

SPRINGFIELD CHARTER TOWNSHIP



SEAN R. MILLER, CLERK

248-846-6510 | 248-846-6538 FAX

Springfield Township
Scope of Work (SOW)
Prepared for: Dr. Monfils
Prepared by: Ric Davis

Subject: Ecological Considerations of Aquifer Changes on Prairie Fens – Supporting Context for Environmental Review

Guiding Principle

Springfield Township will commission an independent, science-based review of the environmental studies submitted by Burroughs Mining, as part of their gravel mine Special Land Use request.

This review is a proactive measure to ensure decisions are informed by verified facts, expert analysis, and community interests, not assumptions or outside pressure. The purpose is not to oppose or endorse the application prematurely, but to create the conditions for sound, lawful, and community-conscious governance

Purpose

Springfield Township is requesting a science-based, professionally prepared report from you to outline how changes in aquifer systems including shifts in groundwater levels, flow, connectivity, and temperature may affect prairie fen ecosystems within the Township.

This report will serve as supporting scientific context for environmental consultants currently tasked with reviewing gravel mining applications submitted by the Levy Company and the Burroughs Mining Company. The intent is not to make conclusions about the potential impact of those projects, but rather to provide factual ecological background that may help inform the formal review process already underway.

You should understand that the Township places strong emphasis on ensuring this process remains objective, neutral, and grounded entirely in scientific fact. This document will help ensure that our environmental experts have access to up-to-date information about prairie fens as part of their broader evaluation of environmental risks and responsibilities.

Role and Expectations

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You are being asked to provide his expertise as a prairie fen ecologist to explain the structure and function of these sensitive wetland systems, with a focus on how they interact with surrounding aquifer systems. He is not being asked to determine or speculate on whether gravel mining will cause harm to these areas. That responsibility lies entirely with the Township's environmental experts.

The tone and content of this report should be science-based and free of advocacy. It should provide insight, not opinion, and must avoid any conclusions related to project approval or denial. The purpose is to give environmental reviewers a clear understanding of the importance of fen systems and what must be considered to protect them.

Scope of Work

The final report should include the following sections:

1. **Overview of Prairie Fens**
A description of prairie fens, including how they are formed, their dependence on groundwater-fed systems, and their ecological significance in the region.
2. **Aquifer Dependency**
A detailed explanation of how fen health depends on stable and clean groundwater input. This should include discussion of aquifer connectivity, recharge dynamics, water level sensitivity, flow patterns, and the influence of water temperature on ecological balance.
3. **Species at Risk**
A summary of rare and sensitive species that rely on prairie fens for habitat, including the Poweshiek Skipperling, Blanding's turtle, Eastern Massasauga rattlesnake, and native mussels and fish. This section should include how these species are linked to specific hydrologic or ecological conditions within the fen.
4. **Conditions for a Healthy Fen**
A summary of the specific ecological and hydrological conditions that are necessary to maintain a stable and functioning prairie fen. This should include measurable indicators or thresholds for environmental professionals to monitor.
5. **Scientific Sources and Supporting Data**
The report should be supported by peer-reviewed studies, data from state or federal agencies, and other scientifically credible sources. All references should be clearly cited using a consistent format.

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6. Considerations for Environmental Review

A practical section listing science-based concerns, observations, or questions that the Township's environmental consultants may wish to consider during their formal review. This is not meant to draw conclusions, but to provide a useful framework for asking the right questions.

Deliverables

One written report, between five and ten pages in length

Delivered in both PDF and Word format

A one-to-two-page executive summary may be included upon request

The final report will be included in the documentation reviewed by the Township's environmental consultants as supporting information within their official scope of work

All content must be objective, science-based, and free of advocacy or bias

Deadline: May 1, 2026

Presentation of Findings

You should be prepared to present the report in a public setting if requested, such as a Township Board or Planning Commission meeting. This presentation should be limited to explaining the scientific information included in the report and should not include any conclusions about whether the mining projects should be approved or denied. The presentation is meant to help the Township's environmental consultants and the public understand the ecological context and importance of prairie fen systems.

Supporting Information

Along with the final report, Dr. Monfils you are being asked to submit the following:

A current curriculum vitae or résumé outlining relevant academic background and field experience

A short narrative summarizing his experience working with prairie fen ecosystems, including any research, monitoring, or restoration work

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Any technical data or documentation that supports the report, including information about:

- Conditions required to maintain a healthy prairie fen
- Ecological thresholds that must be maintained to protect these systems
- Environmental disruptions that should be avoided
- The link between groundwater health and the protection of rare and endangered species
- Best practices for protecting water systems and sustaining sensitive natural habitats over time

This supporting material will assist the Township's environmental experts in evaluating the science, understanding the risks, and guiding responsible decision-making.

Budget and Timeline

We will need you to submit a proposed budget that includes time for research, writing, document preparation, and public presentation if required

An estimated completion timeline should be provided

A general description of the anticipated level of effort should be included

Final compensation will be confirmed following review and approval of the proposal. Payment will be issued upon submission of the final deliverables and invoice.

Board Review and Authorization

Before any work begins, this Scope of Work and the associated budget proposal must be submitted to the Springfield Township Board for review and approval. This ensures alignment with the Board's directive for a neutral, fact-based, and transparent process. No work should proceed until formal approval has been granted by the Board.

Point of Contact

Ric Davis

Supervisor, Springfield Charter Township

Summary of Process: Supporting a Fair, Defensible Environmental Review

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Prepared by: Ric Davis

Date: January 16, 2026

Springfield Township is committed to ensuring a transparent and scientifically credible review process regarding the gravel mining applications submitted by the Levy Company and the Burroughs Mining Company.

As part of that effort, the Township is requesting a supporting scientific report from Dr. Monfils, who has relevant expertise in prairie fen ecology. His report will help explain how changes in aquifer systems may impact fen ecosystems and the rare species that depend on them. This document will serve as a factual reference only and is not intended to replace or pre-judge the findings of the Township's environmental consultants.

This report will not express support or opposition to the proposed mining operations. It will not evaluate whether impacts will occur. Instead, it will explain what ecological conditions must be maintained to support a healthy fen and what disruptions may put those systems at risk.

To maintain a neutral and defensible process, the Township has established the following expectations:

The report must be based entirely on science and free of advocacy

All findings must be supported by credible sources, with clear citations

Any public presentation must remain factual and avoid offering conclusions about project approval

This approach reflects the Township's commitment to making responsible, evidence-based decisions that protect our community's natural resources while honoring a fair and transparent review process.

By relying on professional input, verifiable data, and clear role boundaries, Springfield Township is reinforcing its dedication to thoughtful land use, environmental stewardship, and public accountability.