Proponents	100%			Nov 21, 2025		Nov 14, 2025
Procurement – Post RFP Step 2	100%			Jan 16, 2026	Jan 30, 2026	Jan 26, 2026
Contract Award – Development Phase Agreement	0%	10%	20%	Oct 16, 2026		
Contract Award – Project Agreement	0%			Mar 1, 2028		
Substantial Completion	0%			Dec 31, 2032		

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