

Topic: Bylaw Restricting Use of Fertilizers by Waterbodies in Parkland County (Bylaw 2024-16)

**Introduction:**

Council directed Administration to present a Bylaw restricting the use of fertilizers by Waterbodies in Parkland County.

**Facts (Background Information):**

Parkland County Council approved a Wabamun Lake Ad Hoc Committee in 2016 for the purposes of exploring and providing recommendations and advice on several issues surrounding Wabamun Lake including potential development of a Nutrient Loading Bylaw.

The Committee recommended that all municipalities surrounding Wabamun Lake develop and implement a bylaw to reduce the negative impacts on the Lake and its health.

Council supported this recommendation however work on this has not occurred yet. It was set aside to be done later to allow Administration to focus on development of the new Boat Launch.

Administration presented a report at the September 5, 2023, Governance and Priorities Committee meeting to revisit and reconfirm direction for development of the Bylaw.

Direction was given to move forward with a Bylaw restricting the use of fertilizers alongside all waterbodies in Parkland County not just Wabamun Lake.

The reason for doing this is to protect the health of our lakes by reducing the use of chemicals around waterbodies that increase the level of nutrients in the water. This results in increased growth of aquatic plants/vegetation at faster rates which depletes the lake of oxygen resulting in algae blooms, dead zones and fish kills.

A draft Bylaw and Engagement Plan was presented at the May 21, 2024 Governance and Priorities Committee meeting for information and feedback.

The Draft Bylaw 2024-16 Restricting the Use of Fertilizer by Waterbodies was presented and received first reading at the June 11, 2024 Council Meeting. Council scheduled a public hearing to be held on September 24, 2024 at 9:30a.m. to hear public comment on Bylaw 2024-16.

## **Analysis:**

Purpose of the Bylaw is to restrict the use of fertilizers.

The Bylaw will be known as the Restricted use of Fertilizers by Waterbodies Bylaw. Fertilizers are defined as any substances that contain nitrogen, phosphorus, potassium, or other chemicals that are used as plant nutrients or to aid in plants growth. The definition of waterbody being any location where standing surface water is present, permanent, and naturally occurring including but not limited to lakes and wetlands; as well as rivers and streams which was added through an amendment made at first reading on June 11, 2024.

The restriction is proposed to apply to any subdivision with public access to a waterbody. There are some municipalities with bylaws of this nature that restrict use within 100m or 250m of the shoreline, and others like Summer villages around Wabamun Lake or Spring Lake that restrict use in the entire Village. We are proposing that any subdivision adjacent to a waterbody be restricted in its entirety. The rationale for this approach is that all developed subdivisions typically drain towards waterbodies. Fertilizers and the chemical contained therein all have the opportunity through surface drainage/runoff, as well as through seepage into the soil into groundwater to reach the waterbody. A listing of waterbodies and the subdivisions adjacent to them are listed in the appendix of the proposed bylaw.

Natural compost resulting from the decomposition of food scraps and yard waste would be allowed.

The proposed Bylaw would not restrict the use of fertilizer for agricultural lands, golf courses, greenhouses, market gardens, tree nurseries or those involved in turf and sod production.

Enforcement and penalty provisions are included in the proposed Bylaw. Enforcement would be done on a complaint basis. Focus will be on education and awareness of the restrictions and rationale behind it as enforcement will be a challenge with sampling and lab testing required. Summer Villages around Wabamun Lake do not have enforcement or penalty provisions in their bylaws; the bylaws are used more as an education and awareness tool. Municipalities that have enforcement and penalty provisions in place have not utilized them yet. Penalties are proposed and once Bylaw is approved penalties would be included in the Fees and Charges Bylaw.

As per Council Policy C-AD51 Public Engagement is required. A Public Engagement Plan was drafted and reviewed by Council and focused on informing and consulting.

The activities undertaken were to educate and inform the residents of this direction and to advise them of the process for Bylaw approval which includes the opportunity to address council of any concerns, questions or support, as well as provide comment and feedback.

Administration directly targeted the subdivisions (185 Subdivisions, over 7100 Properties) adjacent to waterbodies with a direct mail out; other means were also used via social and print media to inform those impacted as well as the general community of the proposed bylaw.

An opportunity for residents to provide comment on line, as well as to participate in the Public Hearing to share their thoughts on the proposed bylaw was conveyed. The webpage saw just over 400 visits with 40 taking the time to provide comments. In addition several e-mails and phone calls with feedback was received.

In terms of feedback received:

- There is a mixture of support and non support for the Bylaw.
- Concerns and questions about our ability to enforce this Bylaw.
- Comments about using awareness and education and moderation as opposed to Bylaw that can't be enforced.
- Concerns about the area to be restricted
- Concerns about restrictions on residential but not commercial and agricultural operations
- Concerns about impact on gardens and food provision
- Concerns about complete ban, organic fertilizers should be considered
- Concerns about impact on property appearance and values

### Enforcement

As mentioned previously Enforcement of this Bylaw will be extremely challenging and problematic. Similar Bylaws put in place by Summer Villages do not contain enforcement provisions at all; those that do have them have not utilized them. The burden of proof to lay a charge will be difficult as are questions from residents around the practicality of enforcing the Bylaw.

Points for Councils consideration may be to remove the Enforcement provisions similar to the Summer Villages or not pursue the Bylaw and focus on education and awareness in its place.

### Area to be Restricted

This is a high-level approach to addressing this issue. We know that a number of our waterbodies are being impacted with things like Blue Green Algae blooms which are beginning to occur on a more regular basis. We also know that one of the causes comes from excess nutrients making their way into the waterbodies and a significant source of those nutrients comes from fertilizers. As mentioned previously properties typically drain overland towards waterbodies, and nutrients/chemicals can get in the soil and make their way into the groundwater which also flows towards waterbodies. The approach we have taken with the Bylaw is by restricting the use of fertilizer in the entire subdivision to reduce the impacts.

We do not have scientific studies that tells us what the impact of a resident using fertilizer on their property 250m away from the waterbody is vs one that is immediately adjacent to the waterbody. That impact depends on different variables like the distance, slope, soil composition and vegetation. There is an impact, but common sense tells us that the use closer to the waterbody is more impactful than the one further way – but there can still be an impact.

The challenge is finding a balanced, realistic approach that we hope will have an impact.

This Bylaw does not apply to pesticides and herbicides as those are regulated by the Province. The province does not allow use of those substances within 30m of a waterbody.

Point for Councils consideration would be to restrict fertilizer on lands within 30m of a waterbody.

### Residential vs Commercial/Agriculture Use

Commercial and Agriculture Producers have been excluded in the proposed Bylaw due to potential negative impacts on yields, productivity and profitability.

The general feeling is there is more impact from fertilizer use in commercial and agricultural operations on the waterbodies than from residential use because of the higher volumes of product used.

Point for Council to consider is including commercial and agriculture producers in the restrictions.

### Gardens/Flowers

Concerns around the impacts this could have on those growing food for their own consumption and impacts on pollinators such as bees with fewer healthy flowers.

Questions around the use of organic fertilizers as they would be more effective than compost but less harmful than synthetic fertilizers.

Many organic fertilizers can still contain or result in release of nitrogen which is one of the nutrients causing issues in waterbodies.

Points for Council's consideration may be to:

- Allow use of fertilizer in contained plant boxes, gardens where there is no run off
- Allow use of fertilizer for gardens, flowers and trees
- Allow use of organic fertilizers

### Property Values

There are concerns that yards/landscaping will suffer and deteriorate resulting in poor appearance in communities and decreased property values.

Poor landscaping and appearance can impact a property's value and to a lesser extent the assessed value.

There are programs like ALUS (Alternative Land Use Services) and Green Acreages that can support both Commercial/Agriculture producers, as well as Acreage owners with sustainable approaches to protecting the environment.

Points for Councils consideration may be to allow use of organic fertilizers and to promote or enhance the ALUS and Green Acreages programs.

## Alternatives:

Administration has provided a few options for Councils consideration that may help address some of the concerns raised by residents. Its by no means an exhaustive list but addresses some of the priority areas identified by residents.

### Defeat Bylaw and focus on Education and Awareness

- Enforcement is not practical with this Bylaw; difficult to have a Bylaw in place that cannot be enforced.
- Education and Awareness would focus on things like:
  - o Advice on times to fertilize, times of year, not before rain etc.
  - o Types of fertilizer (ex. low phosphorus)
  - o Use in small doses
  - o Use compost
  - o Maintain natural buffers around property, especially between property and water bodies
  - o Encourage use of ALUS and Green Acreages

### Reduce area of restriction

- Utilize same set back of 30 m as Province for pesticides/herbicides. This means those lands; not necessarily entire parcel would be restricted from use of fertilizer.

### Include Commercial/Agriculture Operations in restriction if area of restriction reduced to 30m

- We did not inform or consult with these operations so would recommend leaving public hearing open and reconvening in January to allow time for us to get information out and comment back for Councils consideration.

## Conclusion/Summary:

The challenge we have is finding a realistic, balanced approach that will be accepted, followed and complied with to protect our waterbodies.

Administrations preference is not to put a Bylaw in place that we will not be able to properly enforce and focus on education and awareness in its place.

If the Bylaw is still Councils wish, then consideration should be given to reducing the area restricted to lands within 30m of a waterbody; as well as consideration to including commercial and agriculture producers as well.

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