

ADMINISTRATIVE REPORT

TO: Shane Bourke, City Manager	DATE: February 20, 2024
FROM: Brian Glavin, Chief Operating Officer	MEETING: Operational Services Committee
REPORT WRITER: Kase DeVries, M.Sc., Director of Environment & Parks	
SUBJECT: Aesthetically Enhanced Naturalization	

RECOMMENDATIONS

That the Operational Services Committee receive this report for information..

PREVIOUS COUNCIL / COMMITTEE DIRECTIONS

At the October 3, 2022, City Council meeting, the following motion was passed:

“Council direct Administration to report back to the appropriate Standing Committee outlining a potential pilot program for naturalization along arterial roads, including a public engagement program.”

At the February 21, 2023 City Council meeting, the following motion was passed:

“Council direct Administration to proceed with the Boulevard Naturalization Pilot Program.”

At the September 5, 2023 City Council meeting, the following motion was passed:

“Committee direct Administration to fall mow naturalized areas, in the pilot areas, adjacent to private properties.”

At the October 16, 2023 City Council meeting, the following motions were passed:

“Council direct Administration to:

1. Adjust the Boulevard Naturalization Pilot Program to return areas adjacent to residential private property to pre-pilot mowing rotations; and,
2. Adjust the Boulevard Naturalization Pilot Program to return the south portion of the 84 Avenue pilot area to pre-pilot mowing rotations to avoid future tree conflicts with existing overhead power and snow storage capacity.”

“Council direct Administration to adjust city-wide locations of naturalization outside of the boulevard Naturalization Pilot Program to accommodate FireSmart principles where possible as presented in Attachment 4.”

“Council amend the motion to add ‘and remove from the Naturalization program areas of the Mission Heights Ravine where it is safe to mow’.”

“Council direct Administration to bring back options and budget implications, in Q1 of 2024, to adapt the two remaining years of the Boulevard Pilot Program to include aesthetically enhanced naturalization where desirable volunteer species do not appear.”

BACKGROUND

The Boulevard Naturalization Pilot Program (the “Pilot”) was introduced to assess the aesthetic impact of naturalizing boulevards. The pilot was divided into three distinct areas:

1. 116th Avenue – North of Crystal Heights, near the entrance to Copperwood
2. 84th Avenue – South of Canfor and north of Mission Heights
3. Resources Road – Along the Berm and Pathway Area

Launching in the spring of 2023, the pilot was designed to run for three growing seasons, concluding in the fall of 2025. A multi-year approach ensures the areas have sufficient time to establish and allows the Parks Department to address any issues related to regulated noxious weeds that may emerge due to the cessation of mowing.

Following an update report to Committee in the fall of 2023, Council directed Administration to bring back options to adapt the remaining two years of the Pilot to include aesthetically enhanced naturalization where desirable volunteer species do not appear.

ANALYSIS

Municipal Research

Both the cities of Edmonton and Calgary have established processes for naturalizing lands within their respective jurisdictions. Edmonton focuses naturalization on scaling back turf maintenance and intensifying noxious weed control. This increased effort on noxious weed control can span multiple years, with Edmonton only considering enhancement if noxious weeds are fully controlled and the site is deemed suitable for enhancement. Prematurely planting on a site where noxious weeds are not fully controlled poses significant challenges as disturbing the soil to plant desirable species may inadvertently propagate noxious weeds, undermining the enhancement effort. It is important to note that planting a site with desirable species often eliminates the ability to use effective broadleaf pesticides to control noxious weeds. Controlling noxious weeds after enhancement will require resource intensive methods like hand pulling.

Calgary’s approach focuses significant effort on the planning stages of naturalization projects, outlined in their Naturalization Guidelines document. Thorough engagement is required before commencing any naturalization project, which is key in cultivating public interest and support for naturalization initiatives. Site analysis is a critical step to determine what plant species existed prior to development, and what method might work well for each site today. Their calculated approach using an identified strategy generally improves the long-term success of naturalization projects.

Grande Prairie’s Boulevard Naturalization Pilot Program

The current pilot follows closely to Edmonton’s approach with a focus on scaling back turf maintenance and increasing the control of noxious weeds. The pilot nature of the program was requested and established to evaluate the aesthetics of naturalizing boulevards within the City. To properly analyze the aesthetic, multiple years are required to allow desirable volunteer species to grow and to sufficiently control noxious weeds. Assessment of noxious weed control efforts from 2023 requires another growing season in 2024 to investigate and potentially re-apply control measures where needed.

While there have been concerns related to the aesthetic, several changes were made to the pilot last fall. In particular, the City has re-established mowing behind residential fences within the pilot areas. In locations such as Resources Road, this provides up to 10 metres of mowed turf between private property lines and the naturalized area, which aims to reduce wildfire risks and may resolve other concerns regarding the pilot.

An assessment of each pilot location was completed to determine the feasibility of aesthetically enhanced naturalization.

1. **116th Avenue:** not suitable for enhancement due to its temporary existence as a grassed berm that will eventually become future traffic lanes. Investing in vegetation enhancements at this location is not advisable. The time horizon for road twinning is subject to development and traffic growth.
2. **84th Avenue:** not suitable for enhancement due to the removal of the south portion of this pilot location in 2023 and the presence of desirable volunteer species on the north portion. Investing in additional vegetation enhancements at this location is not necessary.
3. **Resources Road:** not suitable for enhancement as roadside berms are primarily designed for sound abatement and present challenging conditions for enhancement initiatives. Additionally, due to an increase in noxious weeds observed at the site, this location requires an additional growing season for Parks to evaluate and re-implement control measures as needed. Investing in aesthetically enhanced naturalization at this location is not advisable at this time.

Maintaining the initial approach to the pilot for 2024 will:

- Allow the pilot locations to continue to establish with desirable volunteer species.
- Enable the Parks Department to ensure adequate control of noxious weeds.
- Assess whether concerns regarding the pilot have subsided due to scope adjustments made last fall.

Relationship to City Council's Areas of Focus / Strategic Priorities

Quality of Life – Fostering a community in which our residents love where they live and embrace their environment.

Environmental Impact

Naturalization generally results in positive environmental impacts, including but not limited to slope stabilization, improved habitat to support pollinators, and reduced erosion during rain events.

Economic Impact

Naturalization can reduce long-term maintenance costs compared with traditional horticultural practices (mowing, fertilizing, aeration, etc.) in suitable locations.

Social Impact

The naturalization process may result in an unattractive appearance in certain areas, particularly in cases where these areas have traditionally undergone regular mowing for decades. However, naturalized spaces can fold into the backdrop of the surrounding landscape with sufficient time to establish,

Relevant Statutes / Master Plans / City Documents

- [Parks and Open Space Master Plan 2012](#)
- Council Bee City Resolution – October 19, 2020
- [City of Grande Prairie Land Use Bylaw C-1260](#)

- City of Grande Prairie Design Manual – Section 16
- City of Grande Prairie Construction Manual – Section 32 92 19.13

Risk

Risks associated with naturalization include:

- An influx of noxious weeds in the naturalized areas requiring increased resourcing from the Integrated Pest Management crew that may pull service capacity from other areas (i.e. hardscape weed control, etc.).
- Dead vegetation can pose a fire risk, particularly in the spring prior to new growth.

Alternatives

1. That Administration evaluate enhancement techniques at suitable locations in future years.
 - a) **Enhancement Option 1:** Introducing natural species of shrubs and tree plugs. (Similar to Edmonton’s approach at an estimated cost of \$6,500.00/ha.)
 - b) **Enhancement Option 2:** Introducing perennial plants and grasses. (Similar to Calgary’s approach at an estimated cost of \$18,720.00/ha.)
2. That the Boulevard Naturalization Pilot Program ceases and the pilot areas revert back to pre-pilot mowing rotations.

STAKEHOLDER ENGAGEMENT

Internally, Parks consulted with Transportation and Engineering Services regarding the evaluation of options for enhanced naturalization within the pilot locations. Externally, Parks consulted with other municipalities to understand applications of enhanced naturalization. Specifically, the cities of Edmonton and Calgary were investigated for details on their respective programs.

Implementing enhanced naturalization at scale would necessitate engagement with neighbouring properties that may impact planting schedules for 2024.

BUDGET / FINANCIAL IMPLICATIONS

There are no budget or financial implications related to the recommendation in this report.

SUMMARY / CONCLUSION

The Boulevard Naturalization Pilot Program is designed to assess the aesthetic impact of naturalizing boulevards over three growing seasons. The Pilot closely aligns with Edmonton's approach to naturalization with a focus on reducing turf maintenance and controlling noxious weeds. Upon completion of the first growing season, adjustments were made to the Pilot last fall including reinstating mowing behind residential fences.

Administration recommends maintaining the Pilot's current approach in 2024, allowing areas to establish with desirable species, ensuring noxious weed control, and assessing public concerns following the adjustments made in 2023. Though not advised for the pilot locations, information on enhancement options and costs is provided for future consideration.

ATTACHMENTS