Director of Compliance and Innovation Report

October 18, 2023

Plant Loading, CSO Report, and Director's Notes

Plant Influent Report:

Biochemical Oxygen Demand, 5-Day (Avg. 40334 lbs/day)	63 percent of design
Total Suspended Solids (Avg. 54713 lbs/day)	50 percent of design
Average Daily Flow (22.39 million gallons/day)	55 percent of design
Maximum Daily Flow (28.22 million gallons/day)	23 percent of design
Plant Influent Total Monthly Flow (million gallons) for August	877.22
Estimated Unbilled Total Monthly Flow (million gallons)	119.70
Total Monthly Precipitation (inches)	4.89

Plant Effluent Report:

Parameter	<u>Report Frequency</u>	<u>Permit</u> <u>Limits</u>	<u>Reported</u> <u>Values</u>	<u>Violations</u>
CBOD₅, mg/L	Mo./Wk. Avg	20/40	2/2	0
TSS, mg/L	Mo./Wk. Avg	25/45	5/7	0
NH₃-N, mg/L	Mo. Avg/Daily Max	1.5/3.0	0.43/0.48	0
DO, mg/L	Mo. Avg/Wk. Avg/Daily Min	6.0/4.5/4.0	6.94/6.75/6.65	0
pH, S.U.	Daily Min/Max	6.0/9.0	7.84/8.00	0
Total Nickel, mg/L	Mo. Avg	0.0381	0.019	0
Cl ₂ Residual, mg/L	Daily Max	0.05	< 0.011	0
Fecal Coliform CFU/100mL	Daily Max	400	247	0

CSO Report:

Location	Events	Est. Total Duration of Discharges (hrs.)	Discharge (million gallons)
Oakland Avenue (Outfall 003)	0	0	0
Lincoln Park (Outfall 004)	0	0	0
McKinley Avenue (Outfall 007)	0	0	0
Seventh Ward (Outfall 008)	0	0	0

Director's Notes:

Disinfection Season:

Although the disinfection season is coming to an end for the 2023 season, the District operators continue to work hard operating the disinfection system. Operators have had to continually deal with issues such as nitrite fluctuation and ammonia levels mainly due to heavy loading from industries and low flow conditions.

Land Application Program:

Staff have been hard at work mixing sludge over at the Wyckles storage lagoons prepping for land application to begin this month.

Compliance Reporting:

In accordance with the requirements of our NPDES permit the SDD has submitted all semi-annual and/or annual reports to the appropriate entities. These included the annual NARP Progress Report, the semi-annual Feasibility Progress Report, and the annual Stormwater Pollution Prevent Plan (SWPP) Inspection Report.

New Operator:

Lewis Feltes has been selected for the operator position. Lewis comes to the District with industrial and environmental experience and knowledge from his former positions. He will be a great addition to the operations team.

Operations, Laboratory, and Pretreatment Activity Reports – September/October 2023

Operations Activities:

Normal operational activities were conducted as prescribed by standard procedures or in response to conditions within the plant. These include operating, monitoring, and adjusting facility equipment, performing process control testing, records keeping, and coordination with the other departments to realize optimal performance of the Plant.

- 1) Digester #2- Operators have removed all the sludge that they can. Maintenance will finish pumping sludge but have experienced high methane levels in the attic space creating a safety concern. We will pump the remaining sludge out this month.
- 2) Digester #3- Digester has been put back online. The mixer has been taken offline due to an oil leak.
- 3) Digester #1 Joint leak has been repaired and is back online.
- 4) Operations staff continue to actively address PMs as time, workload, and staff levels allow.
- 5) Blower usage has still been increased due to low flows and higher concentrations of Ammonia, BOD and Nitrates. Operations staff continue to look for opportunities to lower blower usage.
 # 1 Hoffman Blower was in use from 9/6 to 9/8 and 9/30 10/2 for a total of 72 hours.
- 6) Operations staff continue to monitor disinfection chemical usage and make the necessary adjustments.
- 7) I&C has installed the inclinometers and Jaimie is updating the alarms in Scada.
- 8) We have started the sludge mixing at Wyckles lagoons in anticipation of land ap starting this month.
- 9) The rain that we received on the 5th of October has helped with the odors at the plant.

Laboratory Activities:

Routine:

A total of 1,801 analyses were performed in the laboratory during the month of September 2023.

Monitoring of treatment plant, industrial users, and receiving stream samples for compliance purposes and process monitoring continued. Laboratory personnel continued to perform additional background nutrient monitoring to help fully characterize the nutrient loading on the plant.

Non-Routine:

 The SDD laboratory continued to send samples of raw influent twice a week throughout the month of September 2023 for the "COVID-19 in Wastewater" study funded by the Illinois Department of Public Health. A Zoom call was held on September 8, 2023, with the study participants and the researchers to discuss the results of the study thus far. An increase in COVID levels has been observed across the state.

- 2) The SDD laboratory analyzed seven stormwater samples during September 2023 for the Lake Decatur Watershed monitoring study. The SDD is providing in-kind laboratory analysis of samples collected at the study's three monitoring sites after significant storm events.
- 3) The SDD laboratory/pretreatment collected and analyzed samples on September 13, 2023, for the ongoing nutrient study for Black and Veatch.
- 4) Keith Richard attended the Illinois Water Environment Association (IWEA) Executive Board and Committee Chair Meeting at Starved Rock Lodge on September 15, 2022. The group meets quarterly to discuss current and upcoming activities of the IWEA and its committees. Keith continues to serve as the Chair of the IWEA Laboratory Committee.
- 5) Samples were collected of the influent, final effluent, primary sludge, sludge in the Wyckles Lagoon, and landfill leachate on September 27, 2023, for PFAS testing.

Pretreatment Activities:

Pretreatment - General Activities:

- 1) Pretreatment personnel monitored five commercial and industrial users (IU) during September 2023. Three industry site inspections took place during September.
- 2) Bimonthly sampling for the Nutrient Study is ongoing. SDD personnel are utilizing our portable samplers to collect the extra samples from **Primient** and **ADM**.
- 3) Permit renewal packets were sent to Mason Manufacturing and VAE Nortrak North America.
- 4) Renewed wastehauler permits were issued to **Decatur Municipal Services**, **Enviroserve**, **Kelly's Septic Service**, **Midwest Pottyhouse**, **Parks Sewer Service**, **Septic Specialist**, and **Zeschke Septic Cleaning**.
- 5) Meetings were held with **ADM** and **Primient** to get updates on their nutrient reduction efforts.

Pretreatment Ordinance - Verbal Notices:

The SDD issued a total of 2 Verbal Notices to **Primient** in September 2023:

- 1. 9/29/2023: **Primient** was issued a verbal notice and a \$1,000 fine for discharging 26,354 lbs. of BOD, 2,129 lbs. above their limit.
- 2. 9/30/2023: **Primient** was issued a verbal notice and a \$1,000 fine for discharging 30,118 lbs. of BOD, 5,893 lbs. above their limit.

Pretreatment Ordinance - Warning Notices (WN):

No Warning Notices were issued during September 2023.

Pretreatment Ordinance - Notices of Violation (NOV):

No Notices of Violation were issued during September 2023.

Pretreatment Ordinance - Executive Orders:

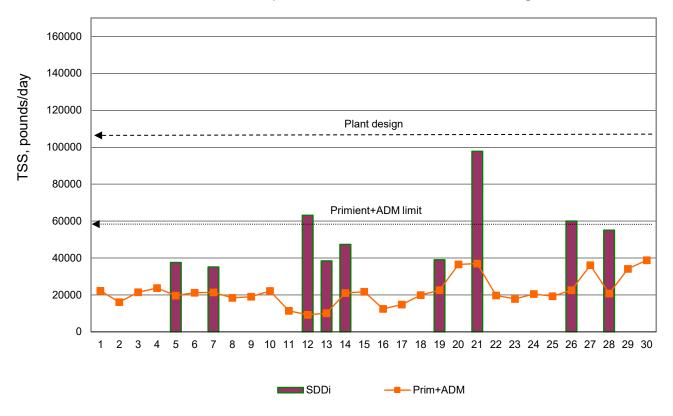
No Executive Orders were issued during September 2023.

Pretreatment Ordinance - Penalty Assessments:

The following industrial penalties were assessed for September 2023:

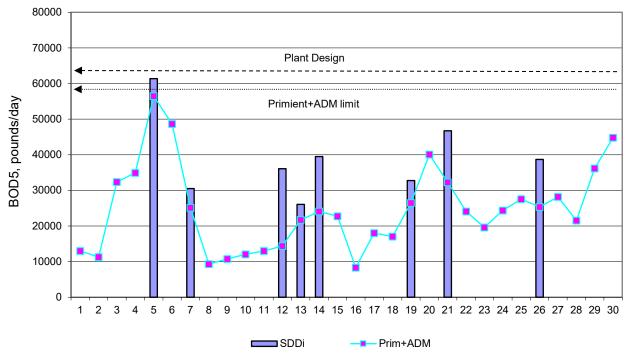
1) **Primient** \$2,000

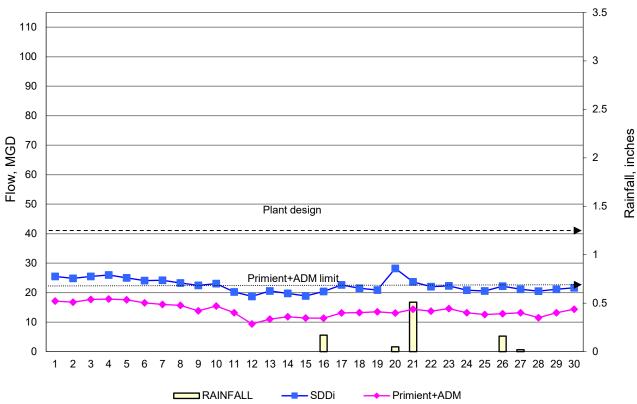
Plant Operating Graphs:



TSS Comparison: SDD Inf Primient+ADM Discharges

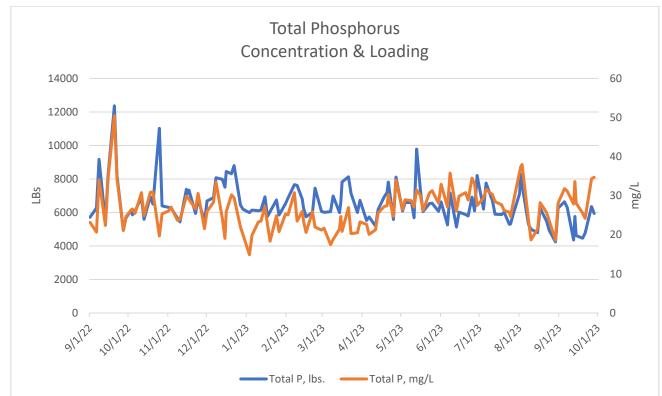
BOD Comparison: BOD Inf vs. Primient + ADM Discharges





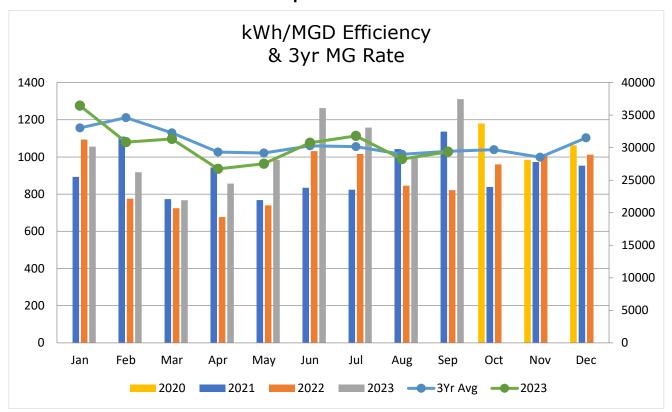
Flow Comparison: SDD vs. Primient + ADM Discharges and Rainfall

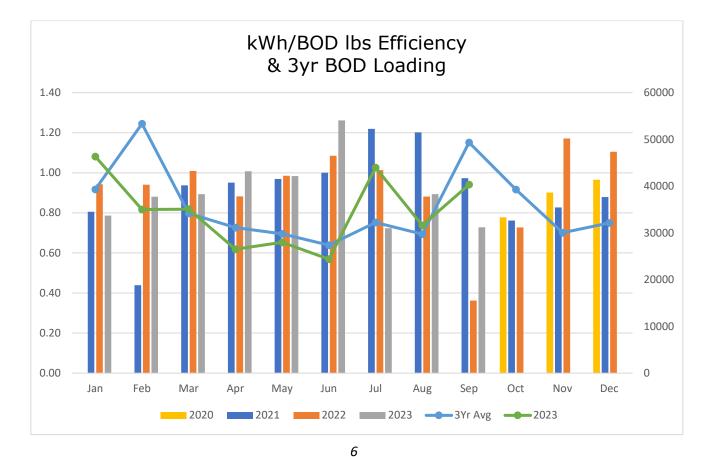
Phosphorus Tracking Graph:



Plant Efficiency Graphs:

September 2023





Sanitary District of Decatur Nutrient Program Management Report

October 18, 2023

During the month of September District personnel attended meetings with members of the Black & Veatch Team to affect progress in nutrient reduction planning and activities.

Currently, activities continue to surround the gathering and sharing of data and information so that all parties can assist in how to move the projects forward as efficiently as possible. In the month of September, the District continued to gather and forward all requested industrial special sampling lab results and plant performance data as requested by the B&V.

B&V has continued the development of their full facility model, continued to develop aged infrastructure evaluation, and as well as continued to assistance with construction phase services of the Frac Tank Pilot Study including leading the construction progress meetings.

Below you will find a list of the actual meetings conducted in chronological order. The information covers the subject, date, and agenda items of each meeting. Additional information related to any of these meetings or specific agenda items can be supplied to the Board upon request including meeting minutes and documentation used during the meeting as it is all being stored as part of the permanent record.

Subject	Date	<u>Agenda</u> <u>Items</u>
Nutrient Program Management Bi-weekly Meeting		 Objective: Provided Status Update on Program Tasks Frac Tank Pilot Power BI Pretreatment Program Update PDOP/Annual Progress Report Watershed Services Aging Infrastructure WRRF Upgrade Plan
Nutrient Program Management Bi-weekly Meeting	09/27/2023	 Objective: Provided Status Update on Program Tasks including schedule and outstanding task items. 1. Frac Tank Pilot 2. Power BI 3. Pretreatment Program Update 4. PDOP/Annual Progress Report 5. Watershed Services 6. Aging Infrastructure 7. WRRF Upgrade Plan
ADM Nutrient Reduction Strategy Update	9/6/2023	<i>Objective:</i> The meeting served as an update meeting for ADM's Nutrient Reduction Strategy
Primient Quarterly and Nutrient Reduction Strategy Update	9/26/2023	<i>Objective:</i> The meeting served as both a quarterly update meeting and an update meeting for Primient's Nutrient Reduction Strategy
Fermentation Reactor Pilot Construction Progress Meeting	08/31/2023	 Submittal Status Request for Information Work Change Directive / Change Orders Pay Applications Additional Questions / Discussion Next Meeting

Nutrient Reduction Program Meetings Conducted during September 2023

Sanitary District of Decatur Watershed Management Report

October 18, 2023

During the month of September District personnel attended meetings with members of the Black & Veatch and Geosyntec Teams to affect progress in meeting the NARP requirements as listed in the NPDES permit as well as moving forward on the formation of a future watershed workgroup for the Middle Sangamon River.

Recent activities pertained to items necessary to complete the NARP Study. Foremost in these efforts included Geosyntec completing their initial watershed modeling efforts and the Sangamon River Watershed Report for SDD review. This month focused on the review of this model and report where SDD provided review comments for incorporation. Geosyntec has also begun to develop potential watershed management scenarios.

Below you will find a list of the meetings conducted. The information covers the subject, date, and agenda items of each meeting. Black & Veatch provided a written summary. Additional information related to any of these items can be supplied to the Board upon request including meeting minutes and documentation used during the meeting as it is all being stored as part of the permanent record.

Subject	Date	<u>Agenda</u> <u>Items</u>
Watershed Services Bi-weekly Meeting	09/06/2023	 Discussed the Watershed Model Report and review comments
Watershed Services Bi-weekly Meeting	09/20/2023	 Provided summary of potential watershed management scenarios

Watershed Management Meetings Conducted during September 2023



October 2, 2023

Sanitary District of Decatur (SDD) 501 Dipper Lane Decatur, IL 62522 Nutrient Program Manager BV Project No. 411502

Attention: Don Miller, P.E., Director of Engineering

Subject:SDD Nutrient Program ManagementSeptember Monthly Progress Update (September 1, 2023 – September 30, 2023)

Dear Mr. Miller:

This letter summarizes the work associated to the SDD Nutrient Program Management project for services from September 1, 2023, through September 30, 2023.

- 1. Program Management, Administration, and Coordination
 - Conducted bi-weekly program conference calls to update progress and discuss key issues.
 - Provided Monthly Project Update.
 - Attended August Board meeting to provide program support and updates to the Board of Trustees.
 - Provided ongoing management of the project including program management, preparation/monitoring of the program schedule and budget as well as program administrative duties.
 - Updated Power BI dashboard with most recent plant monitoring data.
- 2. Pretreatment Program Update
 - Continued to evaluate special sampling data
 - Prepared for and met with both ADM an Primient on their Nutrient Reduction Strategies
 - Continued to update the full facility process model with the industrial special sampling results.
- 3. Phosphorus Discharge and Optimization Plan (PDOP)
 - No Services were completed this period.
- 4. Watershed Support Services
 - Conducted bi-weekly progress update meeting.
 - Geosyntec incorporated SDD comments into the Sangamon River Watershed Model Report and submitted the Final Report
 - Geosyntec completed their Instream model for the NARP Study.
 - Geosyntec began to identify watershed management scenarios and next steps for the WASP modeling efforts.
 - Continued initial planning efforts for the Watershed Group formation development.

- 5. WRRF Upgrade Plan
 - Aged Infrastructure Evaluation
 - i. Continued to developed rehabilitation and replacement costs.
 - ii. Developing rating score for each asset evaluated to determine criticality and timing of upgrades.
 - iii. Continued summarizing structural assessments and incorporate into overall aging infrastructure evaluation.
 - Plant Facility Evaluation
 - i. Continued detailed modeling efforts to evaluate and provide whole plant process model simulations related to the alternatives identified for nutrient removal.
- 6. Pilot and Demonstration Testing
 - Continued to review for contractor submittals
 - Prepared for and conducted the Construction Progress Meeting with Burdick (Contractor).

FRAC TANK PILOT PROJECT S	CHEDULE
MILESTONE/ACTIVITES	DATE
Bi-weekly Construction Progress Meetings	August – December 2023
Early Receipt of Pre-purchased Equipment Primary Sludge Pumps Big Bubble Mixing Frac Tank	November 2023
Substantial Completion (pending equipment delivery times)	December 2023
Final Completion	January 2023

Please feel free to contact me with any questions, comments or if you need additional information.

Sincerely,

Diane Grossenheider, P.E. Project Manager, Black & Veatch

Enclosure(s):

- SDD Nutrient Program Manager Schedule
- Anticipated Cost Forecast

Building a World of Difference."

Project: Nutrient Program Management - 100223

Activity ID	Activity area	Duation Stat Fist	804	2024 2025
	Program Management - 100223	an 1251 26-lan-22 A 18-Dec-26	Feb Ma Ap May Jun Jul Aug Sap Oct Now Dec Jan Feb Ma	Ap May Jun Jul Aug Sep Oct Nov Dec Jan Feb Ma Ap May
	Trogram Management - 100223 Management, Administration and Coordination	1251 26-jan-22 A 18-Dec-26		
A1000	NTP	0 26-jan-22 A		
A1020	Kick Off Meeting Kick Off Meeting Minutes	0 18-Rb22A 18-Rb22A 1 24-Rb22A 24-Rb22A		
A1030 A1040	SDD Bi Weeldy Pragram Progress Calis - Tuesdays SDD Monthly Program Progress Meeting Minutes	1217 01-Mar-22 A 18-Dec-26 1217 01-Mar-22 A 18-Dec-26		
A1050	Cast Fare cas to	1217 01-Mar-22 A 18-Dec-26		
A1051 A1060	PowerBI Monthly Progress Updates - Rest Mos day of Month	1217 15-Mar-22 A 18-Dec-26 1214 04-Mar-22 A 18-Dec-26		
A1070	Monthly Board of Trustees Meetings	1212 08-Mar-22 A 18-Dec-26		
A1080 Pretreatm	Industrial Water Red Itles Meetings eent Program Update	1202 22-Mar-22 A 18-Dec-26 773 10-Jun-22 A 02-Jul-25		
82000	Data Co lection/Request	5 10-Jun-22 A 17-Jun-22 A		
82010 82020	Braku a lon Characterbe Waste water Discharge	25 20-jun-22 A 29-jul-22 A 40 29-Aug-22 A 30-Mar-23 A		
82021	Waste water Discharge Characterization Meeting	4 27-Mar-23 A 30-Mar-23 A		
82030 82040	Pretreatment Program Analysis Pretreatment Program Update Draft Report Submitted	60 13-jun-22 A 21-jul-23 A 37 24-jul-23 A 21-Aug-23 A		
82050	SDD Review	10 22-Aug-23 A 13-Oct-23		
82060 82070	Pretreatment Analysis Draft Review Heeting Stakeholders Meeting	0 16-0d-23 16-0d-23 0 30-0d-23 30-0d-23		
82080 82090	Pretreatment Program Update Pinal Report Subm tted	20 30-0ct-23 28-Nov-23 510 06-Jun-23 A 02-Jul-25		
Phosphore	Semi-Annual Industrial User Meeting (Quarterly) us Discharge and Optimization Plan (PDOP)	276 01-Mar-22 A 24-Mar-23 A		
C3000	Phosphorus Optimization Evaluation	213 01-Mar-22 A 24-Reb-23 A		
C3010 C3011	SDD Warlohop Deep We IInjection Analysis	5 05-May-22 A 05-May-22 A 5 03-Aug-22 A 14-Nov-22 A		
C3020	Industrial User Worlah qp(s)	0 16-Dec-22 A 16-Dec-22 A		
C3030 C3040	PDOP Draft Submitted PDOP SDD Draft Review	125 09-May-22 A 18-Nov-22 A 15 21-Nov-22 A 22-Nov-22 A		
C3050 C3055	PDOP Draft Review Meeting Prepare Pinal PDOP	0 30-Nov-22 A 30-Nov-22 A 5 23-Nov-22 A 24-Reb-23 A		
C3060	Pinal PDOP Submitted	0 24-Bb-23A	•	
C3070 Watershed	PDOP Plan Report Submitted to IEPA 1 Support Services	20 27-Reb-23.A 24-Mar-23.A 1231 09-Reb-22.A 18-Dec-26		
D1000	Data Review and Analysis	30 09-Reb-22.A 04-jan-23.A		
D1010	QA PP SDD Review Meeting	30 09-Reb-22.A 27-May-22.A		
D1020 D1030	Site Visit	0 24-May-22 A 24-May-22 A 2 24-May-22 A 24-May-22 A		
D1040 D1050	Pinal Mon toring Plan IPEA Mee ing	38 09-Reb-22.A 18-Aug-22.A 0 22-Jun-22.A 22-Jun-22.A		
D1060	Deploy for Sampling (not needed)	30 22-Jun-22 A 22-Jun-22 A		
D1070 D1080	Water she d Group Formation Water she d Group M ext bg s	96 31-Aug-22 A 28-Nov-23 773 29-Nov-23 18-Dec-26		
D1090	SDD Public Watershed Meetings (as needed)	773 29-Nov-23 18-Dec-26		
D1100 D1110	Bi-Annual Update Summary (March/September) Waterabed Support Services Bi-Weekly Meetings - Wednesdays	1025 12-Sep-22.A 02-Dec-26 205 09-Mar-22.A 16-Dec-26		
Instream M	Aodel Development	85 01-Jun-23 A 04-Dec-23		
N1000 N1010	Process Date for Model Input Develop and Cal brate Model	30 01-jun-23 A 14-jul-23 A 30 03-jul-23 A 11-0ct-23		
N1020	Sensitivity Analysis	20 03-Aug-23 A 07-Nov-23		
N1030 N1040	QA/QC Inputs QA/QC Outputs	20 12-0d-23 08-Nov-23 16 09-Nov-23 04-Dec-23		
Watershed	EM an age ment Scenarics	142 17-Jul-23 A 23-Rb-24		
N1060	Identify Scenarios Develop Inputs	40 17-jul-23 A 25-0xt-23 25 26-0xt-23 01-Dec-23		
N1070 N1080	Run Scenarios and Post Process Internal Discussion and Considerations	25 05-Dec-23 10-jan-24 10 11-jan-24 24-jan-24		
	C lent Discussion and Considerations	22 25-jan-24 23-Reb-24		
N1100	Lation Plan and Schedule Develop List of Proj/Approaches to Fadilistic Scenarios	191 26-jan-24 23-Oct-24 42 26-jan-24 25-Mar-24		
N1110	Determine Necessary Phancial Pathways	43 26-Mar-24 23-May-24		
N1120 N1130	Coordinate and Develop Schedule NARP Draft Sabraitted	42 24-May-24 24-Jul-24 22 25-Jul-24 23-Aug-24		
N1140	SDD Review	20 26-Aug-24 23-Sep-24		
N1150 Feasibility	NARP Phal for Submittal to IEPA	22 24-Sep24 23-0d-24 400 06-Rb-23.4 19-Sep-24		
E1010	ReadshityStudy Outline	25 06-Reb-23 A 10-Mar-23 A		
E1020 E1022	Draft Feasbillty Stady SDD Review	360 06-Reb-23.A 07-Aug-24 15 08-Aug-24 28-Aug-24		
E1024	Pinal Feas bility Study Submitted	15 29-Aug-24 19-Sep-24		
E1030 Comprehe	Semi Annual Progress Reports ensive WRRF Upgrade Plan	300 24-R-b-23.A 01-Jul-24 501 18-R-b-22.A 08-R-b-24		
Current Co	nditions Tech Memo 1	273 18-Reb-22 A 03-Apr-23 A		
F1000 F1010	Confirm Current Influent Rows and Characteristics Technology Evaluation Workshop (Wrige #1)	15 18-Reb-22.A 01-Apr-22.A 0 15-Mar-22.A 15-Mar-22.A		
F1020	On Site Condition Assessment	0 15-Mar-22 A 15-Mar-22 A		
F1030 F1040	Establish Current and Future Drivers Tech Memo 1 Submitted	10 15-Mar-22 A 29-Mar-22 A 10 15-Mar-22 A 05-May-22 A		
F1050	Tech Memo 1 SDD Review	10 06-May-22 A 17-May-22 A		
F1060 F1070	Tech Memo 1 Review Meeting Tech Memo 1 Final Submitted	0 24-May-22 A 24-May-22 A 0 24-May-22 A		
F1220	Tech Memo 1 Revision	10 27-R-b-23.A 03-Apr-23.A		
Post Acrob F1125	ic Digestion Tech Memo Post Aerobic Digestion TM Subm tted	145 30-Jun-22 A 31-0ct-22 A 5 30-Jun-22 A 06-Sep-22 A		
F1126	Post Aerobic Digestion TM SDD Review	10 07-Sep-22.A 31-Oct-22.A		
F1127 F1128	Post Aerobic Digestion TM Review Meeting Post Aerobic Digestion TM Pinal Subm tted - N/A	0 31-0d-22 A 31-0d-22 A 0 31-0d-22 A 31-0d-22 A		
Liquid Stre	nam Evaluations Review Tech Merzo 2	107 29-Mar-22 A 03-Apr-23 A		
F1080 F1090	Comprehensive Technology List and Baseline Analysis Liqu d Stream Technology Screening Worlah op (Wrlop #2)	21 29-Mar-22 A 05-May-22 A 0 05-May-22 A 05-May-22 A		
F1100	Workshop Minutes	5 06-May-22 A 12-May-22 A		
F1120	Liqu d Stream A ternatives Analysis Liqu d Stream Evaluation Review Workshop (Writep #3 Virtual)	15 05-May-22 A 19-Aug-22 A 0 13-jul-22 A 13-jul-22 A		
F1130	Tech Memo 2 Submitted	15 30-Jun-22 A 19-Aug-22 A		
F1140 F1150	Tech Memo 2 SDD Review Tech Memo 2 Review Meeting	10 22-Aug-22 A 28-Sep-22 A 0 29-Sep-22 A 29-Sep-22 A		
F1160	Tech Memo 2 Pinal Submitted	5 30-Sep-22.A 03-Apr-23.A		
F1170	eam Pilot Plan Development Tech Memo 3 Potential P lot Alternatives Brahaition	112 27-May-22 A 22-Nov-22 A 15 24-Jun-22 A 29-Jul-22 A		
F1180	Develop Nutrient Removal Pliot Testing Plan	40 11-Jul-22 A 23-Sep-22 A		
	Tech Memo 3 INR Submitted Tech Memo 3 SDD Review	40 27-May-22 A 23-Sep-22 A 10 26-Sep-22 A 05-Oct-22 A		
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			Page 1 of 2	Actual Work 🔶 🔶 Milestone
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Project: Nutrient Program Management - 100223

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F1210	Tech Memo 3 Review Meeting	1 06-0ct-22 A																	-		· · · · ·		_	_							<u> </u>		
F2120	Tech Memo 3 Final Submitted	10 10-0ct-22 A																															
	Development Solds Stream Tech Memo 4	300 09-Sep-22 A	13-Nov-23																														
F2130	Sol ds Stream Data Review	80 09-Sep-22.A																															
F2140	Sol de Stream Data Analysis	50 12-Jan-23 A																															
F2150	Sol ds Stream Kidsoff	0 29-Nov-22 A	29-Nov-22 A																														
F2152	Sol ds Stream Technology Worlohop	0 12-Jan-23 A		1																													
F2154	Sol ds Stream Alterna Ives Worlohop	0 07-Rb23A			1																												
F2156	Sol ds Stream Pollow Up Workshop	0 06-Apr-23 A					1																										
F2160	Tech Memo 4 Submitted	70 30-Nov-22 A																															
F2170	Tech Memo 4 Review Meeting	0 17-0d-23																															
F2180	Tech Memo 4 SDD Review	10 17-0d-23																															
F2190	Tech Memo 4 Final Submitted	10 31-0d-23																															
	astructure Evaluation Tech Memo Sb	314 11-Nov-22 A																															
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F2200	Detailed Modeling Evoluation	150 17-Nov-22 A																															
F2300	Aging Infrastructure Dvaluation Plan	105 11-Nov-22 A																															
F2310	Aging Infrastructure Dvaluation	3 18-May-23 A														_																	
F2320	Tech Memo Sb Submi ted	45 30-0d-23														_																	
F2330	Tech Memo Sb Review Meeting	5 12-Jan-24																															
F2340	Tech Memo Sb SDD Review	10 19-Jan-24																															
F2350	Tech Memo Sb Final Subm tted	5 02-Rb24																															
	Demonstration Testing (If Needed)	394 11-Jul-22 A																															
G1000	Conceptual Design Report	20 11-Jul-22 A																															
G1010	Conceptual Design SDD Review and Meeting	22 30-Nov-22 A																															
G1020	Draft Procurement Pkg Subm tted	0 31-jan-23 A																															
G1030	50% Design Docs Submitted to SDD	0 24-Rb-23A		-																													
G1040	Comments Received on Draft Procurement Plag	5 01-Rb-23A																															
G1050	50% Design Review Meeting	0 06-Mar-23 A																															
G1060	SDD Issue Procurement Docs to Vendors Receive Vendor Opotes	5 06-Rb-23A				-																											
G1080		5 20-Rb-23A																															
G1085 G1090	Pinal B d Docs Submitted to SDD Jusse Windor PDs	10 06-Rb-23A 5 24-Rb-23A			_																												
G1090	Advertise for Bd	5 24-ND-23A 8 06-Mar-23A																															
G1110	B d Opening	12 09-Mar-23 A																															
G1120	NTP	1 30-jun-23 A						· ·																									
G1130	Receipt of Pre-Purchased Equipment	1 30-340-23 A	21-Nov-23																														
G1130 G1140	secure of Pre-Purchased Equipment Substantial Completion		21-nov-23 15-jan-24											•																			
G1150	Pinal Completion		15-jan-24 29-jan-24													· · .																	
	al Design Development and Detailed Design Support Services	542 23-0d-24																															
	CD and DD Support Services	542 23-0d-24 542 23-0d-24																															
11000	CD and DD Support Services	542 23-08-24	10-540-20																											_			



SANITARY DISTRICT OF DECATUR - NUTRIENT PROGRAM MANAGEMENT 2022 - 2023 COST FORECAST BV Project Number 411502

Incremental		2022.02	2022.03	2022.04	2022.05	2022.06	2022.07	2022.08	2022.09	2022.10	2022.11	2022.12	2023.01	2023.02	2023.03	2023.04	2023.05	2023.06	2023.07	2023.08	2023.09	2023.10	2023.11	2023.12	2022 Total	2023 Total
	Planned	13 683	108 359	237 519	168 336	497 476	284 217	100 648	86 219	109 725	91 822	91 820	204 625	175 033	184 839	230 195	181 219	171 412	188 595	126 472	126 461	158 090	126 472	126 465	1 789 824	1 999 878
	Actuals	16,724	60,831	77,995	54,608	61,865	125,355	145,679	112,979	118,381	94,677	105,543	155,812	179,053	152,247	155,630	138,917	142,510	137,166	116,874	116,626				974,636	1,294,835
	Forecast	16,724	60,831	77,995	54,608	61,865	125,355	145,679	112,979	118,381	94,677	105,543	155,812	179,053	152,247	155,630	138,917	142,510	137,166	116,874	116,626	122,320	96,379	96,377	974,636	1,609,911
	Planned	4,631	18,589	25,171	20,169	20,164	25,213	20,168	20,170	25,211	20,169	20,167	20,050	17,010	17,014	21,263	17,010	17,012	21,267	17,010	17,012	21,263	17,012	17,012	219,822	199,885
Task 1 Program Mgmt	Actuals	7 905	2 198	2 585	3 303	2 115	3 760	4 348	5 103	3 173	9 068	4 320	9 295	8 708	21 585	22 475	18 400	15 276	19 376	5 868	4 878				47 875	125 859
	Forecast	7,905	2,198	2,585	3,303	2,115	3,760	4,348	5,103	3,173	9,068	4,320	9,295	8,708	21,585	22,475	18,400	15,276	19,376	5,868	4,878	7,000	7,000	7,000	47,875	146,859
	Planned	1 726	15 177	42 250	17 294	10 680	30 576	19 616	5 192	6 491	5 192	5 192													159 386	
Task 2 Pretreatment Program		1 /20	15 177	42 250	17 294		235		353			5 192	-	4.715	8.238	7.625	2.330	40.696	9,115	- 16.840	31,810	-	-		4,543	-
Update	Actuals Forecast			705	470	470	235		353	430	430 430	1,450	4,250	4,/15	8,238	7,625	2,330	40,696	9,115	16,840	31,810	5,192	6.000	6,000	4,543	125,618 142,810
I	FUIEUdol			705	470	470	200		333	430	430	1,400	4,200	4,715	0,230	7,025	2,000	40,090	9,110	10,040	31,010	0,192	0,000	0,000	4,040	142,010
	Planned	536	3,756	4.694	7,073	26,718	5,977	4,881	4,879	6,099	4,877	4,879	6.748	5,656	5,213	5.665	4,536	4,531	5,665	4,533	4.531	5,668	4,533	4,531	74,369	55,062
Task 3 Phosphorus Discharge	Actuals		1,290	3,755	3,508	1,613	235	4,645	8,731	8,100	10,948	3,898	4,760	6,665	1,045	-	-	-							46,721	12,470
and Optimization	Forecast		1,290	3,755	3,508	1.613	235	4,645	8,731	8,100	10.948	3,898	4,760	6,665	1.045		-	-	-	-	-	-		-	46,721	12,470
Task 4 Watershed Support	Planned	6 790	61 631	12 107	4 040	193 891	22 817	18 255	18 250	22 817	18 253	18 251	5 383	4 569	4 567	3 760	29 712	29 705	30 850	29 712	29 705	30 850	29 709	29 707	397 102	258 229
Services	Actuals	940	14,809	17,206	28,841	21,065	45,297	54,170	36,587	44,435	12,003	34,319	16,395	4,931	31,212	1,260	42,718	29,505	13,980	21,228	9,026				309,674	170,255
Services	Forecast	940	14,809	17,206	28,841	21,065	45,297	54,170	36,587	44,435	12,003	34,319	16,395	4,931	31,212	1,260	42,718	29,505	13,980	21,228	9,026	30,850	29,709	29,707	309,674	260,521
Task 5 Comprehensive WRRF	Planned	-	9,206	122,984	89,447	32,035	35,466	-	-	-	-	-	62,344	52,898	52,900	66,121	52,900	52,898	66,124	52,898	52,898	66,124	52,898	52,898	289,138	621,557
Upgrade Plan	Actuals	7,879	42,534	53,745	16,778	36,223	74,878	81,756	59,461	42,065	47,294	28,643	60,035	67,250	65,345	116,523	71,274	49,148	67,288	59,559	44,920				491,254	601,339
13	Forecast	7 879	42 534	53 745	16 778	36 223	74 878	81 756	59 461	42 065	47 294	28 643	60 035	67 250	65 345	116 523	71 274	49 148	67 288	59 559	44 920	44 688	25 000	25 000	491 254	696 027
	Planned						-				-	- 1		3.670	3.670	4,590	3,670	3.670	4,590	3.670	3,670	4,590	3.670	3.670	-	43,130
Task 6 Feas b lity Study	Actuals		-	-	-	-	-	-	-		-		-	775	1 128	4,050	3,070	3,070	4,050	1 120	1 648	4,050	3,070	3,070		4 6 7 0
Table of case only oracly	Forecast				-	-	-	-	-	-	-	-	-	775	1,128		-	-	-	1,120	1.648	4,590	3.670	3.670	-	16,600
																							-			
	Planned	-	-	-	-	213,988	164,168	37,728	37,728	49,107	43,331	43,331	105,773	91,229	101,474	54,736	43,787	43,787	54,736	43,789	43,785	54,736	43,789	43,787	589,381	725,408
Task 7 Pilot and Demonstration Testing	Actuals				1,710	380	950	760	2,745	20,178	14,935	32,914	61,078	86,010	23,695	7,748	4,195	7,885	27,408	12,260	24,345				74,572	254,623
resurg	Forecast				1 710	380	950	760	2 745	20 178	14 935	32 914	61 078	86 010	23 695	7 748	4 195	7 885	27 408	12 260	24 345	30 000	25 000	25 000	74 572	334 623
Cumulative		2022.02	2022.03	2022.04	2022.05	2022.06	2022.07	2022.08	2022.09	2022.10	2022.11	2022.12	2023.01	2023.02	2023.03	2023.04	2023.05	2023.06	2023.07	2023.08	2023.09	2023.10	2023.11	2023.12	2022 Total	2023 Total
Planned	-	13 683	122 042	359 561	527 897	1 025 373	1 309 590	1 410 238		1 606 182	1 698 004	1 789 824				2 584 516	2 765 735		3 125 742	3 252 214	3 378 675			3 789 702	1 789 824	
Actuals	-	16,724	77,554	155,549	210,157	272,023	397,378	543,057	656,036	774,417	869,094	974,636	1,130,448	1,309,502	1,461,748	1,617,378	1,756,295	1,898,804	2,035,971	2,152,845	2,269,471				974,636	1,294,835
Forecast		16,724	77,554	155.549	210,157	272,023	397.378	543.057	656.036	774,417	869.094	974.636	1.130.448	1.309.502	1.461.748	1.617.378	1.756.295	1.898.804	2.035.971	2,152,845	2.269.471	2.391.791	2,488,170	2.584.547	974,636	2,584,547

