

Janzen, Heather

Subject: FW: Email - Request to Speak - Meghan Mickelson - Northeast Swale and Small Swale Boundary Endorsement - CK 4205-40
Attachments: Swale Watchers Vision- Problems and Solutions.pdf

From: Web NoReply <web-noreply@Saskatoon.ca>

Sent: Friday, February 17, 2023 8:15 PM

To: City Council <City.Council@Saskatoon.ca>

Subject: Email - Request to Speak - Meghan Mickelson - Northeast Swale and Small Swale Boundary Endorsement - CK 4205-40

--- Replies to this email will go to swalewatchers@gmail.com ---

Submitted on Friday, February 17, 2023 - 20:07

Submitted by user: [REDACTED]

Submitted values are:

I have read and understand the above statements.: Yes

Date: Friday, February 17, 2023

To: His Worship the Mayor and Members of City Council

First Name: Meghan

Last Name: Mickelson

Email: swalewatchers@gmail.com

Address: [REDACTED] 2nd St E

City: Saskatoon

Province: Saskatchewan

Postal Code: [REDACTED]

Name of the organization or agency you are representing (if applicable): Swale Watchers

What do you wish to do ?: Request to Speak

If speaking will you be attending in person or remotely: In person

What meeting do you wish to speak/submit comments ? (if known):: Regular Business Meeting of City Council

What agenda item do you wish to comment on ?: 9.3.1

Comments:

Hi there,

I wish to speak on behalf of the Swale Watchers, during my presentation if page 4 (the map) of the attached PDF could be displayed that would be appreciated.

Thank you!

Attachments:

- [Swale Watchers Vision- Problems and Solutions.pdf](#) 583.5 KB

Will you be submitting a video to be vetted prior to council meeting?: No

Swale Watchers' Vision for the Swales: Problems and Solutions

February 17, 2023

Dear Councillors:

We are grateful for the thoughtful consideration you are giving to the question of protective boundaries for the Northeast and Small Swales. We understand that these are not simple decisions. As Meewasin's Mike Velonas noted at the recent meeting of SPC Planning, Development and Community Services:

It is really challenging and complicated to try to integrate natural systems within our urban fabric in a way that allows public access, allows development to happen and doesn't compromise the ecological integrity of the places we are trying to protect. If we don't do a good job of that, we might as well not [bother.] There is something special about the Swale. If we don't retain that special thing, this exercise is all for naught, in many ways.

We all have too much invested in this work to let it fail. Unfortunately, there are significant problems with all the recommendations presented to you by city administration, even with the best choice, Option 3. Fortunately, these deficiencies can be overcome.

Problem: Inadequate Protection for the Sharp-Tailed Grouse Dancing Grounds

The Swales are home to more than 200 species of plants, 170 kinds of birds and numerous amphibians, reptiles and mammals, including species at risk such as American badgers, northern shrikes (butcherbirds) and northern leopard frogs. One species of special importance is the sharp-tailed grouse, a bird of ecological, cultural and spiritual significance. The grouse dancing ground, or lek, in the northwest corner of the Northeast Swale is one of the largest in the province and the only one we know of in an urban setting. These birds are a big part of the "special thing" we need to protect.

Unfortunately, Option 3 fails to provide optimal protection for the lek. Provincial guidelines recommend a setback of 400-meters, measured from the outer margins of dance area, which moves slightly from year to year. Option 3 does not achieve this standard. Since we can't ask the grouse how much peace and privacy they actually need, it would be wise to follow Alberta's more generous standards and provide a 500-meter setback. Without making adequate provisions for these birds, they will vanish from our city, and our choices will have led to this loss. As pathfinding ecologist Aldo Leopold pointed out years ago, "The first principle of intelligent tinkering is to keep all the pieces." We need to keep the sharp-tailed grouse.

Recommendations:

- 1. Protect the 40-acre triangle of habitat in the northwest corner of the Northeast Swale to secure the future of the sharp-tailed grouse. See map at the end of this document.**

2. Provide a protective buffer around the northwest corner of the Northeast Swale, further safeguarding the lek. *See map.*

Problem: Inadequate buffers

Option 3 identifies high-quality habitats that are a top priority for conservation. To ensure that the integrity of these areas is maintained, they must be surrounded by a protective interface of buffers. Without this precaution, the special characteristics of the Swales will be degraded by street noise, light pollution, contaminated run-off and invasive species. They will also be impacted by "edge effects" that change the composition of species and the character of the ecosystem. (This is, in part, what has happened to the Saskatoon Natural Grassland, which has proven to be too small for effective management.) "Soft" development, such as trails and naturalized parks, can be located within buffers and wildlife corridors.

The optimal width of protective buffers is open to discussion. As Renny Grilz of Meewasin pointed out, there is no one-size-fits-all guidance—but that does not mean we are completely in the dark. For instance, the USDA has developed a comprehensive manual that establishes a range of best practices for buffers and corridors. This guidance comes with the proviso that buffers in landscapes that are dominated by humans or that need to function for decades or centuries should be wider. The full resource is available here:

https://www.fs.usda.gov/nac/buffers/guidelines/2_biodiversity/introduction.html

The Small Swale is a special case with a simple solution. Here, the dimensions of the buffer are dictated by the local hydrology and topography. The Natural Area Screening report notes:

during the late summer/fall when precipitation is lower, or during dry periods, there is potential for wetlands in the Small Swale to become isolated, fully disconnected, and potentially completely dry if natural runoff is intercepted or directed out of the Swale

The City's valuation of the services provided by the Small Swale, including carbon sequestration and water purification, established a value of \$731,200 per year. Healthy grasslands and wetlands provide these services for free, thereby potentially saving municipalities billions of dollars in infrastructure costs. The Natural Capital Valuation Report provides this example:

Recently, instead of investing \$8 billion to construct a new water filtration plant, New York City paid \$1.8 billion to private landowners to apply sustainable farming practices and protect 80,000 acres of watersheds sourcing their drinking water. With well vegetated fields and riparian areas within the watersheds to uptake nutrients and decrease phosphate and sediment runoff, the water supply was protected for the long term and the City did not have to build the new treatment plant or [expend] \$300 million in annual operating cost.

<https://pub-saskatoon.escribemeetings.com/filestream.ashx?DocumentId=113512>

Failing to protect the hydrology of the Small Swale would be an expensive mistake. Fortunately, the protected area can be buffered by observing the local drainage.

Recommendations:

3. Follow the local topography to design buffers that protect the natural hydrology of the Small Swale.

4. Seek out expertise to establish best practices for designing buffers to protect grassland habitats.

5. Revise the Northeast Swale Development Guidelines to update the stipulations regarding buffers.

Problem: Fragmentation and Loss of Connectivity

A potentially disastrous feature of all three options presented by city administration is the lack of connectivity between the two Swales and between the Northeast Swale and the river. On these maps, the only provision for animal movement is indicated by two dotted lines crossing the subdivision. When wildlife biologist Dr. Ryan Brook of the University of Saskatchewan reviewed this feature, he identified these linear passageways as "pinch points." In other words, rather than serving as corridors, these narrow passageways would function as barriers to animal movement.

Failure to provide for viable habitat connections between the fragmented Swales will create isolated populations of some species, alienating animals from the landscape-scale resources they need to thrive and restricting gene flow through reduced breeding opportunities. The Swale Watchers' proposal has addressed this challenge by identifying suitable wildlife corridors to the north and south of the subdivision. As noted earlier, the width of these linkages is open to discussion, but their importance is not. Providing these connections is absolutely crucial to maintaining the health of the Swales and the organisms who live there.

It is worth noting that wherever the connecting passageways are located (whether around the subdivision or through it), they will have to be naturalized. The expertise needed to restore habitats exists locally, within Meewasin and other organisations. Outside funding to support this work is likely to be available. Restoring degraded habitats is a gift to the future and not something to be afraid of.

Recommendations:

6. Identify "biodiversity targets" – species with different needs – to guide the development of wildlife corridors and other features to ensure movement through the sector.

7. Explore outside funding opportunities to support restoration of degraded habitats to function as wildlife corridors.

The Swale Watchers' proposal has been endorsed by the Canadian Parks and Wilderness Society Saskatchewan, Friends of the Saskatoon Afforestation Areas, Living Sky Wildlife

Rehabilitation, Nature Saskatchewan, the Saskatoon Nature Society, the Saskatchewan Environmental Society, SOS Trees, Walking Saskatoon and Wild about Saskatoon. All these organizations are keen to help the City achieve its goal of protecting and sustaining the Swales. Having contributed to reaching this point, Swale Watchers and our colleagues want an opportunity to contribute to future discussions. This brings us to our final request:

Recommendation:

8. Create a forum for meaningful community engagement in the development of the Concept Plan for UH3.

We hope these comments will be helpful in your deliberations on February 22.

Meghan Mickelson and Candace Savage, co-chairs
 Swale Watchers
www.swalewatchers.org

