2019 Project Abstract
For the Period Ending June 30, 2023

PROJECT TITLE: Spring Biological Nitrate Removal to Protect Drinking Water
PROJECT MANAGER: Tyler Cowing
AFFILIATION: City of Fairmont
MAILING ADDRESS: 100 Downtown Plaza
CITY/STATE/ZIP: Fairmont, MN 56031
PHONE: 507-238-3948
E-MAIL: tcowing@fairmont.org
WEBSITE: www.fairmont.org
FUNDING SOURCE: Environment and Natural Resources Trust Fund
LEGAL CITATION: M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 04r

APPROPRIATION AMOUNT: $175,000.00
AMOUNT SPENT: $173,162.24
AMOUNT REMAINING: $1,837.76

Sound bite of Project Outcomes and Results

The city constructed a passive nitrate removal system optimized for spring low temperature treatment and partnered with the University of Minnesota to evaluate this field scale model. The results show that the concept of warming the water for early spring treatment works; however, treatment was hindered by algae growth in the greenhouse.

Overall Project Outcome and Results

The City of Fairmont, Minnesota's drinking water supply is threatened by high nitrates in spring runoff. Because conventional bioreactors are ineffective during the spring, the City of Fairmont needed an alternative design – a spring-season biological nitrate removal system – to reduce the load of nitrates entering Budd Lake during this time-critical season that can provide reliably safe drinking water for its 10,000 residents. The city worked with the University of Minnesota to evaluate a large passive nitrate removal system. The focus of the project was to optimize a passive solar system to warm water prior to it being treated in a conventional bioreactor system. This system was then designed by Barr Engineering and constructed in 2021. In the spring of 2022 and spring of 2023, the system was operated and monitored by the University of Minnesota and city public works staff. The bioreactor system was monitored for temperature distribution, water depth, flow, nitrate, sulfate, dissolved organic carbon, and general water quality parameters starting in 2022 until June 2023. The results indicate that the denitrifying woodchip bioreactor demonstrates better performance at low water levels, where dissolved oxygen (DO) levels are low enough, and the temperature is high enough to facilitate anaerobic respiration. The greenhouse raises the temperature to the desired level suitable for denitrification to occur. However, the construction of a forebay and greenhouse may significantly hinder the bioreactor's denitrification process due to the high DO levels in the influent and the stratification of DO caused by algae in the bioreactor. To enhance the performance of the bioreactor, the removal of algae in the forebay and greenhouse may be necessary to aid denitrification. If a solution to removing the algae and lowering the DO in the bioreactor can be developed, this system could provide an economical way to decrease spring nitrates in our lakes and rivers.

Project Results Use and Dissemination
The University of Minnesota and City of Fairmont wrote a final report on the demonstration project. This report will be shared with all agencies working with the city to improve the chain of lakes, as well as anyone in the public interested in the project. The final report will also be shared at a water quality meeting hosted by the city where many agencies come together to work on water quality issues in the Fairmont Chain of Lakes. The city, U

of M, and Barr Engineering presented the project at the Minnesota Water Resources conference in 2021 and 2022.

Environment and Natural Resources Trust Fund (ENRTF)
M.L. 2019 ENRTF Work Plan (Main Document)

Today's Date: August 14, 2023

Date of Next Status Update Report: Final Report

Date of Work Plan Approval: June 5, 2019

Project Completion Date: June 30, 2023

PROJECT TITLE: Spring Biological Nitrate Removal to Protect Drinking Water

Project Manager: Tyler Cowing

Organization: City of Fairmont

College/Department/Division: Engineering/Public Works

Mailing Address: 100 Downtown Plaza

City/State/Zip Code: Fairmont, MN 56031

Telephone Number: 507-238-3948

Email Address: tcowing@fairmont.org

Web Address: www.fairmont.org

Location: City of Fairmont, west shore of Hall Lake

Total Project Budget: $175,000

Amount Spent: $173,162.24

Balance: $1,837.76

Legal Citation: M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 04r as extended by M.L. 2022, Chp. 94, Sec. 2, Subd. 19 (c.1) [to June 30, 2023]

Appropriation Language: $175,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the city of Fairmont to build and demonstrate the effectiveness of an experimental passive biological treatment system to reduce nitrates that enter the city's springtime water supply source.

M.L. 2022 - Sec. 2. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2023]

I. PROJECT STATEMENT: The City of Fairmont, Minnesota's drinking water supply is threatened by high nitrates in spring runoff. Because conventional bioreactors are ineffective during the spring, the City of Fairmont needs an alternative design – a spring-season biological nitrate removal system – to reduce the load of nitrates entering Hall Lake and the chain of lakes during this time-critical season that can provide reliably safe drinking water for its 10,000 residents.

Without an environmentally based mechanism to reliably reduce nitrate, the City of Fairmont would likely need to spend several million dollars to upgrade its drinking water treatment system. In 2016, the City was forced to issue a public health notice that Fairmont's drinking water exceeded EPA's maximum contaminant level (10 mg/L). High nitrates in drinking water can cause methemoglobinemia, or "blue baby disease", which is lethal to infants. The City currently uses blending and mechanical treatment to attenuate high nitrate spikes, but the capacity of these tools is limited.

Fairmont's drinking water comes from a chain of lakes fed by agricultural watersheds – the City's surface water intake is on Budd Lake (see Figure 1). Dutch Creek is one of the largest tributaries to the Fairmont chain of lakes, with a watershed covering over 9,000 acres. Dutch creek is also a significant source of nitrate to the City's drinking water supply. Data collected since 2000 show periodic high nitrate occurrences in Dutch Creek, with peaks over three times the EPA maximum contaminant levels. During warmer months of the year, natural nitrate removal processes in the lakes help to prevent nitrates from reaching the City's drinking water. However, in the spring, when nitrates are more easily flushed out of the agricultural watersheds, the natural limnologic removal mechanisms are ineffective. Recent SWAT modeling completed for the MPCA and USEPA supports this seasonal variation[1]. In fact, the results of the modeling suggest that both spring flushing and summer removal mechanisms are underestimated for the Dutch Creek watershed. This reinforces the need to better adapt nitrate removal technologies to work when nitrate removal is most needed – namely in the spring.

Fairmont is working with the University of Minnesota to evaluate a large passive nitrate removal system[2]. The focus of this ENRTF-funded project will be to optimize a portion of the proposed plan to work more effectively during the spring season by employing passive solar technology and bioadaptation. The benefits of a new spring-season biological nitrate removal system over a conventional bioreactor system will be demonstrated at field-scale over the next three years.

II. OVERALL PROJECT STATUS UPDATES:

First Update March 1, 2020 – Project start-up was delayed due to grant agreement approvals and agency coordination. A consultant was selected and approved in January 2020. Project kick-off meeting was held this winter and a site visit was completed. Project plan is being created and concept designs are being developed. Preliminary watershed modeling is being completed by the consultant. Coordination with the U of MN has begun and a final agreement for their services is pending.

AMENDMENT REQUEST March 1, 2020
We are requesting the completion dates of multiple activities be moved back to 2020.
Act. 1 – Outcome 1 to 2-1-20
Act. 1 – Outcome 2 to 7-1-20
Act. 1 – Outcome 3 to 8-1-20
Act. 1 – Outcome 4 to 9-15-20

[1] *Dutch Creek and Hall Lake SWAT Modeling Report*, Prepared for Minnesota Pollution Control Agency and USEPA. Prepared by Tetra Tech, Updated March 13, 2018.
[2] *Dutch Creek Watershed Implementation Plan*

Act. 2 – Outcome 1 to 5-1-20
Act. 2 – Outcome 2 to 8-1-20
Act. 2 – Outcome 3 to 9-1-20
Act. 2 – Outcome 4 to 10-1-20

Act. 3 – Outcome 1 to 9-15-20
Act. 3 – Outcome 2 to 10-15-20

The initial grant application/work plan did not anticipate the grant agreement approval process. In addition, an early winter, shut down the possibility of getting the project constructed in the Fall of 2019. The completion dates have been shifted to allow for installation in 2020.

Amendment Approved by LCCMR 3/20/2020

Second Update September 1, 2020

Design of the project continued through the summer. Project is slightly behind schedule due to outside project delays relating to the final project location and coordination with a LSOHC project. Project is anticipated to bid this fall and anticipating construction this winter or early spring.

Third Update March 1, 2021

The project design is completed, and the project is currently being advertised for construction. Bid opening is scheduled for April 7, 2021. Construction will begin this summer.

Fourth Update September 1, 2021

The construction on this project began in August in conjunction with a Habitat project funded by LSOHC. The construction has been ongoing and progressing well through the summer. Completion of the bioreactor is anticipated by the end of the year. Initial start-up of the system will be this winter/spring with the hopes to get the first data from the system the spring of 2022. The City has been coordinating with the U of MN on the monitoring program throughout construction. The City has requested a COVID extension to allow for the project to gather at least 2 seasons (2022-2023) of data from the new system.

Fifth Update March 1, 2022

Most of the construction was completed the fall of 2021 up to December 2021. The bioreactor was completed and will be put online in March 2022. Sampling will start this spring and analysis and monitoring will be completed by the U of MN. Site restoration will be completed the spring of 2022.

Update as of June 30, 2022:

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

Sixth Update as of September 1, 2022:

The bioreactor was online for most of the summer. However, due to a lack of precipitation there was limited data that was able to be collected. Automatic, solar powered, data collection systems were installed in March

and samples were grabbed twice a week for the first 2 months of monitoring. The function of the bioreactor varied due to varied flows.

Seventh Update as of March 1, 2023: Automatic, solar powered, data collection systems were installed in March 2023 for spring monitoring again, sampling started the first week of March for 2023's monitoring.

AMENDMENT REQUEST March 15, 2023: We are requesting the change of Project Manager from Troy Nemmers to Tyler Cowing. "**Amendment Approved by LCCMR 3/29/23**."

Final Report as of June 30, 2023:

Spring monitoring, reporting and final report have been completed.

III. PROJECT ACTIVITIES AND OUTCOMES:

The City of Fairmont, Minnesota's drinking water supply is threatened by high nitrates in spring runoff. Because conventional bioreactors are ineffective during the spring, the City of Fairmont needed an alternative design – a spring-season biological nitrate removal system – to reduce the load of nitrates entering Budd Lake during this time-critical season that can provide reliably safe drinking water for its 10,000 residents. The city worked with the University of Minnesota to evaluate a large passive nitrate removal system. The focus of the project was to optimize a passive solar system to warm water prior to it being treated in a conventional bioreactor system. This system was then designed by Barr Engineering and constructed in 2021. In the spring of 2022 and spring of 2023, the system was operated and monitored by the University of Minnesota and city public works staff. The bioreactor system was monitored for temperature distribution, water depth, flow, nitrate, sulfate, dissolved organic carbon, and general water quality parameters starting in 2022 until June 2023. The results indicate that the denitrifying woodchip bioreactor demonstrates better performance at low water levels, where dissolved oxygen (DO) levels are low enough, and the temperature is high enough to facilitate anaerobic respiration. The greenhouse raises the temperature to the desired level suitable for denitrification to occur. However, the construction of a forebay and greenhouse may significantly hinder the bioreactor's denitrification process due to the high DO levels in the influent and the stratification of DO caused by algae in the bioreactor. To enhance the performance of the bioreactor the removal of algae in the forebay and greenhouse may be necessary to aid denitrification. If a solution to removing the algae and lowering the DO in the bioreactor can be developed, this system could provide an economical way to decrease spring nitrates in our lakes and rivers.

ACTIVITY 1 Title: Design and Install nitrate removal system
Description: City of Fairmont public works (CFPW) staff will collaborate with the University of Minnesota Dept of Bioproducts and Biosystems Engineering (UMN-BBE) team to plan the design, implementation and performance evaluation of the nitrate removal system.

Specifically, CFPW and UMN-BBE will develop a request for proposal (RFP) and select a consulting engineering firm to design the system in concert with CFPW and UMN-BBE. That consulting engineering firm will develop plans, specifications, bid documents and a second RFP and select a contractor to construct the nitrate removal system. Once a contractor is selected, they will construct the nitrate removal system under the supervision of CFPW, UMN-BBE and the consulting engineer.

ACTIVITY 1 ENRTF BUDGET: $95,000

Outcome	Completion Date
1. RFP and selection of engineering consultant	2-1-20
2. Detailed design, schedule, and bid package for contractors completed	7-1-20
3. Bidding and selection of construction contractor	8-1-20

4. Completed construction of nitrate removal system	9-15-20

First Update March 1, 2020

Second Update September 1, 2020

Barr Engineering and the University of MN have been working with City staff on the project design. Construction plans are at 60% and scheduled for bidding this fall with construction this winter/spring.

Third Update March 1, 2021

Barr Engineering and U of MN have completed design and bid packages. Bid opening for construction is April 7, 2021.

Fourth Update September 1, 2021

Construction is in progress and completion of the bioreactor is currently scheduled for 12/15/21.

Fifth Update March 1, 2022

Construction of the bioreactor was completed and the unit will be brought online in March 2022.

Update as of June 30, 2022:

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

Sixth Update as of September 1, 2022:

Project construction was completed and the unit was brought online in March 2022.

Seventh Update as of March 1, 2023:

No update, construction completed.

Final Report as of June 30, 2023:

No update, construction completed.

ACTIVITY 2 Title: Research and install cold weather bio-adaptation
Description: CFPW, UMN-BBE and the selected engineering consultant will work together to identify the materials needed to manage temperature and microbial response in the bioreactor. This activity will likely involve iteration to more closely target the desired nitrate treatment. A scaled performance design will be developed catch operation changes and adjustments needed to meet the project objectives.

ACTIVITY 2 ENRTF BUDGET: $46,000

Outcome	Completion Date
1. Develop cold weather technology	5-1-20
2. Detailed design, schedule, and bid package for contractors completed	8-1-20

3. Bidding and selection of contractor	9-1-20
4. Install cold weather features on bioreactor	10-1-20

First Update March 1, 2020

Second Update September 1, 2020

Bidding is behind schedule but planning to identify a contractor this winter to complete the installation.

Third Update March 1, 2021

Further delays in permitting and agency reviews. Contractor will be selected in April 2021.

Fourth Update September 1, 2021

Construction is in progress and completion of the bioreactor is currently scheduled for 12/15/21.

Fifth Update March 1, 2022

Construction of the bioreactor was completed and the unit will be brought online in March 2022.

Update as of June 30, 2022:

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

Sixth Update as of September 1, 2022:

Project construction was completed and the unit was brought online in March 2022.

Seventh Update as of March 1, 2023:

Continuing to monitor performance of the bioreactor.

Final Report as of June 30, 2023:

Spring monitoring and review of performance has been completed. The results of the monitoring conclude the greenhouse increases the influent water coming into the bioreactor as expected, however significant algae growth in the sediment pond and greenhouse occurred and have been a problem in the bioreactor.

ACTIVITY 3 Title: Operate and monitor bioreactor performance
Description: CFPW, UMN-BBE and the selected engineering consultant will work together to start the system in the spring of 2020. We anticipate multiple operational changes and adjustments will be necessary to create the optimal temperature and microbial response. CFPW and UMN-BBE will gather data from the site and regularly discuss the results with the entire team to successfully reduce nitrate entering Hall Lake.

ACTIVITY 3 ENRTF BUDGET: $30,000

Outcome	Completion Date
1. Run start up trials	9-15-20

2. Complete performance evaluation of cold weather features	10-15-20
3. Make operational adjustments	6-1-23
4. Collect performance data	6-1-23

First Update March 1, 2020

Second Update September 1, 2020

Start-up will be delayed until spring.

Third Update March 1, 2021

Start-up will be this summer with trial runs and potential fall data collection.

Fourth Update September 1, 2021

Construction is in progress and completion of the bioreactor is currently scheduled for 12/15/21. Monitoring will likely begin in the spring of 2022.

Fifth Update March 1, 2022

A monitoring plan was developed in conjunction with the University of Minnesota. Installation of solar powered data collection equipment will be installed in March. Start trials will begin and data will be collected via data collection equipment and bi-weekly sampling.

Update as of June 30, 2022:

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

Sixth Update as of September 1, 2022:

Grab sample collection began in mid-March with electronic data collection equipment installed and data collection began in late April after cold weather threats had passed. Several parameters were evaluated including, TSS, carbon, sulfate, nitrate, and volatile solids. Data collection continued through June with limited date in July due to lack of precipitation. Electronic data collection equipment was removed at the end of August.

Seventh Update as of March 1, 2023:

Electronic data collection equipment was reinstalled at the beginning of March and grab sample collection has resumed. The parameters of TSS, carbon, sulfate, nitrate, and volatile solids will be evaluated once results start coming from monitoring equipment and grab samples.

Final Report as of June 30, 2023: The bioreactor and greenhouse were operated from March though June, the flow through the bioreactor was optimized by flow tests and guidance provided by Barr Engineering to maximized nitrate treatment, and the results showed good results during lower flow conditions, however the dissolved oxygen (DO) levels in the bioreactor were effected by algae flowing through the bioreactor, and we feel the algae is affecting the denitrification process in the bioreactor.

ACTIVITY 4 Title: Conduct statistical analysis and complete final project report
Description: CFPW, UMN-BBE and the selected engineering consultant will work together to interpret data and create charts and tables of the system performance. UMN-BBE will prepare a draft report for review and then complete the final report.

ACTIVITY 4 ENRTF BUDGET: $4,000

Outcome	Completion Date
1. Gather and organize performance data and conduct statistical analysis	6-30-22
2. Prepare a draft report	6-30-22
3. Complete the final report	8-15-23

First Update March 1, 2020

Second Update September 1, 2020

Nothing to report.

Third Update March 1, 2021

Nothing to report.

Fourth Update September 1, 2021

Nothing to report.

Fifth Update March 1, 2022

The unit will be brought online this spring. Data loggers will be installed, and sampling will begin. U of MN will be collecting data and analyzing the results.

Update as of June 30, 2022:

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

Sixth Update as of September 1, 2022:

All the data that was collected since March is being compiled. Current preliminary results are less than anticipated with an average nitrate removal efficiency of 9%, however there are a couple isolated events more than 15% and one over 40%. Additional analysis will be completed to attempt to correlate the higher efficiencies to flow characteristics. Early theories are that the flow rates had a significant effect on the efficiency. Unfortunately, limited flows throughout the summer made it difficult to fine tune the rate control equipment on the bioreactor. The COVID extension will allow this project to collect data for an additional season to better analyze the system effectiveness.

Seventh Update as of March 1, 2023:

Data loggers have been installed for 2023 monitoring and sampling has begun, the U of M will be analyzing the data as results come in from this spring's monitoring.

Final Report as of June 30, 2023: The final report is completed and is being sent as a separate document.

IV. DISSEMINATION:

Description: The final report will be presented to the City of Fairmont residents, at the MN annual Water Resources Conference and a national conference TBD.

The Minnesota Environment and Natural Resources Trust Fund (ENRTF) will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENRTF Acknowledgement Guidelines.

First Update March 1, 2020

Second Update September 1, 2020

Nothing to report.

Third Update March 1, 2021

Nothing to report.

Fourth Update September 1, 2021

Nothing to report.

Fifth Update March 1, 2022

Preliminary project data and intended outcomes were presented at the MN Water Resources Conference in October 2021.

Update as of June 30, 2022:

Project extended to June 30, 2023 by LCCMR 6/30/22 as a result of M.L. 2022, Chp.94, Sec. 2, Subd. 19, legislative extension criteria being met.

Sixth Update as of September 1, 2022:

City staff and the consultant, Barr Engineering, are scheduled to present preliminary findings at the MN Water Resources conference in October 2022. Signage referencing the funding programs and project partners has been installed at the site for the past 18 months or so.

Seventh Update as of March 1, 2023:

Nothing to report.

Final Report as of June 30, 2023 :

City plans to present the results of the project at the interagency water quality data and monitoring, and information sharing meeting on August 23, 2023 hosted by the City of Fairmont, this group brings together the MDH, MPCA, DNR, BSWR, Martin SWCD and other partners to share information and work together on projects.

V. ADDITIONAL BUDGET INFORMATION:

A. Personnel and Capital Expenditures

Explanation of Capital Expenditures Greater Than $5,000: The materials and construction of the bioreactor with the cold weather technology is estimated to cost $58,000.

Explanation of Use of Classified Staff:

Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:

Enter Total Estimated Personnel Hours for entire duration of project: 670	Divide total personnel hours by 2,080 hours in 1 yr = TOTAL FTE: 0.32

Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:

Enter Total Estimated Contract Personnel Hours for entire duration of project: 1000	Divide total contract hours by 2,080 hours in 1 yr = TOTAL FTE: 0.48

VI. PROJECT PARTNERS:

A. Partners outside of project manager's organization receiving ENRTF funding: UMN-BBE: $55,000, A selected engineering consultant: $41,000

B. Partners outside of project manager's organization NOT receiving ENRTF funding: Martin County SWCD, MPCA, MDA and MDH.

VII. LONG-TERM- IMPLEMENTATION AND FUNDING: To fund long term implementation, the City of Fairmont is applying for EPA Clean Water Act Section 319 funding. Section 319 funding is provided to help implement approved nonpoint source management programs. The outcome of this funding request is not known to date.

VIII. REPORTING REQUIREMENTS:

- Project status update reports will be submitted March 1 and September 1 each year of the project
- A final report and associated products will be submitted between June 30 and August 15, 2023

IX. SEE ADDITIONAL WORK PLAN COMPONENTS:

A. Budget Spreadsheet
B. Visual Component or Map
C. Parcel List Spreadsheet
D. Acquisition, Easements, and Restoration Requirements
E. Research Addendum

Attachment A:
Environment and Natural Resources Trust Fund
M.L. 2019 Budget Spreadsheet - Final
Legal Citation: M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 04r
Project Manager: Tyler Cowing
Project Title: Spring Biological Nitrate Removal to Protect Drinking Water
Organization:City of Fairmont
Project Budget: $175,000
Project Length and Completion Date: 4-yrs; 6-30-23
Today's Date: August 14, 2023

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Budget	Amount Spent	Balance
BUDGET ITEM			
Personnel (Wages and Benefits)	$ 20,000	$ 19,455	$ 544.83
City staff, 0.32 FTE for 3 year, All personnel costs will be reimbursed at 100% of salary. City staff fringe benefits will be calculated at 20% for reimbursement.	$ 20,000		
Professional/Technical/Service Contracts			
Contract with the University of Minnesota - contract/services will be negotiated with the Uof M as a partner on this project	$ 55,000	$ 54,668	$ 331.51
Contract with a selected engineering consultant - RFPs will be requested for this work to select an engineering consultant.	$ 41,000	$ 41,000	$ -
Equipment/Tools/Supplies			
NA	$ -	$ -	$ -
Capital Expenditures Over $5,000			
These expenses will include the construction and installation costs for the cool weather bioreactor system and components. This contract will be awarded following a competitive bidding process.	$ 58,000	$ 58,000	$ -
Fee Title Acquisition			
NA	$ -	$ -	$ -
Easement Acquisition			
NA	$ -	$ -	$ -
Professional Services for Acquisition			
NA	$ -	$ -	$ -
Printing			
NA	$ -	$ -	$ -
Travel expenses in Minnesota			
Mileage reimbursement will be requested in accordance with the Commissioner's plan. Travel expenses will include travel of City staff to participate in design, construcion or post-construction meetings not held in the City of Fairmont.	$ 1,000	$ 39	$ 961.42
Other			
	$ -	$ -	$ -
COLUMN TOTAL	$ 175,000	$ 173,162.24	$ 1,837.76

OTHER FUNDS CONTRIBUTED TO THE PROJECT	Status (secured or pending)	Budget	Spent	Balance
Non-State:	None	$ -	$ -	$ -
State:	None	$ -	$ -	$ -
In kind: City of Fairmont	Secured	$ 10,000	$ 10,000	$ -

PAST AND CURRENT ENRTF APPROPRIATIONS	Amount legally obligated but not yet spent	Budget	Spent	Balance
Current appropriation:	None	$ -	$ -	$ -
Past appropriations:	None	$ -	$ -	$ -

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND

City of FAIRMONT

Protecting drinking water from nitrate
Innovative passive treatment