COMMONWEALTH™
ENGINEERS, INC.
A wealth of resources to master a common goal.

Prepared for

Town of McCordsville, Indiana

Proposal for Professional Engineering Services for the Sanitary Sewer Master Plan Update

November 21, 2025

commonwealthengineers.com

COMMONWEALTH ENGINEERS, INC.
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November 21, 2025

Town of McCordsville
Attn: Tim Gropp, Town Manager
6280 Vail Road
McCordsville, IN 46055

Re: Proposal for Professional Engineering Services for the Sanitary Sewer Master Plan Update

Dear Mr. Gropp,

Since 1974, Commonwealth Engineers, Inc. (Commonwealth) has partnered with Indiana communities to provide engineering solutions focused on water resources. We specialize in planning, design, and management of water and wastewater systems and can provide the Town of McCordsville unmatched expertise in sanitary sewer master planning.

We understand the critical role that a Master Plan plays in budgeting, planning, and scheduling infrastructure improvements. Additionally, we have navigated IDEM requirements and understand the regulatory landscape, ensuring our plans avoid pitfalls while maximizing eligibility for grants and low-interest financing. In fact, we have secured over $278 million in grant dollars for our clients over the past 5 years alone!

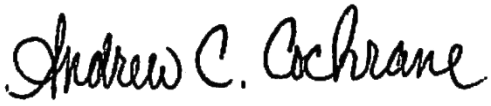
As a new consultant for the Town, we will provide a fresh perspective and include planning options that are best suited for a high growth community to maximize funding opportunities and to address long-term infrastructure needs. Our approach will be one of collaboration to tailor solutions that align with your goals. By selecting Commonwealth, you will gain the benefit of:

- A local company with **40 Professional Engineers** specializing in wastewater and water resources.
- A firm with **95% of work devoted to water resource projects,** demonstrating focused expertise.
- Staff with a **proven track record in regulatory compliance and operational support,** helping communities navigate through expansions and phasing improvements projects evolving standards.
- The **assurance that solutions will be based on the Town's long-term interests**, aligning wastewater planning with McCordsville's growth and redevelopment objectives.

Thank you for considering Commonwealth Engineers for this important work. We look forward to the opportunity to discuss our qualifications further and to demonstrate how we can best serve the Town of McCordsville.

Respectfully submitted,
COMMONWEALTH ENGINEERS, INC.

Albert C. Stong, PE (IN)
President, Senior Project Manager



Andrew Cochrane, PE (IN), CFM
Associate, Project Manager

INTRODUCTION

Our approach is centered on delivering a clear, practical, and cost-conscious roadmap that supports the Town's continued growth while safeguarding reliable wastewater service. We will evaluate development activity since the prior 2011 update, identify remaining and emerging service needs, and assess the existing "AeroMod" treatment system to determine the most effective strategies for future expansion. By integrating technical expertise with thoughtful long-term planning, our team will provide the Town with a comprehensive and actionable plan that positions its wastewater infrastructure for the next decade and beyond.

PROVEN BACKGROUND HELPING COMMUNITIES WITH SEWER MASTER PLANS

- Extensive Experience completing Sewer Master Plans for communities of all sizes, providing clear, data-driven guidance for long-term infrastructure needs.
- Successful funding support helping communities secure grants and low-interest financing for sewer extensions, and treatment upgrades.
- Comprehensive technical expertise in hydraulic modeling, collection system evaluation, treatment plant capacity analysis, and future service area planning.
- Practical, constructible solutions focused on cost-effective improvements that support growth while ensuring regulatory compliance and reliable system performance.
- Community-focused approach that prioritizes public engagement, stakeholder communication, and minimal disruption during project planning and implementation.

QUALITY CONTROL

Each project is assigned to a Firm partner with a vested interest in client satisfaction. All planning and design documents are reviewed by team members, providing a "checks-and-balances" review. Our written Quality Control Plan states that for larger, more complex engineering reports and design projects, a peer review is performed by an engineer not directly involved with the project. Finally, our written plan stipulates a constructability and value engineering review to identify potential issues and any further cost savings measures.

AWARD-WINNING

- Ranked No. 2 on Indianapolis Business Journal's List of Largest Environmental Firms in Indiana (2024)
- Awarded PSMJ Circle of Excellence 8-Years Running
- Awarded PSMJ Platinum Member 2023
- Ranked Top Workplace by IndyStar 7-Years Running
- Ranked No. 3 on Inven Ai's List of Top 23 Environmental Engineering Companies in Indiana
- Recipient of ACEC Indiana Engineering Excellence Awards Year After Year

Largest Environmental Consulting Firms

(Ranked by 2023 Indianapolis-area environmental consulting billings)

RANK 2023 rank	FIRM ADDRESS TELEPHONE / WEBSITE	LOCAL ENV. CONS. BILLINGS: 2023 / 2022	LOCAL FTE EMPLOYEES % OF TOTAL BILLINGS	ENVIRONMENTAL SCIENTISTS ENGINEERS	CERTIFIED: PROFESSIONAL GEOLOGISTS HAZMAT MANAGERS	PRIMARY SERVICES
1 2	**August Mack Environmental Inc.** 1302 N. Meridian St., Suite 300, 46202 317-916-8000 / augustmack.com	$35.4 million $33.2 million	121 86	79 5	12 10	environmental health and safety compliance, water resources,
2 1	**Commonwealth Engineers Inc.** 7256 Company Drive, 46237 317-888-1177 / commonwealthengineers.com	$33.7 million $31.4 million				
3 5	**American Structurepoint Inc.** 9025 River Road, Suite 200, 46240 317-547-5580 / structurepoint.com	$13.9 million	14	15	1	wastewater collection and treatment, NPDES, environmental studies and permitting, NEPA
3 4	**Stantec Consulting Services Inc.** 5778 W. 74th St., 46278 317-876-8375 / stantec.com	$15.6 million $12.9 million	89 79	39 2	6 1	site investigation, vapor intrusion, groundwater plume behavior, hydrogeology, remediation, coal combustion residuals, 401/404 permitting, ecological restoration, cultural resources, wetland services
5 10	**AECOM** 101 W. Ohio St., Suite 810, 46204 317-532-5400 / aecom.com	$11.8 million $7.1 million	163 65	6 DND	4 1	water, environment, energy, facilities, construction services, design and planning

Source IBJ 2024

PROFESSIONAL SERVICES

STORMWATER MANAGEMENT

- Creation of Stormwater Utilities
- Site Development Reviews
- Watershed Assessments & Design
- Best Management Practices
- Stormwater Treatment Practices
- Dam & Levee Inspection/Design
- Municipal Separate Storm Sewer
- System (MS4) Compliance

DRINKING WATER

- Supply
- Master Planning
- Well Field Development
- Utility Creation
- Regionalization
- Water System Evaluation & Modeling
- Supply, Treatment, Distribution & Storage Design
- Lead Line Inventory & Abatement
- System Hydraulic Modeling
- SCADA, Telemetry, and Control System Design
- Polyfluoroalkyl Substance (PFAs) Treatment & Removal
- Water Audits & Validations

CIVIL/TRANSPORTATION

- State Roads
- Local Streets
- Highways
- Intersection Improvements
- Multi-use Paths & Sidewalks
- Streetscapes & Enhancements
- Context Sensitive Solutions
- Traffic Signal Design
- Land Surveying
- Roundabout Design
- Traffic Studies & Analysis
- Maintenance of Traffic

WASTEWATER UTILITIES

- Utility Creation
- Master Planning
- Collection & Treatment
- Infiltration/Inflow Studies
- Sewer System Evaluations & Modeling
- Innovative Treatment Technologies
- Combined Sewer Overflows (CSO)
- National Pollutant Discharge Elimination System (NPDES) Compliance
- Assistance in Solicitation of Project Financing (Grants & Subsidized Interest Rate Loans)
- Instrumentation & Controls / SCADA
- Startup / Operations Assistance

OTHER SERVICES

- Preliminary Engineering Reports
- Master Planning
- Facilities Operations Assistance
- Value Engineering/Alternatives Assessments
- Asset Management Planning
- Site Development - Commercial & Industrial
- Construction Monitoring
- System Mapping
- Geographic Information Systems (GIS) Consultation
- Instrumentation/Control/Electrical/ Mechanical Design
- Lake & River Enhancement
- Industrial/Municipal Compliance Audits
- Environmental Permitting
- Grant Assistance
- Operations Assistance
- Energy Savings
- Residential
- Educational
- Municipal

WASTEWATER RESOURCES

Wastewater collection and treatment is an essential aspect of any community's health and safety. It's an integral part of a community's infrastructure that simply cannot be overlooked. Our team has expertise in all phases of building your project. From separating combined sewer systems to the creation of new treatment facilities, we are your go-to firm for water reclamation needs.

Key Areas

- Utility Creation
- Master Planning
- Collection & Treatment
- Infiltration/Inflow Studies
- Sewer System Evaluations & Modeling
- Innovative Treatment Technologies
- Combined Sewer Overflows (CSO)
- National Pollutant Discharge Elimination System (NPDES) Compliance
- Assistance in Solicitation of Project Financing (Grants & Subsidized Interest Rate Loans)
- Instrumentation & Controls / SCADA
- Startup / Operations Assistance

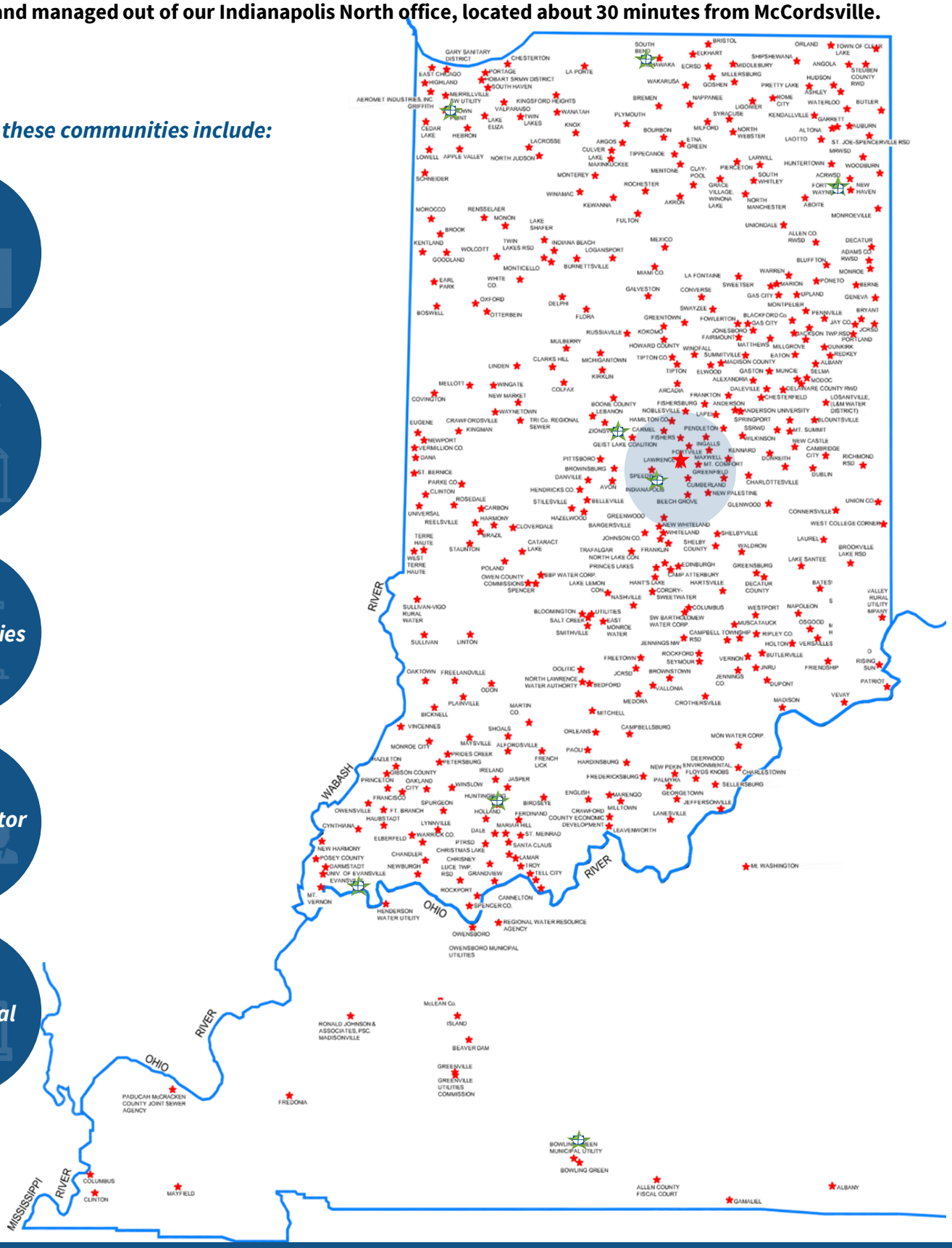
The cornerstone of any significant, long-term project is the planning phase. Evaluating existing conditions, reviewing regulatory concerns, and projecting future conditions/issues are critical steps in recommending a course of action. For wastewater projects, this evaluation often requires several pieces of equipment in addition to the requisite computer hardware and software. Commonwealth Engineers specializes in these evaluations and this type of work. Therefore, we have invested in the equipment necessary to complete these activities. Any or all of these resources are available in the event that it is deemed necessary in the planning and subsequent design phase. In addition, we own licenses of the SWMM and SewerCAD computer programs for gravity sewer modeling, Visual Hydraulics for plant hydraulic profile modeling, WaterGEMS and KYPipe for pressure pipe system modeling, and GPS-X for wastewater treatment process modeling. With these models, we can simulate sewer and plant conditions, project future conditions resulting from system changes/improvements, and assess and optimize treatment alternatives.

SERVING CLIENTS IN INDIANA & KENTUCKY

Commonwealth Engineers is the consultant of choice by many private and public entities. Our experience and responsiveness have successfully created a broad cross-section of clientele in Indiana and Kentucky. **Your project will be completed and managed out of our Indianapolis North office, located about 30 minutes from McCordsville.**

Our service in these communities include:

- ***Cities***
- ***Towns***
- ***Municipalities***
- ***Private Sector***
- ***Commercial***



WE ARE COMMITTED TO PROTECTING WATER QUALITY, AND MORE GENERALLY, THE QUALITY OF LIFE FOR OUR CLIENT COMMUNITIES.

STAFF AND FIRM LOCATION

Our staff includes one hundred seventy-four (174) full-time staff members, including forty (40) professional engineers, thirty (30) engineering interns, and four (4) engineering assistants. Additionally, we employ planners, surveyors, environmental scientists, regulatory coordinators, and funding (grant) experts, among other experienced support staff. We also offer more than thirty years of experience with in-house electrical, mechanical, instrumentation and control, and energy savings engineering services.

Indianapolis North Office Personnel	
Registered Professional Engineers (PE)	4
Engineering Interns (EI)	4
Construction Manager	1
Construction Engineers	2
Construction Inspectors (RPR)	6
Designers	1
CAD Specialists/Technicians	1
Regulatory Specialists	3
Accounting	6
Business Development/Marketing	1
Support Staff (Clerical, HR, IT)	2
Total	**31**

Indianapolis HQ Office Personnel	
Registered Professional Engineers (PE)	11
Engineering Interns (EI)	8
Registered Land Surveyor	4
Construction Inspectors (RPR)	13
Designers	6
CAD Specialists/Technicians	4
Environmental Scientist	5
Business Development/Marketing	5
Support Staff (HR)	1
Support Staff (Clerical, IT)	8
Total	**63**

Crown Point Office Personnel	
Registered Professional Engineers (PE)	5
Engineering Interns (EI)	2
Engineering Assistants	3
Construction Inspectors (RPR)	2
CAD Specialists/Technicians	2
Business Development/Marketing	2
Support Staff (Clerical, HR, IT)	1
Total	**17**

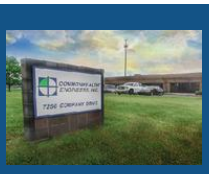
South Bend Office Personnel	
Registered Professional Engineers (PE)	3
Engineering Interns (EI)	3
Construction Inspectors (RPR)	1
Operations Specialist	1
Total	**8**

Fort Wayne Office Personnel	
Registered Professional Engineers (PE)	4
Engineering Interns (EI)	5
Construction Inspectors (RPR)	1
Designers	1
CAD Specialists/Technicians	3
Business Development/Marketing	2
Support Staff (Clerical, HR, IT)	1
Total	**17**

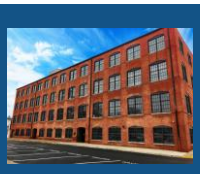
Evansville Office Personnel	
Registered Professional Engineers (PE)	6
Engineering Interns (EI)	4
Engineering Assistants	1
Construction Inspectors (RPR)	3
Designers	2
CAD Specialists/Technicians	2
Business Development/Marketing	1
Support Staff (Clerical, HR, IT)	1
Total	**20**

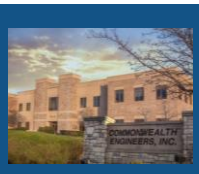
Huntingburg Office Personnel	
Registered Professional Engineers (PE)	2
Engineering Interns (EI)	1
CAD Specialists/Technicians	1
Construction Inspectors (RPR)	1
Business Development/Marketing	1
Total	**6**

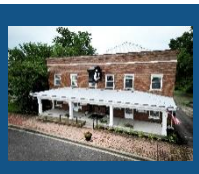
Bowling Green, KY Office Personnel	
Registered Professional Engineers (PE)	5
Engineering Interns (EIT)	3
Business Development/Marketing	2
Support Staff (Clerical, HR, IT)	1
Total	**11**


Indy Corporate


Crown Point


Evansville


Fort Wayne


Huntingburg


Indy North


South Bend


Bowling Green

Corporate Office
7256 Company Drive, Indianapolis, IN 46237
Phone: 317.888.1177 | E-mail: cei@contactcei.com

Regional Offices
Crown Point, Evansville, Fort Wayne, Huntingburg,
Indianapolis (North), and South Bend, IN | Bowling Green, KY

Project Team

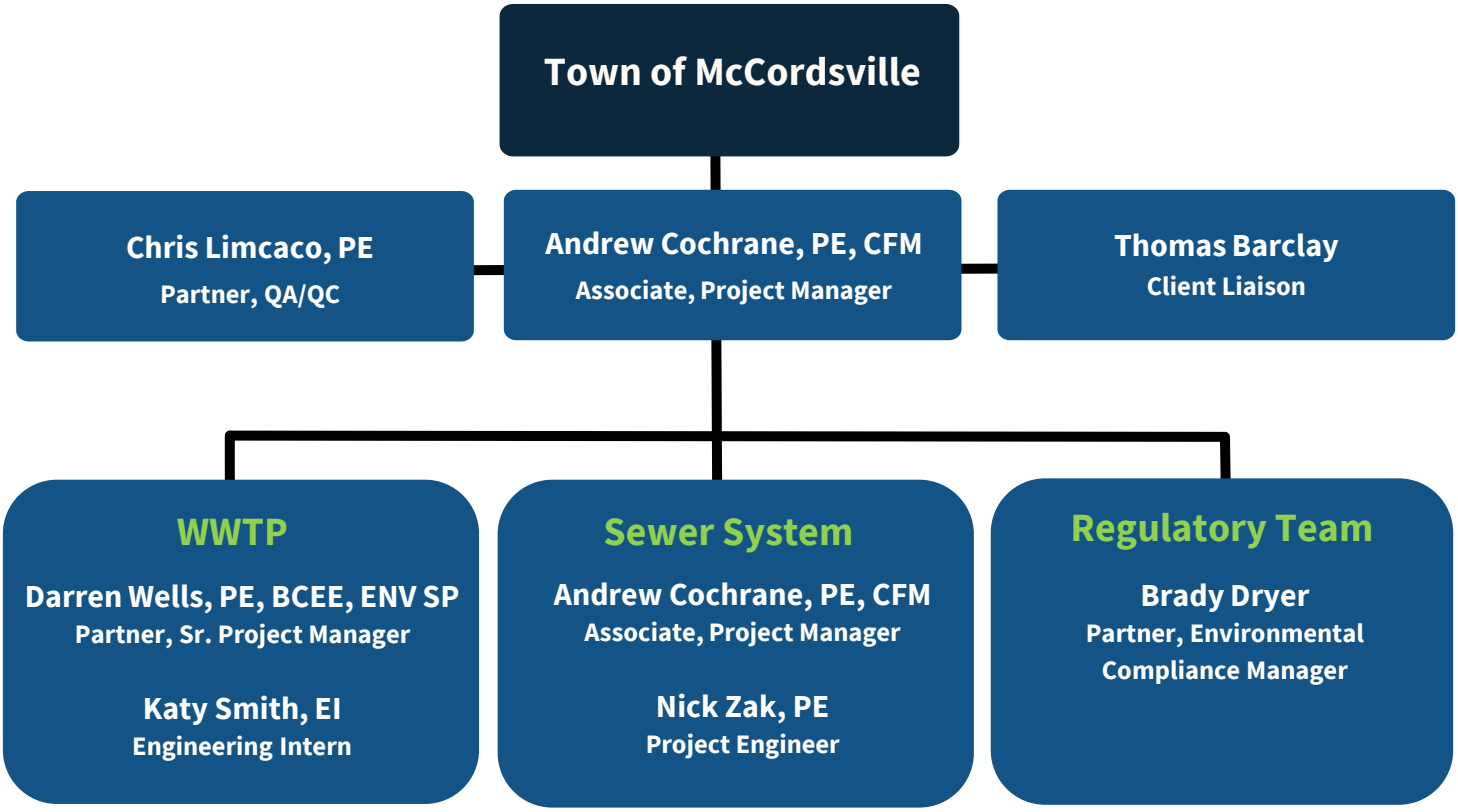
Commonwealth Engineers, Inc.
6325 Digital Way, Suite 101
Indianapolis, Indiana 46278

Office: 463.900.1177
Mobile: 317.658.3233
E-mail: acochrane@contactcei.com

Andrew Cochrane, PE (IN), CFM
Associate, Project Manager

Andrew is responsible for all aspects of your project, from plan definition through the presentation of the finished product. He will ensure your project keeps moving forward according to schedule, prepare project progress reports, report on project status, and resolve any issues that may arise. Andrew is available to the Town of McCordsville through e-mail, office, mobile phone, or in-person.

We provide the commitment of these staff members to your effort. Each noted team member will be fully committed to the requested services for the project's duration and will not be replaced after the work begins. All work will be performed in-house without subconsultants.



Our integrated team's philosophy is to serve in partnership with clients like you, to understand your current position, recommend valid solutions, and work together to achieve successful projects.

EDUCATION
Civil Engineering B.S.
Purdue University
1994

REGISTRATION
Professional Engineer
IN# 19900094

Licensed Surveyor
ST# 49600017

CERTIFICATIONS
IN – Floodplain Manager

NASSCO – Pipeline Assessment Certification Program

HONORS
Chi Epsilon Honor Society Member

MEMBERSHIPS
Indiana Water Environmental Association (IWEA)

Water Environmental Federation (WEF)

AFFILIATIONS
Johnson County Drainage Board

Andrew Cochrane, PE (IN), CFM
Associate, Project Manager

Andrew brings more than 30 years of experience in managing and designing a wide range of infrastructure projects, including interceptor sewers, lift stations, force mains, wastewater treatment facilities, storm sewers, and water distribution systems. His holistic, team-oriented project management approach builds confidence and trust with clients throughout every stage of a project. Andrew's expertise spans the full project lifecycle, from initial surveying and design to construction administration and on-site observation.

RELEVANT PROJECT EXPERIENCE

- **Town of Plainfield, IN – 24 MGD South WWTP Master Plan –** Planned a 24 MGD Aero-Mod WWTP on a 98-acre site, included building, tank, and piping layouts, and utility corridors.
- **Town of Plainfield, IN – South WWTP Phases I & II –** Designed new 2 MGD Aero-Mod system and subsequent 2 MGD expansion.
- **Town of Plainfield, IN – West Fork 1 Interceptor & Lift Station**
- **Town of Plainfield, IN – Clarks Creek Interceptor and Force Main-Phases 2, 3, and 4**
- **City of Tipton, IN – Tipton-Getrag Wastewater Master Plan**
- **City of Tipton, IN – Tipton-Getrag 125,000 gpd Aero-Mod WWTP**
- **Town of Arcadia, IN – Stormwater & Wastewater Improvements**
- **Town of Frankton, IN – Wastewater Improvements**
- **Town of New Market, IN - New Market Wastewater Improvements**
- **Aqua Utilities, Greenfield, IN – Western Hancock Utilities WWTP Expansion**
- **Town of Lowell – WWTP Improvements**
- **Newton County Economic Development Commission, Morocco, IN – Newton County WWTP**
- **Town of Whitestown, IN – North WWTP Improvements**
- **Citizens Energy Group, Indianapolis, IN – 75th St & Westfield/75th & Keystone/82nd & Westfield Septic Tank Elimination Program**
- **Town of Plainfield, IN – Crystal Bay Lift Station and Force Main**
- **Town of Plainfield, IN – Deer Path Interceptor and Force Main**
- **Town of Plainfield, IN – Stafford Road Force Main**
- **Knox Co. Development Commission, Vincennes, IN – Industrial Park LS & Force Main**
- **City of Indianapolis, IN – Parks of Winding Ridge Lift Station and Force Main**
- **Town of Merrillville, IN – Purdue Research Park Lift Station & Force Main**
- **City of Fort Wayne, IN – Sycamore Lakes Off-Site LS, Force Main, and Water Main**
- **Town of Whitestown, IN – Walker Farms Force Main Improvements**
- **Mt. Comfort, IN – Western Hancock Utilities Wastewater Treatment Plant**
- **City of Alexandria, IN – Alexandria WPCF**
- **Clay Township Regional Waste District, Zionsville, IN – WWTP Expansion to 1.05 MGD**
- **City of Brazil, IN – Wastewater Treatment Plant Improvements**
- **Town of Bargersville, IN – WWTP Influent Force Main Improvements**
- **Town of Whitestown, IN – North Sewer System Rehabilitation**
- **Clay Township Regional Waste District, Carmel, IN – 96th Street Interceptor Lining**

EDUCATION
Civil Engineering B.S.
Purdue University
1996

REGISTRATION
Professional Engineer
IN #10100200
KY #21913
IL #062056988
OH #65832
WI #36483
Board Certified Environmental Engineer,
Water Supply and Wastewater (BCEE)
Envision Sustainability Professional (ENV SP)

HONORS
20-Year Club (IWEA)
Chi Epsilon Honor Society

MEMBERSHIPS
Indiana Water Environmental Association (IWEA)
Water Environmental Federation (WEF)
America Water Works Association (AWWA)
American Academy of Environmental Engineers and Scientists (AAEES)
Institute for Sustainable Infrastructure (ISI)
ACEC Indiana – IDEM Committee

Darren Wells, PE*, BCEE, ENV SP (*IN, KY, IL, OH, WI)
Partner, Senior Project Manager

Darren has over 29 years of experience as a project manager and project engineer in the planning, design, bidding, permitting, construction, and operation phases of wastewater infrastructure and treatment systems ranging in capacity from less than 100,000 GPD to over 300 MGD throughout Indiana and surrounding states. **Darren's expertise includes planning and design of various treatment technologies such as oxidation ditches, conventional activated sludge, SBRs, VLRs, "Aero-Mod", and biological nutrient removal.** Additionally, Darren's project management experience includes state and federal funding community assistance through EPA's State Revolving Fund, USDA's Rural Development, and HUD's Community Development Block Grant programs.

RELEVANT PROJECT EXPERIENCE (WASTEWATER – partial listing) *(*prior to joining Commonwealth)*

- **Town of Zionsville, IN WWTP Evaluation Study and Design Improvements (2 MGD)**
- **Gary Sanitary District, City of Gary WWTP Sludge Handling Upgrades**
- **Town of Kirklin, IN Wastewater Utility PER and Improvements (0.24 MGD)**
- **City of Portage, IN WWTP Clarifiers Replacement (5.25 MGD)**
- **Town of Michigantown, IN Wastewater Utility PER and Improvements (0.09 MGD)**
- **Town of Hartsville, IN Wastewater Utility Master Plan**
- **Marion Utilities, City of Marion, IN WWTP Plant Assessment Study (12 MGD)**
- **Town of Bristol, IN WWTP Improvements (0.75 MGD)**
- **City of Rensselaer, IN WWTP Improvements (2.24 MGD)**
- **Town of Modoc, IN Wastewater Utility Improvements (0.055 MGD)**
- **Town of Flora, IN Wastewater Utility Improvements (2 MGD)**
- **Town of Brownsburg, IN Wastewater Improvements (10 MGD)**
  - Main Plant Oxidation Ditches Upgrades and Clarifier Replacement
  - Main Plant Biosolids (Phase 1) and Tertiary Filters Improvements
  - East Plant Phase 1 Improvements (New Grit Removal)*
  - East Plant Phase 2 Improvements (New Mechanical Screen and Electrical Upgrades)
  - East Plant Phase 3 Improvements (New Odor Control, Motor Control, HVAC Upgrades)
- **TriCo Regional Sewer Utility, Carmel & Zionsville, IN**
  - Water Resource Recovery Facility (WRRF) Expansion (5.72 MGD)*
  - Multiple Lift Stations and Force Mains Upgrades
- **Columbus City Utilities, Columbus, IN**
  - Phase 1 WWTP Dewatering Improvements – New Centrifuge*
  - Phase 2 WWTP Dewatering Improvements – Biosolids Conveyor Replacement*
  - Various Lift Station and Force Main Replacements (Over 20)
- **Citizens Energy Group, Indianapolis, IN**
  - Multiple Lift Stations and Forcemains Replacements (Over 30)
- **Indiana Department of Corrections**
  - Wabash Valley Correctional Facility Headworks/Lift Station Replacement
  - Pendleton Reformatory Lift Station/Headworks Upgrades*
- **Aqua Indiana**
  - Hendricks Co. WWTP Biosolids Evaluation Study and Design
  - South Haven WWTP Improvements (2 MGD)*
  - South Haven WWTP Biosolids Evaluation Study
- **Milwaukee Metropolitan Sewerage District, Jones Island WWTP Improvements***

EDUCATION
Civil Engineering
B.S.
Purdue University
1992

REGISTRATION
Professional Engineer
KY# 23867
IN# 19700338
IL# 62057377

HONORS
Senator Lugar Energy Patriot

2015 WEF Innovative Technology Award Winner

Chris Limcaco, PE (IN, KY, IL)
Partner, Senior Process Engineer

Chris has over 30 years experience in the planning, design, construction, and operation of wastewater collection and treatment systems. Based on his education and experience he has extensive knowledge of the theory and design of wastewater treatment facilities. Chris has been a Director and Chief Technology Officer for a global wastewater treatment design and manufacturing company for over ten 10 years. Chris' role at Commonwealth is to assist in evaluating and designing economical wastewater solutions using the best available technology and innovative design principles for their clients.

RELEVANT PROJECT EXPERIENCE

- **Regional Water Resource Agency, Owensboro & Daviess, KY – WWTP Rehabilitation**
- **City of Huntingburg, IN – WWTP Preliminary Engineering Report**
- **Town of Wolcott, IN – New 0.63 MGD Wastewater Treatment Plant Design**
- **White County Commissioners, IN – Wolcott WWTP Improvements**
- **City of Greenfield, IN – New 8 MGD Wastewater Treatment Plant Design**
- **City of Huntingburg, IN – New 3.35 MGD Wastewater Treatment Plant Design**
- **Town of Paoli, IN – New 1.75 MGD Wastewater Treatment Plant Design**
- **City of Princeton, IN – Wastewater Treatment Plant Upgrade to 4.2 MGD**
- **City of Greenfield, IN - New 8 MGD Wastewater Treatment Plant Design**
- **Town of Elberfeld, IN – Wastewater Treatment Plant Upgrade to 0.4 MGD**
- **Town of Lynnville, IN – New 0.25 MGD Wastewater Treatment Plant Design**
- **City of Evansville, IN – Wansford Yard Lift Station**
- **City of Rockport, IN – Long-Term Control Plan Phase 4**
- **Portage Sanitary Board, Portage, IN – Portage Utility Service Facility**
- **Regional Water Resource Agency (RWRA) Owensboro, KY – RWRA Max Rhoads WWTP Assessment & Hydraulic Modeling**

EDUCATION

Environmental Science, Water Resources Concentration M.S. Indiana University 2005

Environmental Management B.S. Indiana University 2002

MEMBERSHIPS

Indiana Water Environment Association

Indiana Rural Water Association

American Water Works Association

Water Environment Federation

Indiana Industrial Operators Association

Brady Dryer
Partner, Environmental Compliance Manager

Brady brings extensive education and practical experience in addressing and solving environmental issues. In his previous capacity with the Indiana Department of Environmental Management (IDEM) Office of Water Quality (OWQ), he reviewed and approved Combined Sewer Overflow (CSO) Long Term Control Plans (LTCP), Combined Sewer Overflow Operational Plans (CSOOPs), and Use Attainability Analyses (UAA). Working in the Office of Water Quality, he also acquired a vast understanding of the National Pollutant Discharge Elimination System (NPDES), and Municipal Separate Storm Sewer System (MS4) permitting programs that he continually applies on a case-by-case basis for Commonwealth's clients.

RELEVANT PROJECT EXPERIENCE

Through his years of experience at Commonwealth, Brady has expanded his skill set to include the following regulatory technical areas:

- NPDES Permit Application Preparation and Negotiation
- New Wastewater Treatment Plant (WWTP) Discharge Antidegradation Analyses Development and Updates
- IDEM Agreed Order Enforcement Action Negotiation
- Sewer Ban Capacity Negotiation and Compliance Assistance
- UAA Preparation
- CSOOPs Development and Updates
- MS4 Permitting and Compliance
- IDEM Office of Land Quality Land Application
- Industrial Pretreatment Program Compliance Assistance
- Industrial Wastewater Treatment and Permitting
- Industrial Stormwater (Rule 6) Permitting and Compliance
- Indiana Department of Natural Resource Environmental and Floodway Permitting Programs
- IDEM 401 Water Quality Certification
- United States Army Corps of Engineers Wetland programs
- Consumer Confidence Report Preparation
- Wellhead Protection Plan Development/Updates,
- Revised Total Coliform Rule Compliance Assistance
- Revised Lead and Copper Rule Compliance Assistance

Brady continues to contribute to State environmental rule-making initiatives and implementation such as MS4 General Permit review, Aboveground Storage Tank (AST) advisory group, antidegradation, nutrient water quality standards, recreational water quality standards, CSO compliance assurance/regulatory certainty, and operator certification workgroups.

To enhance his abilities to serve Commonwealth's clients, Brady currently serves as the Chair on the Indiana Water Environment Association (IWEA) Government Affairs Committee (GAC) and is a member of the American Council of Engineering Companies (ACEC) GAC.

EDUCATION
Environmental Engineering M.S.
University of Notre Dame
2021

Civil Engineering B.S.
Trine University
2019

REGISTRATION
Professional Engineer
IN# 12500724

Safe Dig Indiana 811
Certified

Nick Zak, PE (IN)
Project Engineer

Nick joined Commonwealth in 2021 and has been working on planning, design, permitting, bidding, and construction phase services for sanitary sewers, lift stations, force mains, and wastewater treatment plants, as well as conducting hydraulic modeling and system evaluations. He has significant experience using tools such as EPA SWMM, KY Pipe, and Visual Hydraulics for sanitary sewer, lift station, and treatment plant applications.

RELEVANT PROJECT EXPERIENCE (WASTEWATER – Partial Listing)

- **Citizens Energy Group, Indianapolis, IN – US 36 Sanitary Sewer Relocation**
- **Citizens Energy Group, Indianapolis, IN – Large Diam. Water Main Improvements**
- **City of Clinton, KY – Lift Station/Headworks Relocation and Improvements**
- **Town of Flora, IN – Wastewater Utility Improvements/Sanitary Sewer Rehab.**
- **City of Richmond, IN – Sanitary Sewer Collection System Improvements (36”-54”)**
- **City of Kokomo, IN – Sanitary Sewer Interceptor Improvements (66”-78”)**
- **City of Terre Haute, IN – Main Lift Station Improvements (96 MGD)**
- **City of Bloomington, IN – Collection System Hydraulic Modeling Services**
- **Town of New Palestine, IN – Collection System Hydraulic Modeling Services**
- **City of Crown Point, IN – Collection System Hydraulic Modeling Services**
- **Town of Westport, IN – Collection System Hydraulic Modeling Services**
- **City of Berne, IN – Collection System Hydraulic Modeling Services**
- **Town of Zionsville, IN – Wastewater Treatment Plant Improvements (2 MGD)**
- **City of Rensselaer, IN – Wastewater Treatment Plant Improvements (2.24 MGD)**

EDUCATION
Environmental and Ecological Engineering B.S.
Purdue University
2021

REGISTRATION
Engineering Intern
IN# 32300116

Water Loss Audit
Certified Validator
IN# WV22051

Safe Dig Indiana 811
Certified

Katy Smith, EI
Engineering Intern

Katy joined Commonwealth in 2021 and has been involved water and wastewater resources planning, design, permitting, bidding and construction phase services for municipalities /utilities ranging from less than 0.1 MGD up to 12 MGD average design flow. Her project experience includes writing PERs and master plans, KYPipe hydraulic modeling, designing water and wastewater treatment and infrastructure projects, and evaluating project costs.

RELEVANT PROJECT EXPERIENCE (WASTEWATER - Partial Listing)

- **Town of Zionsville, IN – WWTP Improvements Evaluation Study/Design (MP Update)**
  Town of Bristol, IN – Wastewater Treatment Plant Improvements Design
- **Town of Modoc, IN – Wastewater Treatment Plant Improvements Design**
- **Citizens Energy Group, Indianapolis, IN – Multiple Lift Station and Force Main Replacement Projects (Lift Stations 105, 114, 204, 308)**
- **Columbus City Utilities, Columbus, IN – Multiple Lift Station Replacement Projects (8th St, Clifty Creek, Woodside, Walesboro, Eastern 1, Royalview)**
- **Town of Kirklin, IN – Wastewater Utility PER and Sanitary Sewer Improvements**
- **Town of Flora, IN – Wastewater Utility Improvements**
- **Town of Michigantown, IN – WW Utility Improvements PER and Design**
- **Marion Utilities, Marion, IN – Wastewater Treatment Plant Assessment**
- **TriCo Regional Sewer Utility, Zionsville, IN – LS 8 Reconstruction & Force Main Design**
- **TriCo Regional Sewer Utility, Carmel, IN – LS 10 Pump & Control Upgrades Design**
- **City of Rochester, IN – Landfill Leachate Lift Station and Force Main Design**
- **Town of Frankton, IN – Wastewater Utility Improvements**

EDUCATION
Political Science B.A.
History Minor
The Pennsylvania State University
2013

AFFILIATIONS
Penn State Alumni Assoc. Indiana Chapter, Treasurer

Commission on Intergovernmental Affairs, Board Member

Thomas Barclay
Indiana Government Affairs Manager

Thomas joined Commonwealth in 2021 as the East Central Indiana Business Development Manager. Prior to joining Commonwealth, Barclay was the Director of Intergovernmental Affairs for Lt. Governor Suzanne Crouch. He worked closely with elected officials and civic leaders to strengthen rural economies and communities through capacity building, advocacy, and innovation. Prior to that, he held the position of District Director for the U.S. Senate in the Indianapolis area. Thomas will work with client to ensure Commonwealth is meeting, and ideally exceeding expectations.

RELEVANT PROJECT EXPERIENCE

- **Serve as the key link between the Office of the Lt. Governor to state legislators, mayors, county commissioners, chambers, lobbyists**
- **Primary legislative and policy contact for issues regarding the Lt. Governor's family of business in the community**
- **Work with membership organizations and issue advocacy groups to collate legislative priorities**
- **Attend committee meetings and hearings**
- **Organize and manage multiple community events including Diversity in Agriculture, Golden Hoosier Award, New Mayors Luncheon**
- **Track and analyze policy/legislative changes and grant opportunities for local elected officials**
- **Represent the Senator in a 21-county geographic area and serve as a local point of contact for businesses, nonprofits, educational institutions, and other constituents;**
- **Track implementation of federal programs at the municipal/county level**
- **Advise the Senator on community activities, local legislative updates, or other developments in assigned geographic**
- **Meet with elected officials, local stakeholders, and other constituent groups on behalf of the Senator**
- **Manage an aggressive community outreach effort to a wide range of chambers of commerce, economic development corporations, housing authorities, and veteran's organizations to advance the legislative agenda of the Senator**

During his time as a Commonwealth Engineers Business Development Manager, Thomas has acted as Client Liaison on the following projects:

- **Town of New Palestine, IN – Wastewater Treatment Plant**
- **Town of Frankton, IN – Wastewater Treatment Plant and Water Treatment Plant**
- **City of Greenfield, IN – Wastewater Treatment Plant**
- **Town of Chesterfield, IN – Water Treatment Plant**
- **Town of Daleville, IN – Water Utility Improvements**
- **Delaware County Regional Sewer District**

WASTEWATER UTILITY IMPROVEMENTS – WWTP NEW PALESTINE, INDIANA

PROJECT HIGHLIGHTS

- WWTP Capacity Improvements Project 2018 (designed by others); 0.4 MGD
- Operational issues noted by Owner in 2022
- Reviewed flows and loadings and determined the 2018 project was deficient (more capacity was needed)
- Commonwealth selected to assemble Wastewater Utility Master Plan which identified need for WWTP and Sanitary Collection System Capacity Improvements
- The first phase of the WWTP Capacity Improvements (1.54 MGD) is currently designed and under construction

PROJECT DESCRIPTION

After the completion of a WWTP expansion project with another consulting engineer in 2018, the utility was experiencing operational issues. The Town contacted Commonwealth, and it was determined that the flows and loadings to the WWTP were exceeding the design. We identified that the basis of design was contrary to best practice and did not support the Town's needs. Commonwealth was requested to assemble a Wastewater Utility Master Plan to holistically evaluate the utility.

The Master Plan recommended numerous improvements including the decommissioning of a satellite WWTP and routing of flow to the primary WWTP, collection system improvements to resolve pumping deficiencies associated with the current "daisy-chained" lift stations (a large diameter interceptor and routing of lift stations to this interceptor), and a phased WWTP capacity improvements project providing 1.54 MGD of WWTP treatment capacity (compared to the current 0.4 MGD WWTP) with the ability to be expanded to 2.5 MGD in the future as additional customers are realized. The collection system improvements were determined through the assembly of a comprehensive sewer system model and simulation of future flows through this model based on identified anticipated growth.

The WWTP improvements project replaces existing facilities with a new Sequencing Batch Reactor (SBR) that is best suited to treat the rapidly expanding customer base. Specifically, this project includes a new influent lift station, new headworks facility with mechanical screening and grit removal, new 2-cell SBR, new UV disinfection, new cascade aeration, new chemical dosing facilities and equipment, and new non-potable water system.

The phased approach to WWTP capacity improvements is taken to not only provide an immediate increase in WWTP capacity but also support growth in the user base and generate revenue to afford future improvements without adversely impacting the user rate. Facility construction is underway and is anticipated to be completed in August 2026.

CLIENT

James Robinson
Town Manager
Town of New Palestine
42 E. Main Street
New Palestine, Indiana
317.441.5131

NEW WASTEWATER TREATMENT PLANT GREENFIELD, INDIANA

PROJECT HIGHLIGHTS

- Prepared Preliminary Engineering Report for SRF Funding.
- Originally constructed in the 1960s, updated and expanded through the 2000s
- Existing facility has reached the end of its useful life with frequent effluent violations resulting from dilapidated and malfunctioning equipment
- Peak flow capacity (10 MGD) is routinely exceeded during wet weather events
- Existing Biosolids Facility inclusive of two (2) Belt Filter Presses and Class A Alkaline Sludge Stabilization Facility have outlived their usefulness and require replacement

PROJECT DESCRIPTION

The function of the existing WWTP with respect to common design standards was analyzed and alternative improvements were identified for a 20-year planning period. The selected solution included the replacement of the existing WWTP with a new 8 MGD average / 24 MGD peak wastewater treatment plant consisting of a raw sewage lift station; headworks with screening, grit removal, odor control equipment; sequencing batch reactor (SBR) treatment; UV disinfection; low-profile cascade aeration system; non-potable water system and sludge processing facilities.

Specifically, the sludge processing facilities include:

1. One (1) Alfa Laval Dewatering Centrifuge.
2. Two (2) Moyno progressing cavity Sludge Feed Pumps
3. Liquid Polymer Blending System
4. Belt Conveyors with Discharge Chutes
5. Controls and instrumentation

The System is designed for the addition of a second like sized centrifuge.

This $70M SRF-funded project is currently in construction and nearing substantial completion.

CLIENT

Nicholas Dezelan, CHMM, ASP
Wastewater Manager
City of Greenfield
809 South State Street
Greenfield, Indiana
317.477.4360

WASTEWATER TREATMENT PLANT IMPROVEMENTS CROWN POINT, INDIANA

PROJECT HIGHLIGHTS

- New primary clarifier
- New aeration tanks
- Improvements to the tertiary filtration system
- Wet weather screening and disinfection facility
- Digester gas flare
- Digester tank mixer
- Upgrades to the existing digester piping for code compliance
- Connection of a new Downtown Interceptor to the WWTP
- Wet weather excess flow pumps

PROJECT DESCRIPTION

The Crown Point wastewater treatment process consisted of a combined BOD/Nitration activated sludge facility, followed by pressured tertiary filtration and UV disinfection. The existing facility had an average daily flow of 4.1 MGD with a peak hourly flow of 8.1 MGD.

This project consisted of increasing the average daily flow to 5.2 MGD. It included installing one (1) new primary clarifier, three (3) new aeration tanks, miscellaneous improvements to the tertiary filtration system, new ultraviolet disinfection system, and associated piping and pumping equipment.

Since the project's completion, the City has realized an additional benefit in increased peak treatment capacity. They are able to treat 9.2 MGD over a 72-hour period which has reduced their overflows throughout the system by 80%.

As part of a separate project, Commonwealth provided planning, design, and construction engineering for a new a wet weather disinfection facility consisting of a 35 MGD pump station, two (2) 35 MGD fine screens, 35 MGD chlorine contact tank with chemical feed equipment, screenings and chemical feed building. The project also includes a 60 MGD excess flow pump station adjacent to the disinfection facility, replacement of existing headworks bar screen, anaerobic digester improvements including replacement of a digester tank cover, digester tank mixer, upgrades to the existing digester piping, a digester gas flare and improvements to the existing blower intake piping, connection of the Downtown Interceptor to the WWTP.

CLIENT

Terry Ciciora
Director
City of Crown Point
101 North East Street
Crown Point, Indiana
219.662.3787

SEWER MASTER PLAN
TERRE HAUTE, INDIANA

PROJECT HIGHLIGHTS

- Planning area encompasses approximately 60 square miles.
- Integration of these respective programs was required during the development phase as Terre Haute is a CSO and MS4 community.
- Computer Simulation Modeling of Sewer Sheds Required

PROJECT DESCRIPTION

This multi-phased project demonstrates the successful teaming of Commonwealth and CHA. The project includes decommissioning the old 48 MGD Main Lift Station (MLS) facility and providing a new MLS designed to screen and pump a peak flow of 81 MGD with room for expansion. The new MLS will pump 48 MGD to the wastewater treatment plant (WWTP) and 33 MGD to the High-Rate Clarification (HRC) facilities, designed and constructed in phases as part of this overall project. The MLS includes non-clog dry well pumps sized to accommodate a range of flows, from low-flow dry weather to high-flow wet weather (the LTCP design storm). Screening equipment comprises three (3) 10 mm multi-rake course bar screens. Force main improvements to include rehabilitation and re-use of the existing 48-inch and incorporation of a new 24-inch, with the ability to fluctuate between the two (2) dependent upon flow, also providing a means of backup. Large diameter sewer is also included to route the flows originally terminating at the old MLS to the new MLS.

CLIENT

Robert Elkins
WWTP Operator
City of Terre Haute
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Terre Haute, Indiana
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Robert.elkins@terrehaute.in.gov

SANITARY SEWER IMPROVEMENTS MASTER PLAN ADAMS COUNTY REGIONAL SEWER DISTRICT ADAMS COUNTY, INDIANA

PROJECT HIGHLIGHTS

- Countywide regional sewer district
- Design of two Sanitary Sewer Improvements projects
- Provided municipal sewer service to approximately 250 new customers.

PROJECT DESCRIPTION

The preparation of a Master Plan established a countywide regional sewer district in addition to providing in-depth planning for septic elimination projects in four unincorporated areas of Adams County. The scope of this report contained the following: 1) facility needs in unsewered areas to provide for wastewater collection and treatment for individual, selected developed areas, 2) identified, established, and evaluated up-to-date alternative methods for providing collection and treatment, 3) determined the cost-effective alternative for each area with respect to sewage collection and treatment, 4) considered potential environmental impacts in all of the service areas, 5) reviewed available funding sources, 6) determined approximate monthly user charges and 7) provided a schedule for project implementation, the establishment of an entity to provide funding, and long-term operation and maintenance of the proposed sewers. Alternative solutions were evaluated on the basis of their cost-effectiveness, operation, and maintenance reliability issues and their ability to implement from a construction standpoint.

Subsequent to the master plan, the project also included the design of two Sanitary Sewer Improvements projects which involved the extension of new sanitary sewer collection systems into three unincorporated communities near Decatur, IN with failing on-site septic systems. The projects involved the extension of new gravity sanitary sewers and low-pressure sanitary sewers coupled with grinder pump stations and a regional lift station for each collection system. This project provided municipal sewer service to approximately 250 new customers.

CLIENT

Barry Scherer
Adams County RSD
313 West Jefferson Street, Room 115
Decatur, Indiana
260.724.2995
bscherer@co.adams.in.us

Project Understanding

Commonwealth has reviewed the RFP and prior Master Plan (MP) documentation and understands that the Town of McCordsville is experiencing significant, dynamic growth, necessitating a proactive and cost-conscious update to its Sewer Master Plan, last revised in 2011. This project is not merely a technical inventory; it is a foundational planning effort essential to securing the Town's future utility reliability, compliance, and sustained economic growth over the next two decades.

We recognize the Town's primary objective: to ensure the sewer utility is well-positioned to support current and anticipated growth while maximizing the investment made in existing infrastructure. Key elements of this understanding include:

- **Rapid Growth Integration:** The Town's Comprehensive Plan, adopted in June 2025, and provided density projections must be the primary drivers for the capacity analysis, flow projections, and infrastructure gap identification, translating vision into tangible system needs.
- **Wastewater Treatment Plant (WWTP) Optimization:** A critical success factor for the Town is the comprehensive evaluation of the existing 1 MGD Aero-Mod system. We will focus on recommending expansion options for the adjacent 14.89-acre parcel, which strategically utilizes and integrates the current facilities, serving as the necessary foundation for a future design.
- **Practical, Phased Implementation:** The final deliverable must be a practical roadmap, clearly defining Near-Term (5-year), Mid-Term (10-year), and Long-Term (20-year) improvements to guide capital budgeting and decision-making through 2026 and beyond.
- **Financial Sustainability:** The plan must include a realistic evaluation of financial tools, including sewer availability fees and reimbursement strategies, ensuring the Town's capital improvement plan is financially sustainable for the required infrastructure investments.

Commonwealth is committed to delivering a high-quality, practical revision to the Sewer Master Plan that serves as a critical guide for the Town’s long-term utility planning.

Project Approach and Methodology

Our approach is organized into four distinct phases, ensuring that all requirements in the Scope of Services are met through a logical and collaborative workflow.

Phase 1: Project Initiation and Data Acquisition (Review & Inventory)

This phase involves collecting the data and feedback necessary for the subsequent analyses.

1. **Kick-off Meeting:** Conduct an in-person kick-off meeting with Town staff to confirm project goals, data formats, and communication protocols.
2. **Information Collection and Review:** Collect and review all prior master plans (2011 revision), current development plans, the Town's Comprehensive Plan, and the provided density projections, WWTP and collection system drawings, and GIS information.
3. **System Inventory Update:** Update the existing system inventory to reflect current corporate boundaries, annexations, and land use data. This includes interceptors, lift stations, and existing WWTP components, ensuring an accurate baseline for the study area.
4. **Development Status Assessment:** Conduct an analysis of developed versus undeveloped areas within the corporate boundaries and planning areas to precisely identify 10-year and 20-year anticipated growth areas.

Project Approach and Methodology (continued)

Phase 2: Flow Projection and Capacity Analysis (Gap Analysis)

In this phase, we identify gaps in the Town's wastewater utility to compile a list of system improvements.

1. **Population, Flow, & Loading Projection Calculations:** Translate the Town's anticipated growth into Near-Term (5-year), Mid-Term (10-year), and Long-Term (20-year) flow projections. This includes calculating EDU equivalents, determining average and peak flow projections, and creating a preliminary population projection summary/graph based on historical growth, projected over the next 20 years.
2. **Existing WWTP Evaluation:** Conduct a detailed evaluation of the existing Aero-Mod wastewater treatment system. This analysis will yield the following information:
    - the available capacity and when it is anticipated to surpass the 80% and 90% thresholds dictating the issuance of an IDEM Early Warning Sewer Ban or Sewer Moratorium, respectively,
    - how effectively the existing WWTP meets its current NPDES effluent limits, and
    - identify how components can be best utilized in an expanded system.

    Commonwealth performed an analysis of the existing Aero-Mod wastewater plant utilizing two years of Monthly Reports of Operation (MRO) from September 2023 to September 2025. A summary and supporting graphs are in the **Appendix** to the Project Understanding & Approach.
3. **Collection System Gap Analysis:** Evaluate flow projections and their resulting impacts on the collection system. This includes identifying system deficiencies (e.g., pipe capacity, lift station constraints) under the projected 20-year growth flows.
4. **WWTP Gap Analysis:** Evaluate flow and loading projections and their resulting impacts on the WWTP. This includes identifying system deficiencies (e.g., WWTP bottlenecks; site restrictions) under the projected 20-year growth flows.

Phase 3: Infrastructure Planning and Financial Assessment (Recommendations)

This phase focuses on generating the core recommendations for treatment and collection systems.

1. **WWTP Expansion & Phasing:** Develop and recommend expansion alternatives for the next WWTP, focusing on sizing, expandability, facility type, repurposing existing facilities, space requirements, odor control, and impacts to adjacent property owners, and phasing onto the adjacent parcel. Population projections in high-growth areas play a critical role in the master planning process. Accurate population projections help ensure that master plans are responsive to future needs, allowing for proactive investment in capacity, compliance, and operational reliability to support sustainable community growth. The population projection graph, found in the Appendix, provides a visual snapshot of how a projection could impact the master planning process.
    - Key considerations in the evaluation of the type of process will include the ability to treat total nitrogen. Effluent limits are not currently imposed, but as a Major Municipal WWTP, the Town is required to monitor and report total nitrogen. It is likely that total nitrogen will become a formal, regulated pollutant in Indiana's Municipal NPDES program in the near future, given that IDEM now has an extensive dataset of municipal WWTP Total Nitrogen loading to our receiving streams. It will be imperative that the selected process is either capable of treating total nitrogen or can easily be expanded/modified to do so. We will submit an Application for Preliminary Effluent Limitations to IDEM for use in the assembly of the MP update.
    - We also recommend the inclusion of an emerging contaminants summary in this assessment. For example, PFAS is frequently in state and federal news these days. State and Federal Drinking Water Standards have been developed, and Public Community Drinking Water Systems are monitoring for the suite of forever chemicals. While we will not recommend monitoring for PFAS or other emerging contaminants, such as microplastics, at the WWTP, we believe it is warranted to evaluate the "what if" scenario in which the WWTP is issued an NPDES permit with PFAS limits.

Project Approach and Methodology (continued)

- Sludge quality and disposal might be even more relevant with respect to PFAS and other emerging contaminants, as many states have already banned Land Application due to the risk of food supply contamination. While we understand that McCordsville currently disposes of sludge via landfill, solid waste disposal companies are increasingly more cautious of sludge quality that may impact leachate and subsequently land and water resources.

2. **Collection System Phasing:** Based on the gap analysis, identify the locations and sizes of the necessary 5-year, 10-year, and 20-year collection system improvements (e.g., new interceptors, lift station upgrades, collection system rehabilitation).

3. **Financing Alternatives:** Evaluate and provide recommendations for financial and policy tools, specifically focusing on sewer availability fees, connection charges, and potential reimbursement strategies for capital recovery by collaborating with the Town's financial advisor.
   Commonwealth is intimately familiar with a variety of funding mechanisms. Over $278 million in grant dollars has been secured for our clients over the past 5 years alone. Additionally, there are low-interest-rate loan programs to consider. For example, Commonwealth recently oversaw the completion of a Residential Infrastructure Funding (RIF) loan application for the Town of Arcadia. Commonwealth is designing a water treatment plant to partially serve a residential development consisting of 264 single-family homes. The Town of Arcadia was awarded a $3 million Residential Infrastructure Funding (RIF) loan. Managed by the Indiana Finance Authority, RIF provides low-interest loans to Indiana communities for infrastructure projects that support residential development. The program prioritizes towns with housing-friendly zoning and demonstrated needs, based on local job growth, dedicating 70% of its funding to communities with fewer than 50,000 residents. RIF loans are designed to reduce costs and remove barriers that often slow down development, but they do not cover planning, design, or engineering expenses. Instead, funds are reserved for the construction of essential infrastructure, including water and wastewater systems. The RIF funds will be utilized to fund the construction of the new water treatment plant. A portion of the funding will also be provided through the formation of a newly created residential tax-increment financing (TIF) district.

4. **Collection System Maintenance Recommendations:** A comprehensive, long-term collection system maintenance plan, often referred to as the Capacity, Management, Operation, and Maintenance program (CMOM), is an essential planning tool used to extend the life of a municipality's infrastructure. While the traditional CMOM is a robust document that is well beyond the scope of this work, the recommendations requested comprise a small portion of a CMOM.
   Commonwealth's project team has individuals with extensive experience in preparing contract documents for cleaning, televising, inspecting, and rehabilitating pipes and manholes. Commonwealth has NASSCO certifications in pipelines (PACP), laterals (LACP), and manholes (MACP). The combination of experience and knowledge makes our team well-suited to prepare maintenance recommendations that will yield long-term benefits for the town's infrastructure.

Phase 4: Sanitary Sewer Master Plan Report

The final phase involves compiling all findings into a comprehensive, usable document.

1. **Draft Master Plan Preparation:** Prepare a comprehensive draft report detailing the methodologies used, findings, capacity analyses, infrastructure recommendations, and financial evaluations.

2. **Review and Collaboration:** Provide the draft report to the Town Manager, Town Engineer, and Utility Staff for review. Attend a virtual meeting to receive feedback from the Town.

3. **Final Master Plan Production:** Incorporate any Town comments and finalize the report.

PROPOSED TASK BREAKDOWN AND FEE

Work Task Description	Project Manager III Wells	Project Manager II Cochrane	Sr. Process Engineer Limcaco	Project Engineer I Zak	Engineering Intern III Smith	CADD Specialist II Reinoehl	Clerical II Alvis	Env. Compliance Manager Dryer
Phase 1: Project Initiation and Data Acquisition (Review & Inventory)								
Kickoff Meeting	3	4						
Site Investigation/Pump Down Tests	2	2			8			
Information Collection and Review	1				8			
System Inventory Update	1				8	4		
Development Status Assessment					8			
Phase 2: Flow Projection and Capacity Analysis (Gap Analysis)								
Population, Flow, & Loading Projection Calculations	1	2			8			
Existing WWTP Evaluation	3				8			
Collection System Gap Analysis		8		8				
WWTP Gap Analysis	3				8			
Phase 3: Infrastructure Planning and Financial Assessment (Recommendations)								
WWTP Expansion & Phasing	4				8	2		4
Collection System Phasing		4		8		2		
Financing Alternatives		2						
Collection System Maintenance Plan				4				
Phase 4: Sanitary Sewer Master Plan Report								
Draft Master Plan Preparation	1			4	8			
Review and Collaboration		2		2	2			
Final Master Plan Production	1			2	4		4	
Administration & Management								
Project Management		4						
QC		2	4					
Internal Meetings		2		2	2			
Direct Labor (All Local)	20.0	40.0	4.0	30.0	80.0	8.0	4.0	4.0

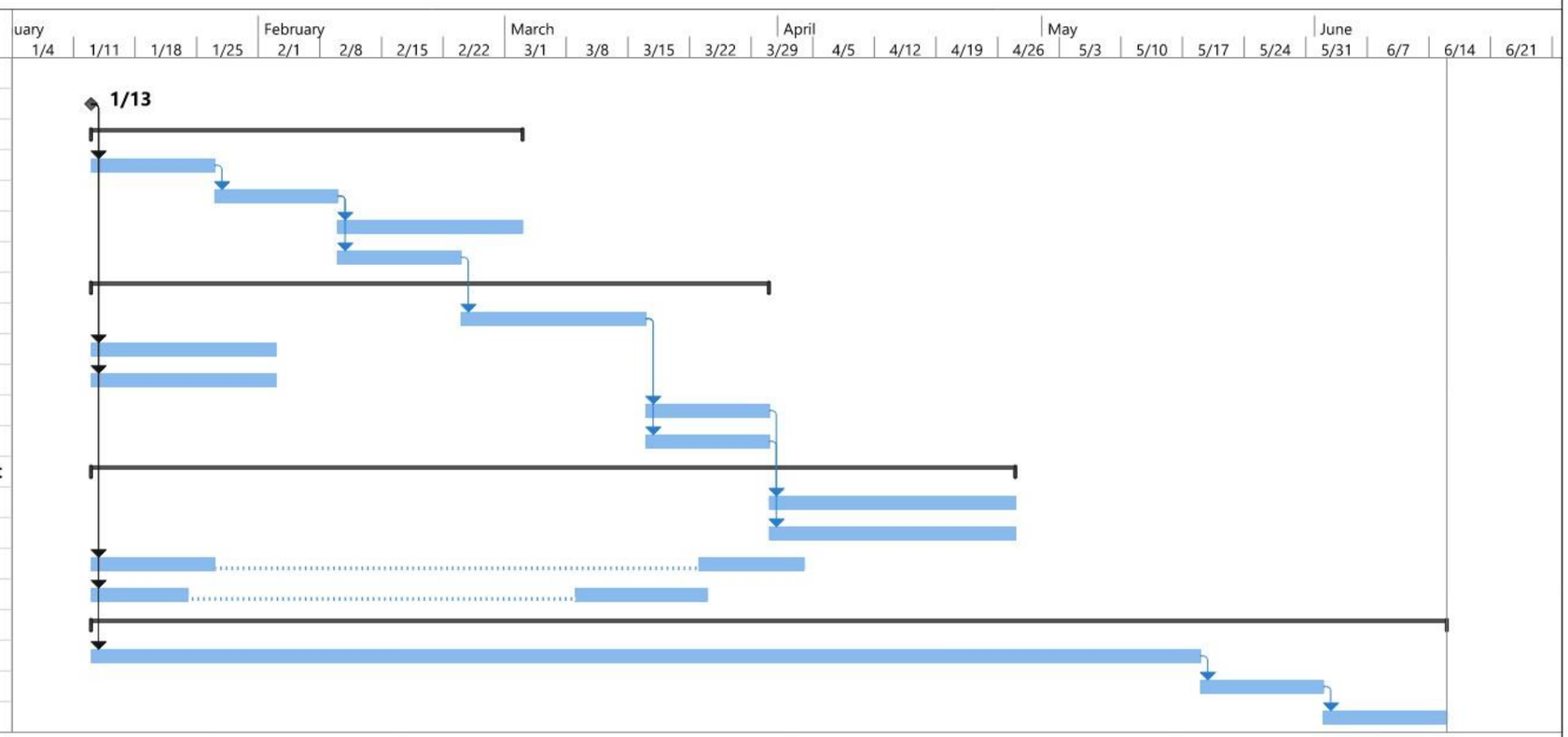
Fee = $40,000 (lump sum)

PROPOSED PROJECT SCHEDULE

Commonwealth has assembled a team with specific expertise focused on McCordsville's needs. We will work with all parties to move your project forward in a timely manner and with attention to detail. We anticipate your project could be completed under the tentative milestones shown below.

Town of McCordsville
Sewer Master Plan Update

ID	Task Mode	Task Name
1		Select Consultant (12/9/25)
2		Execute Agreement
3		**Phase 1**
4		Attend Kickoff Meeting
5		Document Review
6		System Inventory Update
7		Development Status Assessment
8		**Phase 2**
9		Flow Projection Calculations
10		Existing WWTP Evaluation
11		Existing Collection System Evaluation
12		WWTP Gap Analysis
13		Collection System Gap Analysis
14		**Phase 3 - Infrastructure Planning & Fiancial Assessment**
15		WWTP Expansion & Phasing
16		Collection System Phasing
17		Financing Alternatives
18		Collection System Maintenance Plan
19		**Phase 4 - Report Assembly**
20		Draft Report Preparation
21		Review and Collaboration
22		Final Report Production



Project: Schedule
Date: Tue 11/18/25

Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

Page 1

REFERENCES

Commonwealth Engineers, Inc. has provided municipal water, wastewater, and stormwater engineering services for numerous governmental entities across Indiana. We encourage you to contact the following:

Mr. James Robinson
Town of New Palestine, Indiana
Town Manager
317.441.5131

Ms. Jessica Bastin, P.E.
Madison County, Indiana
Madison County Engineer
317.370.5265

Mr. Rich Versprille
Town of Arcadia, Indiana
Town Council President
317.385.0164

Mr. Bill Walters
Town of Daleville, Indiana
Town Council President
765.378.6288

Mr. Bryce Black
City of Rensselaer, Indiana
Water and Sewer Superintendent
219.866.7833

Mr. Shawn Pabst
Town of Brownsburg, Indiana
Assistant Town Manager
317.852.1120

Mr. Jeremy Kosegi, PE
Citizens Energy Group, Indianapolis, Indiana
Manager, Underground Engineering and Construction
317.407.2698

George W. Lewis, PE
Town of Zionsville, Indiana
Engineering Division Supervisor Town Engineer
317.873.4544

Ms. Ashley Getz, PE
Columbus City Utilities, Indiana
Associate Director - Engineering
812.372.8861

Mr. Terry Ciciora
City of Crown Point, Indiana
Public Works Director
219.662.325

APPENDIX

Monthly Reports of Operation (MRO) Analyses
September 1, 2023, to August 31, 2025

Commonwealth downloaded the Monthly Reports of Operation for the Town's existing WWTP to perform MRO analyses from September 1, 2023, to August 31, 2025, from IDEM's Virtual File Cabinet. MRO analyses were performed for Flow, CBOD, TSS, ammonia-nitrogen, and total phosphorus, respectively. These results are only a preliminary limited sampling of data analyses Commonwealth will be providing as part of the Master Plan Update. Each analysis has a summary of the results and its own graph on the following pages.

Some general observations from this analysis include:

Flow

- Avg. flow (0.65 MGD) is 66% of plant rated design capacity for the 2-year period.
    - Dry weather Avg. = 0.64 MGD / Wet weather Avg. = 0.68 MGD
    - Peak day flow = 1.41 MGD (54% of peak capacity)
- Diving deeper, from 9/1/23 to 8/31/24, avg flow is 60% and from 9/1/24 to 8/31/25, it is 70% of rated capacity representing 10% increase year over year. Should this trend continue, there may be less than 2-3 years before the 90% capacity threshold is reached when an IDEM Early Warning Sewer Ban could be imposed.

Influent Organic (CBOD5) Loading

- WWTP is operating at 71% design organic loading (200 mg/l actual > 185 mg/l design). WWTP would need to be downrated to 0.92 MGD to meet equivalent design rating.
- There are no apparent monthly exceedances of design capacity.
- Effluent concentration levels consistently below permit limits.

Influent Total Suspended Solids (TSS) Loading

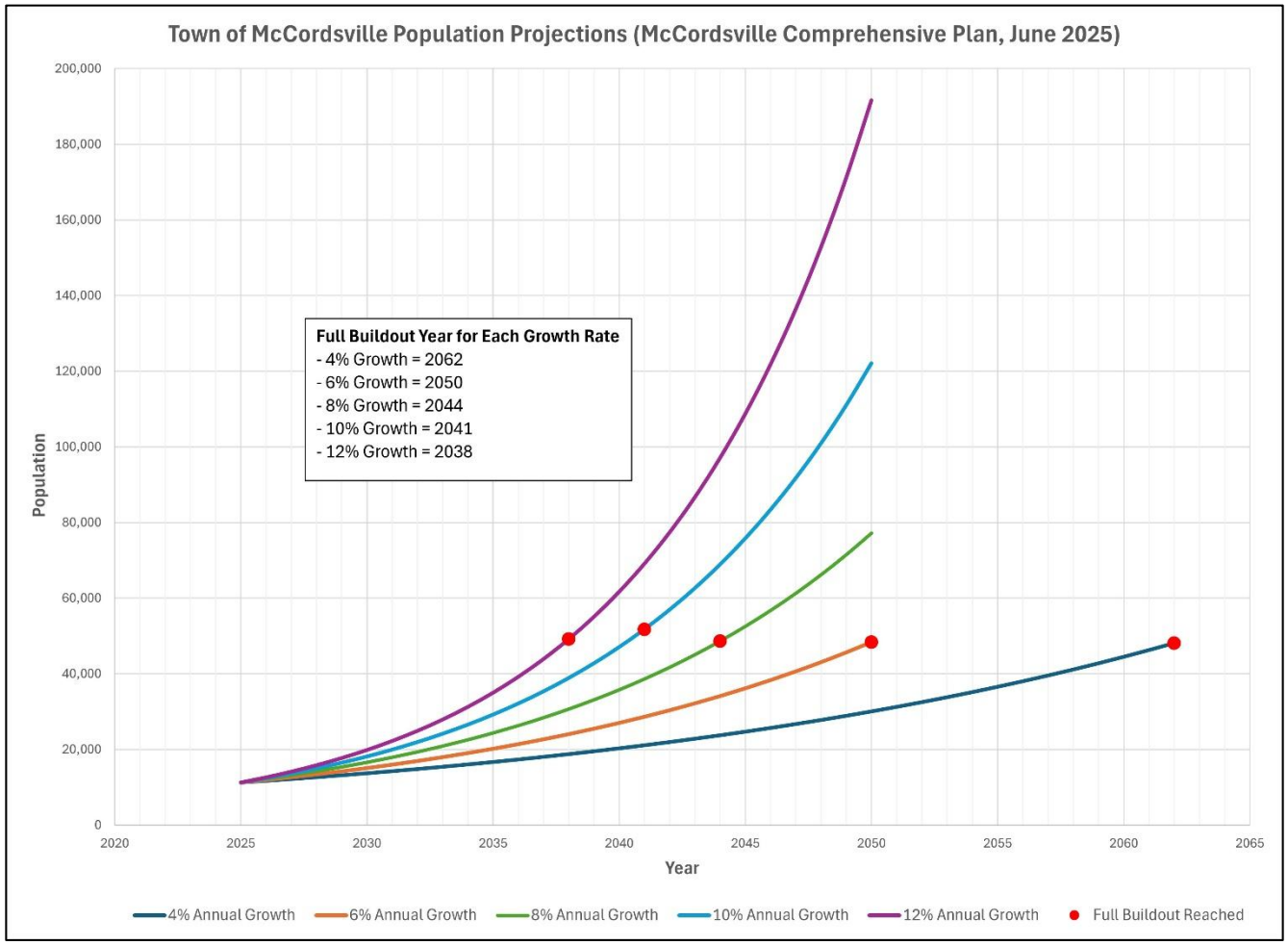
- WWTP is operating at 103% of design loading (313 mg/l actual > 200 mg/l design) and chronically running above this. WWTP would need to be downrated to 0.63 MGD to meet equivalent design rating.
- Effluent concentration levels consistently below permit limits.

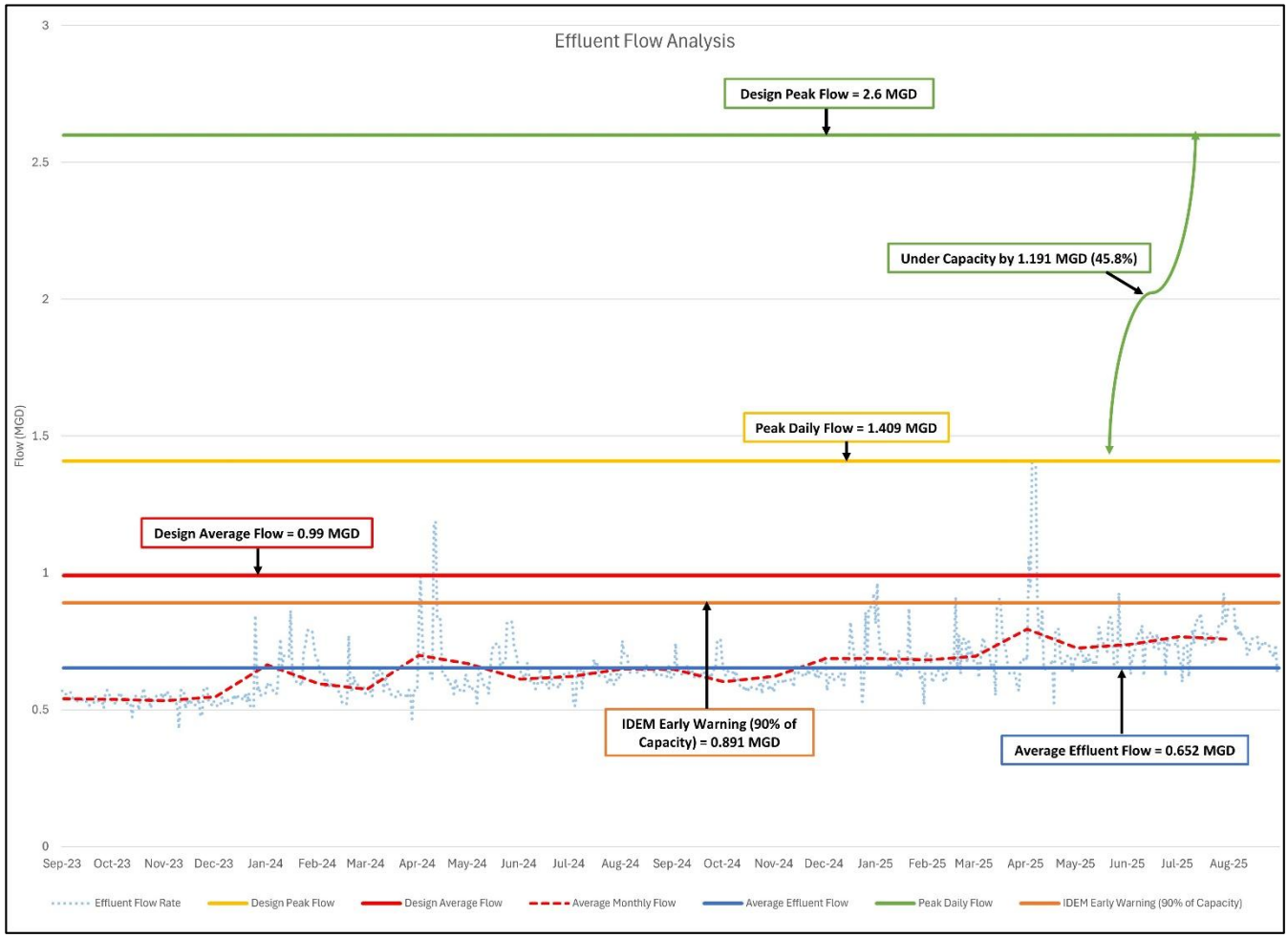
Influent Ammonia-Nitrogen (NH3-N) Loading

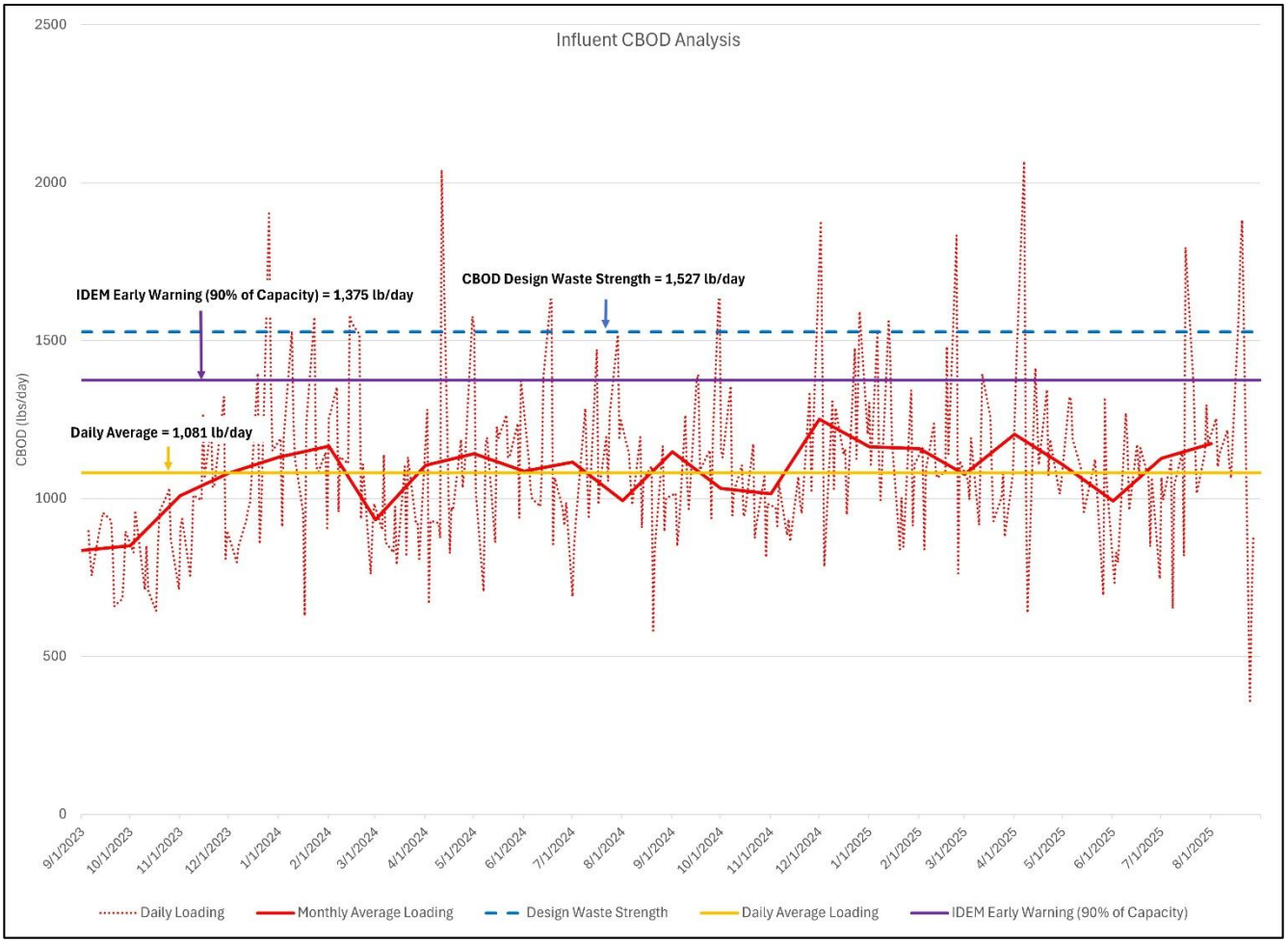
- WWTP is operating at 62% of design loading (35 mg/l actual < 37 mg/l design).
- There are no apparent monthly exceedances of design capacity.
- Effluent concentration levels consistently below permit limits.

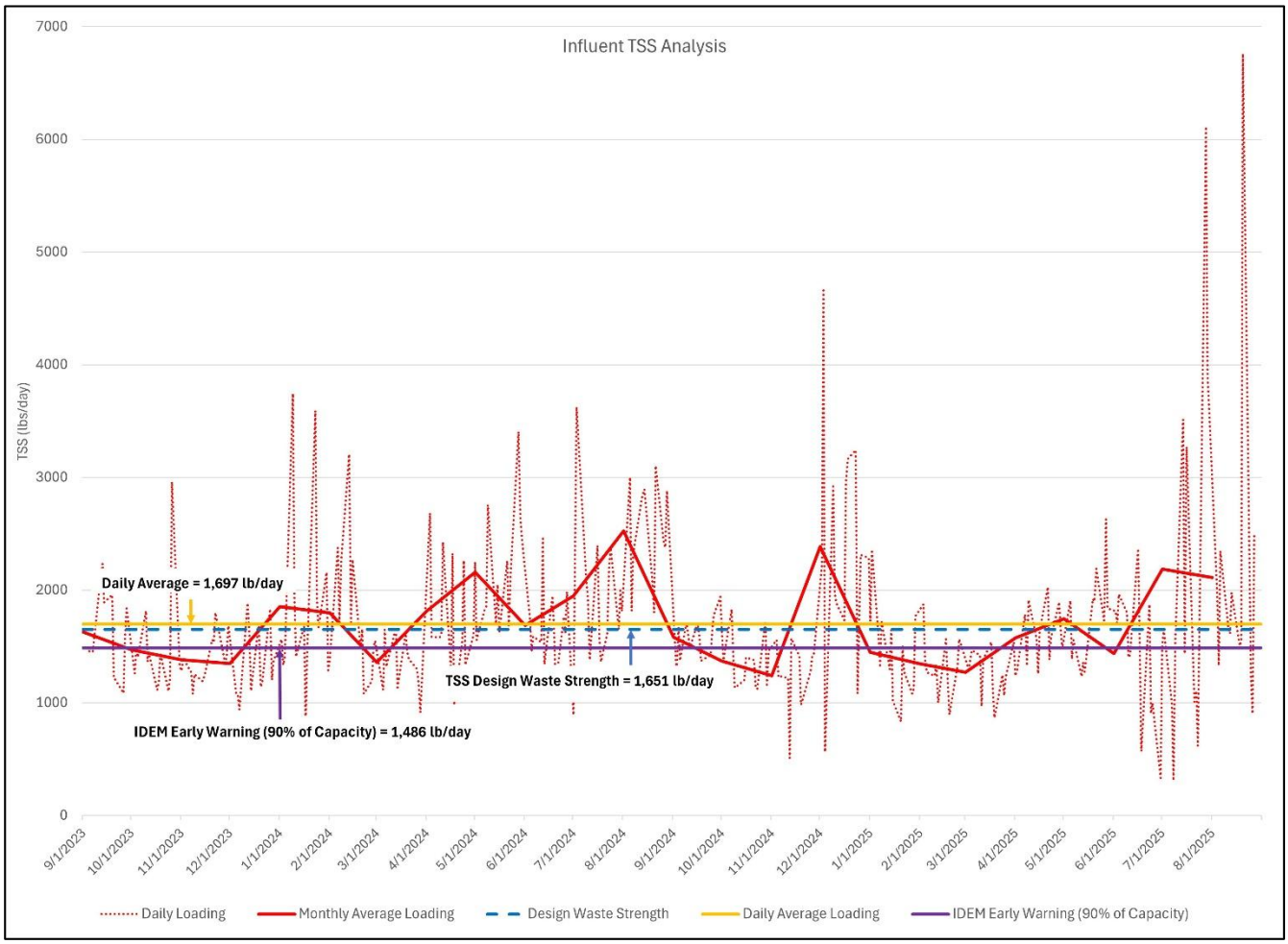
Influent Total Phosphorus (TP) Loading

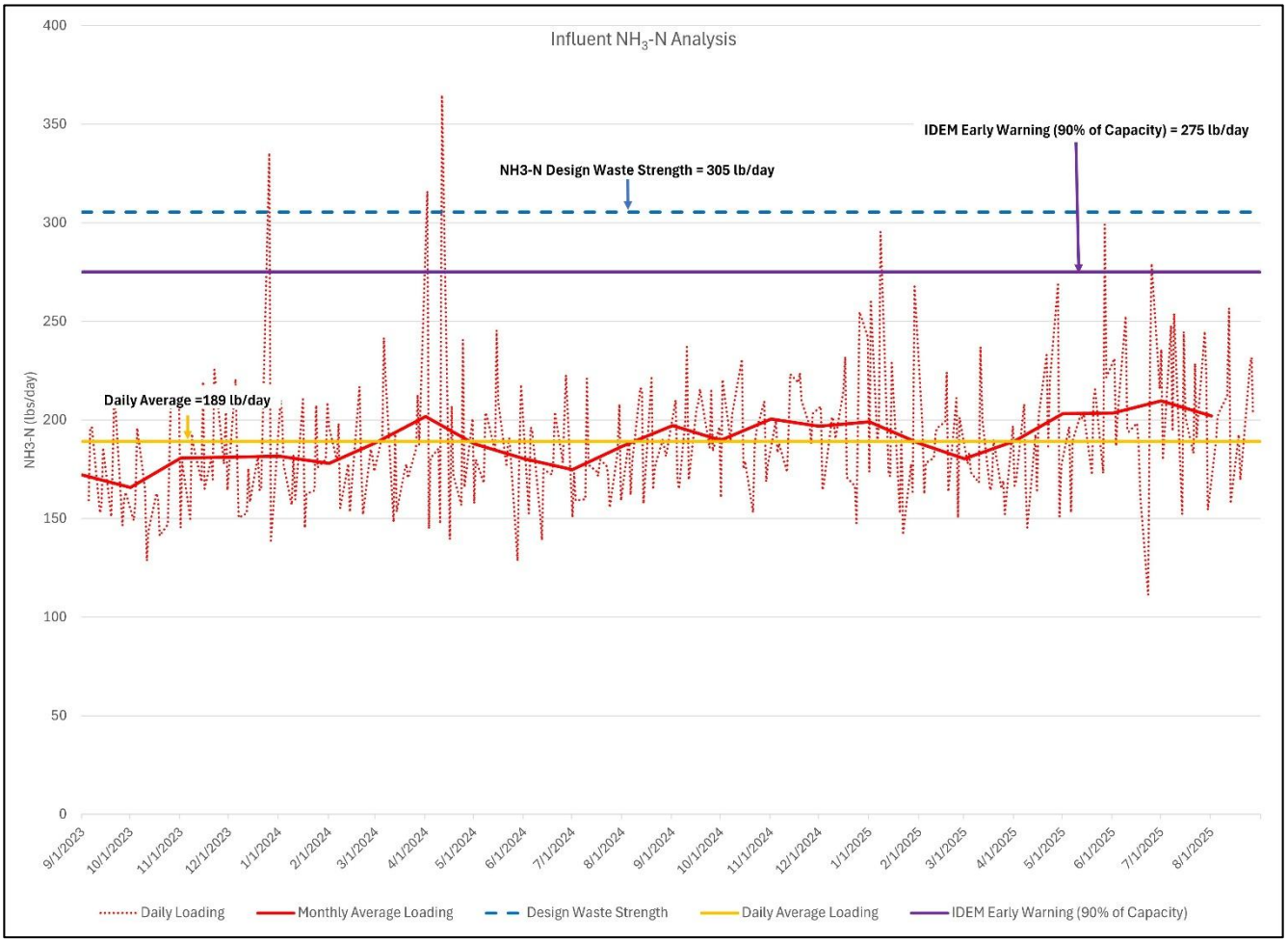
- WWTP is operating at 85% of design loading (5.2 mg/l actual > 4 mg/l design). WWTP would need to be downrated to 0.76 MGD to meet equivalent design rating.
- There are no apparent monthly exceedances of design capacity but several above 90% threshold.
- Effluent concentration levels consistently below permit limits.

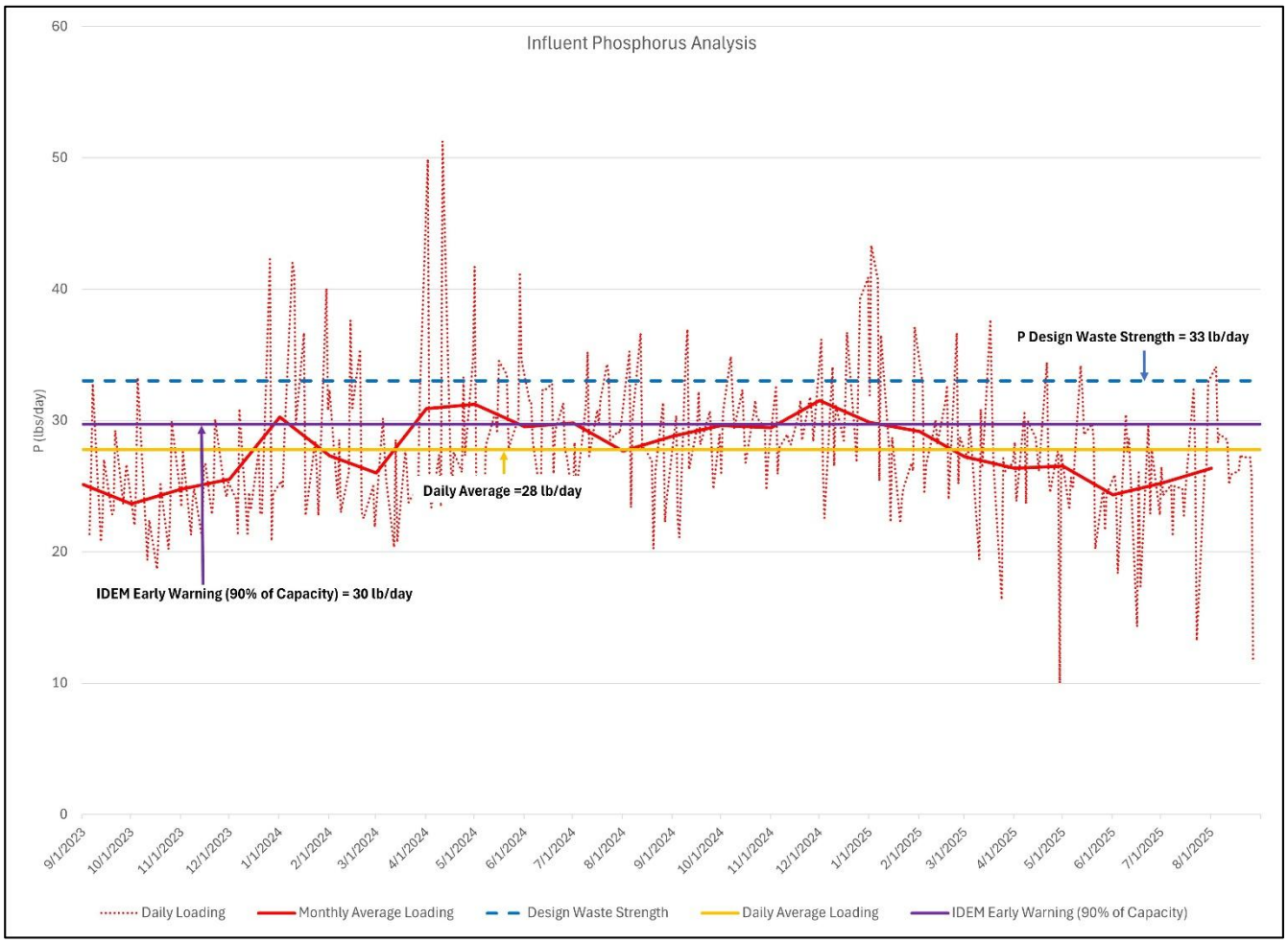

Town of McCordsville Population Projections (McCordsville Comprehensive Plan, June 2025)
Full Buildout Year for Each Growth Rate
- 4% Growth = 2062
- 6% Growth = 2050
- 8% Growth = 2044
- 10% Growth = 2041
- 12% Growth = 2038
Population
Year
4% Annual Growth
6% Annual Growth
8% Annual Growth
10% Annual Growth
12% Annual Growth
Full Buildout Reached


Effluent Flow Analysis
Design Peak Flow = 2.6 MGD
Under Capacity by 1.191 MGD (45.8%)
Peak Daily Flow = 1.409 MGD
Design Average Flow = 0.99 MGD
IDEM Early Warning (90% of Capacity) = 0.891 MGD
Average Effluent Flow = 0.652 MGD
Flow (MGD)
Effluent Flow Rate
Design Peak Flow
Design Average Flow
Average Monthly Flow
Average Effluent Flow
Peak Daily Flow
IDEM Early Warning (90% of Capacity)


Influent CBOD Analysis
CBOD (lbs/day)
2500
2000
1500
1000
500
0
IDEM Early Warning (90% of Capacity) = 1,375 lb/day
CBOD Design Waste Strength = 1,527 lb/day
Daily Average = 1,081 lb/day
9/1/2023
10/1/2023
11/1/2023
12/1/2023
1/1/2024
2/1/2024
3/1/2024
4/1/2024
5/1/2024
6/1/2024
7/1/2024
8/1/2024
9/1/2024
10/1/2024
11/1/2024
12/1/2024
1/1/2025
2/1/2025
3/1/2025
4/1/2025
5/1/2025
6/1/2025
7/1/2025
8/1/2025
Daily Loading
Monthly Average Loading
Design Waste Strength
Daily Average Loading
IDEM Early Warning (90% of Capacity)


Influent TSS Analysis
TSS (lbs/day)
7000
6000
5000
4000
3000
2000
1000
0
Daily Average = 1,697 lb/day
TSS Design Waste Strength = 1,651 lb/day
IDEM Early Warning (90% of Capacity) = 1,486 lb/day
9/1/2023
10/1/2023
11/1/2023
12/1/2023
1/1/2024
2/1/2024
3/1/2024
4/1/2024
5/1/2024
6/1/2024
7/1/2024
8/1/2024
9/1/2024
10/1/2024
11/1/2024
12/1/2024
1/1/2025
2/1/2025
3/1/2025
4/1/2025
5/1/2025
6/1/2025
7/1/2025
8/1/2025
Daily Loading
Monthly Average Loading
Design Waste Strength
Daily Average Loading
IDEM Early Warning (90% of Capacity)


Influent NH3-N Analysis
NH3-N Design Waste Strength = 305 lb/day
IDEM Early Warning (90% of Capacity) = 275 lb/day
Daily Average =189 lb/day
NH3-N (lbs/day)
400
350
300
250
200
150
100
50
0
9/1/2023
10/1/2023
11/1/2023
12/1/2023
1/1/2024
2/1/2024
3/1/2024
4/1/2024
5/1/2024
6/1/2024
7/1/2024
8/1/2024
9/1/2024
10/1/2024
11/1/2024
12/1/2024
1/1/2025
2/1/2025
3/1/2025
4/1/2025
5/1/2025
6/1/2025
7/1/2025
8/1/2025
Daily Loading
Monthly Average Loading
Design Waste Strength
Daily Average Loading
IDEM Early Warning (90% of Capacity)


Influent Phosphorus Analysis
P Design Waste Strength = 33 lb/day
Daily Average =28 lb/day
IDEM Early Warning (90% of Capacity) = 30 lb/day
P (lbs/day)
60
50
40
30
20
10
0
9/1/2023
10/1/2023
11/1/2023
12/1/2023
1/1/2024
2/1/2024
3/1/2024
4/1/2024
5/1/2024
6/1/2024
7/1/2024
8/1/2024
9/1/2024
10/1/2024
11/1/2024
12/1/2024
1/1/2025
2/1/2025
3/1/2025
4/1/2025
5/1/2025
6/1/2025
7/1/2025
8/1/2025
Daily Loading
Monthly Average Loading
Design Waste Strength
Daily Average Loading
IDEM Early Warning (90% of Capacity)

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