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PO Box 256  
Brodhead, WI 53520

December 16, 2025

City of Dodgeville  
Attention: Evan Chambers, Town & Country Engineering  
6264 Nesbitt Rd.  
Madison, WI 53719  
echambers@tcengineers.net

## Proposal for Water Quality Trading for Phosphorus Compliance

Dear City of Dodgeville Representatives,

Following the request for phosphorus credits through the WI Water Quality Trading Clearinghouse, the RES team is pleased to present the Dodgeville Treatment Facility (WWTF) and Town & Country (T&C) Engineering, with the following proposal to deliver 1000 phosphorus credits for the purpose of WPDES Permit Compliance. These credits will be used to address phosphorus effluent standards in their upcoming WPDES permit renewal which is to be issued following the expiration of the current WPDES permit, WI-0026913-08-0. This proposal describes the Water Quality Trading Project ("Project") that RES<sup>1</sup> would perform to deliver those credits.

## Project Need

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Dodgeville WWTF is contemplating Water Quality Trading for phosphorus compliance after being denied the Multi-Discharger Variance. For the upcoming permit cycle, Dodgeville WWTF staff and T & C Engineering have indicated an interest in purchasing 1000 phosphorus credits for a term of 20 years.

This Project has been appropriately sized based on this inquiry from Dodgeville WWTF staff and T & C Engineering, to not only achieve compliance in the upcoming permit term and will provide the 1000 water quality trading credits necessary to account for future population increases and/or any inflated effluent phosphorus discharge as a result of weather, onsite challenges, or any other outside factors.

Dodgeville WWTF's current WPDES permit is set to expire on December 31, 2025, and is working with T&C Engineering as a trusted advisor to make the changes necessary to meet upcoming phosphorus limits. RES understands that WI DNR expects Dodgeville WWTF, to complete a trade agreement by January 31, 2026, in order to meet the needs of the upcoming permit. This timing ensures the credits will be installed and achieve final certification prior to January 1, 2027.

## Comparison of RES Project to Compliance Alternatives

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While discussing the potential for a water quality trade for Dodgeville WWTF, it was determined that there is an interest in pursuing water quality trading credits if cost-competitive relative to other alternative compliance solutions. To date, RES has sought out WQT credits within the watershed, engaged with local landowners, worked with WI DNR around project design concepts, and more, all at **no** cost to the city.

With the RES Project offered, Dodgeville WWTF will be provided with a **20-year** solution that we not only believe will be more cost effective than any facility upgrades available, but it will also provide a locked-in compliance cost **below** the current Multi-Discharger Fee (current MDV rate is \$66.62 per pound of effluent phosphorus) when considering the price per credit.

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<sup>1</sup> For the purposes of qualitative proposal evaluation, RES, and its subsidiaries (including HGS, LLC) should be viewed as a single entity ("RES"). We are one company with a singular vision and proven track record of implementing the creative solutions sought by Dodgeville WWTF.



These credits will ensure that Dodgeville WWTF will meet the compliance requirements set forth by their WPDES permit and reduce the nutrient load within the watershed through an affordable solution for years to come.

Additionally, an enormous benefit to Dodgeville WWTF is that this Project is a fixed cost for phosphorus compliance for the next 20 years and will require **no future operating and maintenance costs**. Other alternatives such as filtration and plant upgrades not only bring a large capital cost for initial installation and start-up, but also have large costs associated with annual operation and maintenance. With this RES solution, the success of the WQT site will be monitored and maintained by RES for the entire 20-year term with **no** additional OM&R costs to Dodgeville WWTF.

RES will be held accountable for all regulatory requirements pertaining to the phosphorus reduction Project with oversight from WI Water Quality Trading Clearinghouse, which is approved by WI DNR to monitor the Project annually and confirm the Project meets planned phosphorus reductions. In addition, to provide further assurance to Dodgeville WWTF, the Project will be bonded for the entire 20-year period to hold RES accountable for Project success and ensure regulatory compliance for Dodgeville WWTF.

## RES Solution and Scope

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RES has identified, and entered into a contract on, a suitable property located in the Upper East Branch of the Pecatonica River watershed that will allow us to generate the 1000 phosphorus credits mentioned for a 20-year trading term. The Project will utilize barnyard BMPs to reduce phosphorus runoff from nearby agricultural practices. This project will reduce 1200+ pounds of phosphorus annually to produce 1000 credits at a 1.2:1 pounds per credit ratio.

RES will perform the scope of work associated with delivering 1000 phosphorus credits as summarized below:

- Prepare and submit a Credit Verification Plan (CVP) to WDNR and Wisconsin Clearinghouse for review and approval
- Prepare Design Plans, Obtain Permits, and Obtain an Approved Water Quality Trading Plan per WI DNR
- Place a Site Protection Instrument per WI DNR requirements on the property where work will occur. This instrument provides RES with the legal authority to maintain credits for the term of the Dodgeville WWTF contract.
- Perform work, including construction, installation, and annual maintenance of vegetation and other management practices to minimize barnyard runoff which will reduce 1,200+ pounds of phosphorus for the term of 20 years.
- Begin BMP installation no later than September 1, 2026. This date is subject to execution of a definitive agreement by January 31, 2026.
- Guarantee BMP certification by January 1, 2027. This date is subject to execution of a definitive agreement by January 31, 2026.
- Bond Project for the full 20-year life of the credits if requested by the City of Dodgeville
- Reporting required by WDNR to demonstrate that credits remain in place for the term of this contract (20 years) will be completed by RES and submitted to both the Wisconsin Water Quality Trading Clearinghouse and WI DNR annually.

## Co-Benefits

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Along with the ability to achieve regulatory compliance set forth by Wisconsin DNR, this Project will provide several co-benefits. This Project will provide substantial reductions of other nutrients outside of phosphorus in the Pecatonica River such as nitrates, total suspended solids, and more. Thus, benefiting the overall health of the stream, watershed, and all living communities within the local ecosystem. Ecological uplift will be achieved through the addition of several native plant species under the Project scope. These native plant species will benefit an abundance of local wildlife such as pollinators, while adding natural beauty to the local landscape.

## Project Pricing and Payment Terms

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The proposed cost for this turnkey solution is **\$1,332,000, which is a per credit price of \$66.60 locked in over the term of the contract**. This pricing considers the City of Dodgeville purchasing the Project and receiving 1000 water quality trading



credits applied to their WPDES permit annually for a 20-year term. Any additional Phosphorus Credits created by the Project in excess of 1000 credits can be transferred to Dodgeville for additional compliance protection and to account for future community growth at **no additional cost outside of any changes in WI WQT Clearinghouse fees based on the final size of the trade**. By advancing this Project, Dodgeville WWTF will secure a durable solution for phosphorus compliance with a fixed cost. This Project will allow Dodgeville WWTF to achieve compliance at a guaranteed rate for the next 20 years at a cost comparable to previous Multi-Discharger Variance enrollment without any future O&M costs.

This Purchase Price includes a one-time payment of \$32,000 due to the Wisconsin WQT Clearinghouse per the Flat Fee Structure for trades of 701-1000 credits.

**Table 1. Pricing Table**

Service	Total Cost
Water Quality Trading Project (1000 Phosphorus Credits) of 20-year life span	\$1,300,000
One-time Fee due to Clearinghouse	\$32,000
<b>Total Cost</b>	<b>\$1,332,000</b>

RES works with clients to negotiate payment milestones that align with the permit need as much as possible. In order to have credits available by January 1, 2027, RES proposes three performance milestones for consideration, as specified in Table 2 below:

**Table 2. Proposed Payment Milestones**

No.	Milestone	Percent of Contract	Estimated Payment Date
1a.	Contract Execution	5%	01/2026
1b.	Credit Transaction Fee due to WI WQT Clearinghouse	\$32,000 one-time payment	01/2026
2.	Final Approval of the Water Quality Trading Plan	35%	08/2026
3.	Final WQT Credit Certification sent to WI DNR <sup>1</sup>	60%	12/2026

<sup>1</sup>This final certification will happen after the project is fully installed and inspected by the Clearinghouse and confirmed to be in compliance with the design.

Financing through the Wisconsin Clean Water State Revolving Fund (CWSRF) or other green project financing programs may be possible if necessary to fund this Project. RES is able to support discussion with the CWSRF as needed. RES successfully supported the City of Independence, WI in securing a 20-year loan through the CWSRF for a water quality trading project. Using the CWSRF program can allow for loan payments to occur over time in a similar payment timeline as the MDV (annual payments rather than one-time capital expenditure) but provide greater long-term certainty and compliance for Dodgeville WWTF.

## Contract Structure and Process

RES has registered this Project through the Wisconsin Water Quality Trading Clearinghouse, which is authorized by the State of Wisconsin to facilitate water quality trading.

If the City agrees to move forward with this proposed transaction, the Wisconsin Clearinghouse will facilitate a definitive, three-party contract between the City, the Wisconsin Clearinghouse, and RES. A draft copy of this three-party contract is attached for your review.



## Next Steps

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This proposal and Purchase Price are valid until January 31, 2026. Please let me know if you have any questions or concerns and I would be happy to discuss how we can work together to develop a solution that meets your needs.

Thank you,

*Evan Deegan*

**Evan Deegan**

Client Solutions Manager

edeegan@res.us | 608.921.3826

Copy. Chris Murphy, Wisconsin Clearinghouse Nutrient Manager

Attached: Draft Three-Party agreement

# Appendix A

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## Concept Map





# Appendix B

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## RES Qualifications



## RES Overview

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As the nation's largest nature-based solutions company, Resource Environmental Solutions, LLC ("RES") supports the public and private sectors with durable, resilient infrastructure for communities through solutions for environmental mitigation, stormwater and water quality, and climate and flooding resilience. RES has a unique operating model for delivering ecological uplift, based on science-led design, full delivery, long-term stewardship, and guaranteed performance. From headwaters to coastal shores, RES designs, builds, and sustains sites that preserve the environmental balance, lifting impaired ecosystems into restored health and ultimately, self-sufficiency. These projects restore sensitive wetland, prairie, and species habitats as well as floodplains, streams, river valleys, and coastal and tidal systems. The result is nature-based systems that cleanse water, shelter wildlife, buffer storms, and sequester carbon from the atmosphere.

RES works closely and creatively with municipalities, developers, operators, landowners, and regulatory agencies to balance the needs of clients, communities, and resources. Our operating model is built around this approach. We employ teams covering the full project lifecycle, combining in-house analytics and technical expertise with implementational resources and capabilities.

We have helped clients successfully permit more than 3,900 projects, creating rich, high-functioning ecosystems as part of each permit. Our clients include local and state governments, large mining operators, energy production companies, energy transmission companies, Fortune 500 companies, departments of transportation, and other public-sector organizations. RES now employs 918 dedicated staff in 48 operational hubs across the country, including regional offices in Brodhead, Milwaukee, and Janesville.

RES delivers customized solutions tailored to our clients' needs. RES' internal resources include environmental, health, safety, and security (EHS&S) staff, land acquisition specialists, wildlife biologists, Rosgen IV certified stream designers, professional wetland scientists, engineers, hydrologists, QA/QC oversight teams, field ecologists, regulatory project managers, analysts, certified foresters, arborists, landscape architects, construction managers, superintendents, and field crew members as well as supporting project controls, government affairs, public relations, financial, legal and analytical staff.

RES' experience includes:

- Restoration, enhancement, and preservation of 77,736 acres of wetlands
- Restoration of over 686 miles of streams
- Rehabilitation, preservation, and/or management of over 20,400 acres of special-status species habitat
- Currently conducting monitoring and maintenance (including invasive species management) for over 88,429 acres of mitigation and restoration habitat
- Successful close-out of over 117 mitigation sites
- Permitting and development of over 210 permittee-responsible mitigation projects
- Design, permitting, management, and development of 197 wetland, stream, species, and conservation banks
- Delivery of 20,000 acres of custom, turnkey mitigation solutions
- Design and construction of over 356 stormwater management facilities
- Reductions of over 524 tons of water quality nutrients
- Planting of over 28,055,610 trees across all operating regions
- Development and operation of nurseries in six states including the largest coastal nursery in Louisiana
- Facilitation of compensatory mitigation and nutrient offsets for over 3,980 federal and state permits
- Long-term protection and conservation of over 87,202 acres
- Restoration of over 422 miles of shorelines and levees

We draw on our dedicated, in-house resources and deep experience across all phases of ecological restoration projects in defining our project approach, which seeks to balance performance and cost in the manner that is most beneficial to our clients.





# Project Examples

## WATER QUALITY TRADING PROJECTS

### Water Quality Trading Project

City of Independence | Independence, WI

RES restored up to 1,500 LF of stream to reduce phosphorus loading in the watershed as a nonpoint to point source water quality trading project with the City of Independence, for compliance with the wastewater treatment facility's Wisconsin Pollutant Discharge Elimination System (WPDES) permit. RES identified the parcel and stream as suitable for a trade for Independence based on its location in the watershed.

RES secured a 20-year easement with the landowner, vetted the project with the Wisconsin DNR for the Pilot Program under Clean Water Loan Fund, and modeled the expected phosphorus reduction, all before Independence committed to moving forward. RES and Independence entered into a 20-year contract for a fixed fee, including monitoring and maintenance for 20 years. RES will bond the project for construction and maintenance.

#### AT A GLANCE.

##### Client Contact

Chad Miemietz  
chadm@rjjurowskiconstruction.com

##### Contract Value

\$869,000

##### Project Size

1,500LF

##### Maintenance & Monitoring Period

20 years

##### Project Highlights

- ~1500 LF streambank stabilization
- Reduction of a minimum of 436 pounds of phosphorus
- 20-year contract term for 436 credits/year





## STREAMBANK STABILIZATION PROJECTS

### Primrose Stream Stabilization and Habitat Improvements

Village of Belleville | Dane County, WI

This project, located on two sections of the Primrose stream in Dane County, WI, encompassed almost a mile of streambank stabilization, habitat restoration, and nutrient reduction efforts.

The scope included streambank stabilization, remeandering, streambank soil lifts, and native planting/tree planting which involved the following activities and features, tree clearing and snagging, installation of a rock stream crossing, stabilization of eroding banks via grading, soil bioengineering practices and riprap toe placements, installation of miscellaneous rock and wood aquatic habitat structures, tree plantings, hauling and disposal of spoil materials, and pool pool-riffle sequences and log veins, as well as habitat features like fish cribs.

Before the project began, a cultural resources review uncovered an archeologically significant area within one of the sections designated for bank stabilization. This discovery led to a delay at the start of construction and resulted in a modification to the original work plan, removing any work in the area with artifacts to prevent disturbance. Though there were delays and changes in the scope, the project was completed on-budget.

#### AT A GLANCE.

##### Client Contact

MacKenzie Phillips, EIT  
MSA Professional Services, Inc.  
mphillips@msa-ps.com  
(608) 421-7147

##### Contract Value

\$1,054,410.48

##### Project Size

4,850 LF

##### Contract Period

Full Project: 04/2023-8/2024  
Construction: 08/2023-08/2024

##### Project Type

Streambank Stabilization

##### Project Highlights

- Worked around an archeological site







## Pike River Streambank and Wetland Restoration

Kenosha County Department of Public Works | Kenosha County, WI

The Pike River flows through Petrifying Springs Park, the most popular park in Kenosha County, Wisconsin. This 1.75-mile section of Pike River is broken into a three-phased project of streambank restoration and re-meander, wetland enhancement, fishing access and trail enhancements. This substantial stretch of a publicly owned river and a green infrastructure hub in the Pike River Watershed Plan is an important trout and salmon spawning tributary.

Site constraints included a low-profile dam removal in 2012 in the park and to reduce flooding during storm events, an archeological significant site with known native American and early settler remnants, steep bluff slopes with delicate natural seeps, all located within a heavily utilized public park.

RES provided permitting services that required working with Kenosha County, Wisconsin DNR and the Army Corps of Engineers. RES also provided construction oversight with the contractor.

RES worked with the Kenosha Parks Director to address water quality problems, eroding riverbanks and an impaired riparian zone, as well as invasive reed canary grass. The design for the restored banks included stable inclines and vegetation with native species including seeding, plugs, live stakes, shrubs and trees.

A portion of the river was re-aligned to decrease water velocity and collect sediment. The new alignment created a meander in the flow of the river to help restore the wetlands and a wetland pool system created a more diverse wildlife habitats including wet prairies, floodplain forest and mesic woodland.

In-stream structures, including rock riffles, j-hooks, log vanes, boulder clusters and wing deflectors, helped to re-direct flow away from sensitive slopes and increase aquatic biodiversity. Riverbank treatments included rock armoring, seeded slopes and toe-wood revetments.

RES is working closely with the Kenosha Park District to design a further two phases of the Pike River through Petrifying Springs Park to continue the overall goal to enhance flora and fauna diversity on land and build fish spawning habitat along the shoreline. Funding was partially provided by the Great Lakes Restoration Initiative through the U.S. Environmental Protection Agency and the Fund for Lake Michigan.

### AT A GLANCE.

#### Client Contact

Matthew Collins, Director of Parks  
262.857.1850  
matthew.collins@kenoshacounty.org

#### Project Size

10.5 Acres

#### Timeline

Winter 2018 - Summer 2019

#### Project Highlights

- Design for restored banks included: stable inclines, native species vegetation by seeding, plugs, live stakes, shrubs, and trees
- In-stream structures included: rock riffles, j-hooks, log vanes, boulder clusters, and wing deflectors



*After Construction*



## Muirhead Springs Construction Phase 2

Kane County Forest Preserve District | Kane County, Fox River Watershed, IL

RES Teamed with Kane County Forest preserve to implement the Phase 2 Muirhead Springs Wetland Mitigation Bank. The work consisted of creating a floodplain and some sinuosity to the ditch and installing 6 flow control structures that runs through Muirhead Springs Forest Preserve. Our teams worked to create this wide floodplain utilizing heavy equipment to excavate the floodplain and move it to the stockpile location. Around 15,000 ln/ft of drain tile was disabled to restore the natural hydrology to the former agricultural fields and a solid line was installed to maintain the drainage of others. All areas disturbed along the channel were seeded with a diverse native seed mix and covered with erosion control blanket. The stockpile was also restored for seeding of a diverse native prairie seed mix. All areas disturbed were completed with a final application of straw mulch after the installation of the native seeds.

Project was completed on schedule with no delays or issues.



### AT A GLANCE.

#### Client Contact

Jennifer Rooks-Lopez, Chief of Planning & Operations  
630-444-3095

#### Contract Value

\$2,361,794

#### Project Size

217 acres

#### Contract Period

August 2023– December 2023

#### Project Type

Wetland Mitigation Bank

#### Project Highlights

- Streambank grading and restoration to create 6,041 ln/ft of streambank mitigation.
- Over 15,000 ln/ft of drain tile removal
- 120,000 yds of earth moving to create new streambanks and floodplain.
- Seed 217 acres with native seed mix
- Install 10 acres of erosion blanket





## PHOSPHORUS REDUCTION PROJECTS

# Stream & Wetland Restoration in the North Raccoon Watershed

## North Raccoon Watershed | Des Moines, IA

This project is located immediately upstream of the North Raccoon River, one of the United States' ten most endangered rivers according to American Rivers. The North Raccoon River is a tributary of the Des Moines River in central Iowa, and eventually flows into the Mississippi River. Much of the watershed is under intensive agricultural cultivation and livestock farming, with significant drain tiling throughout. The Raccoon River provides drinking water for the Des Moines metropolitan area but has been documented as impaired by Iowa Department of Natural Resources (IA DNR) for several years due to high levels of nitrates and indicator bacteria, meaning E. coli bacteria or similar, are present. On one occasion in 2014, nitrate levels were so high that the water was deemed unsafe for pregnant women and infants. The project is located in Dallas County, Iowa, which also experiences abnormally dry-to-moderate drought conditions.

RES plans to restore an approximately 8-acre wetland immediately upstream of the North Raccoon River and to re-meander an old agricultural ditch that runs through the wetland into a natural stream channel. RES plans to use a small earthen berm which will capture a large upstream tributary area and achieve 43.6M gallons of groundwater replenishment. The project will slow water from the drainage ditch in

the restored wetland area to enhance infiltration and provide treatment of all tributary flow.

### AT A GLANCE.

#### Volumetric Benefit

43.6 MGy, leading to 436.0 MG over 10-year term

#### Total Project Cost

\$1.5M

#### Unit Pricing (\$/MGY)

\$3,440/ MGY

#### Methodology

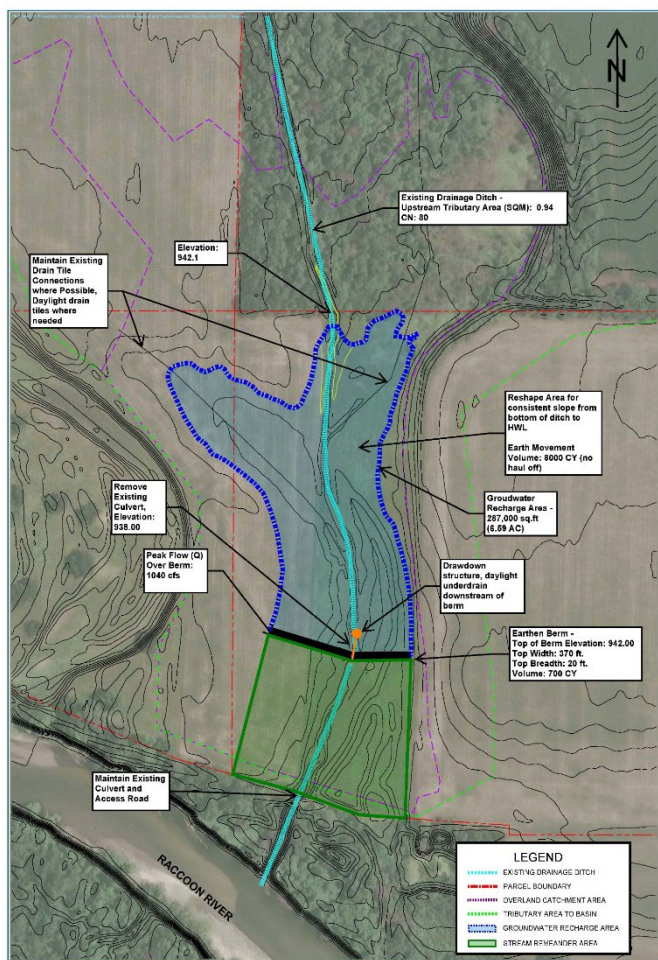
Recharge Method

#### Project Type

Wetland and Stream Restoration

#### Project Highlights

- ~8 acres of wetland
- 400LF of stream re-meander
- ~7 acres of native prairie restoration



Conceptual Plan  
WJR Farms  
Dallas County, IA

DESIGNED BY: RES  
PROJECT NO: 2020-001  
DATE: 10/1/2020  
SCALE: AS SHOWN  
DRAWN BY: RES  
CHECKED BY: RES  
APPROVED BY: RES



In addition to the primary goal of infiltration, the wetland design will be optimized to reduce nitrogen, which causes impairment to drinking water sources and harmful algal blooms. The treatment will secondarily enhance removal of phosphorus and total suspended solids, both of which can impair aquatic habitat locally and downstream in the Gulf Hypoxic Zone. Lastly, treatment of wetlands such as this can also reduce the levels of E. coli in treated water.

The project is in development at the request of another large corporate client, but **it is expected to have excess volumetric capacity that could be funded by Google as a joint partner.** RES will only implement as much of the project as funded by corporate partners, so partnerships between different entities are critical to maximizing the ecological benefit and groundwater replenishment potential of this site. **This project is currently available for contracting and allocation.**



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