



# Environment and Climate Change Committee Minutes

2E – Community Room B  
City Hall  
13450 - 104 Avenue  
Surrey, B.C.  
WEDNESDAY, APRIL 17, 2024  
Time: 5:01 p.m.

**Present:**

Councillor Bose, Vice-Chair  
D. Jack  
M. Lamont  
S. Sajda  
D. Smith

**Absent:**

Mayor Locke, Chairperson  
K. Purton

**Staff Present:**

Y. Yohannes, Director Engineering Ops  
V. Jhingan, Director Project Delivery  
P. Klitz, Senior Transportation Planner/Policy  
Planning Lead  
R. Villarreal, Director, Transportation  
S. Meng, :Legislative Services Coordinator

Councillor Bose assumed the role of the Chair.

**A. ADOPTIONS**

**1. Adoption of the Agenda**

It was Moved by S. Sajda  
Seconded by M. Lamont  
That the agenda of the Environment and  
Climate Change Committee meeting of April 17, 2024, be adopted.  
Carried

**2. Adoption of the Minutes**

**(a) February 21, 2024 Environment and Climate Change Committee**

It was Moved by M. Lamont  
Seconded by D. Smith  
That the minutes of the Environment and  
Climate Change Committee meeting of February 21, 2024, be adopted.  
Carried

Chair added the agenda item 'Levels of Protection of Parklands' to Section C: New Business.

**B. DELEGATIONS****1. 72nd Avenue Extension between 152 Street and 176 Street**  
Victor Jhingan, Director Project Delivery

The delegation provided a presentation regarding the extension of 72nd Avenue between 152 Street to 176 Street. The following information was highlighted:

- Last month, the Council approved advancing the detailed design and public engagement for the 72nd Avenue extension between 152 Street and 176 Street. This is the largest transportation project ever undertaken by the engineering department, estimated to cost between \$130 to \$150 million. Spanning approximately 5 kilometers through agricultural land, floodplains, and watercourses, it will connect two significant points in the community. A feasibility assessment conducted earlier this year informed this decision, highlighting the importance of the 20 metre wide road corridor reserved for this purpose since 1875.
- Investments along the 72nd Avenue corridor are part of the engineering 10-year plan, with several projects slated for the coming years. Starting from the West, there are plans to widen 72nd Avenue to four lanes between 144th Street and 152 Street. Moving East, the Skytrain project will cover a section between Highway 15 and Fraser Highway. Council recently awarded a construction contract to expand 72nd Avenue to connect with Fraser Highway, scheduled for completion this summer. Additionally, there are plans to widen 72nd Avenue in the East Clayton area to four lanes within the next couple of years.
- As part of the feasibility assessment, a traffic model was developed to assess current congestion levels along East-West corridors, including the potential impact of not extending 72nd Avenue. The model revealed that during peak afternoon rush hours, corridors like 64th Avenue and Highway 10 experience significant congestion. Looking ahead to 2050, with an estimated population equivalent to Burnaby moving to the city, despite planned investments like Surrey Bus Rapid Transit and SkyTrain, all East-West corridors would face bumper-to-bumper traffic without the 72nd Avenue extension. By 2050, around 100,000 vehicles are projected to travel East-West, surpassing the capacity threshold for a four-lane road. Thus, extending 72nd Avenue is necessary to alleviate congestion and prevent overcapacity on other routes.
- The project entails complex considerations due to its path through agricultural land reserves and its impact on adjacent farmland and drainage systems. Starting from 152 Street and moving eastward, the road crosses Bear Creek, Fleetwood Creek, the 168th Street canal, and the Serpentine River. These conditions necessitate extensive ground improvements like preloading. Challenges also arise from existing infrastructure, such as BC Hydro's transmission corridor and a hydro tower along the gazette road. Additionally, the project crosses Fortis' high-pressure gas main and the connection to Highway 15 are critical for the project's success.

- As part of the feasibility assessment, an environmental overview was conducted to identify existing environmental features along the corridor. Aquatic habitats include salmon-bearing watercourses like Bear Creek, Fleetwood Creek, and the Serpentine River, along with offshoots used for agricultural drainage and irrigation. Terrestrial habitats encompass a bald eagle's nest near 152 Street, potentially active and requiring mitigation, and historical occurrences of pacific water shrew along Bear Creek. A bald eagle's nest south of the corridor and a barn owl habitat near 176 Street also need consideration. Preserving and mitigating these habitats are crucial aspects of the project. Additionally, the green infrastructure network along Bear Creek, the 168th Street Canal, and the Serpentine River must be maintained during the detailed design phase to preserve connectivity between natural areas.
- The current 20-meter area along the road corridor encompasses about 25 acres, predominantly used for farming and drainage. To accommodate traffic needs while minimizing environmental impact, a compromise was reached for the road cross-section: a four-lane road without a wide central median or expansive pathway. Various environmental features such as watercourses will be addressed with clear span bridges across Bear Creek and a wildlife and fish passable culvert across Fleetwood Creek. Existing culverts at 168th Street Canal are expected to remain unchanged. For the Serpentine River, a three-span bridge with piers located on the banks is planned. Drainage and irrigation will be integrated with adjacent farms while maintaining aquatic habitats and wildlife corridors. Fencing will secure watercourses on both sides of the road to guide wildlife safely across. Lighting will be installed at major intersections but not along the corridor between them. These concepts will be refined during the detailed design phase.
- The Bear Creek Connector, determined unnecessary for traffic flow due to the 72nd Ave extension, will be repurposed as a pedestrian and cycling corridor to connect environmental hubs like Bear Creek, Fleetwood Park, and Surrey Lake. Next steps involve awarding a detailed design contract in June, followed by four months of public engagement to refine the design and gather input. Council will then review the design, cost estimates, and public feedback before finalizing detailed plans and procurement. Construction, expected to start earliest in fall 2025, will involve preparatory work such as laying preload material before road construction begins.

In response to questions from the Committee, the following information was provided:

- The traffic modeling accounts for various factors, including the impact of new transit facilities like the Skytrain corridor, alongside road widening initiatives. It considers the volume of traffic, with a notable focus on the Newton area, serving as a crucial connection for routes to Hwy. #1, Glover Rd., and potentially to Maple Ridge and Mission. While identifying potential future routes for rapid transit, the modeling underscores the ongoing need for roads to connect communities in Surrey, especially given its unique grid network and dispersed pockets of residential areas. Discussions are ongoing regarding whether 72nd Ave will serve as a rapid traffic corridor or accommodate bus services.
- The corridor along 72nd Avenue includes two large dairy farms among various types of farming operations. This 20-meter corridor is owned by the city, with

- plans to reestablish watercourses and drainage ditches crucial for farming purposes. The majority of landowners along the corridor are dairy farmers.
- The budget includes provisions for environmental offsetting required by the project. Considerations include road sections and compliance with regulatory approvals from agencies like Fisheries and Oceans Canada (DFO), ensuring a balanced approach to the road corridor's development.
  - The detailed design will determine the specific locations of wildlife crossings along the road corridor. Considerations include ensuring suitable gaps between crossings and exploring alternatives if needed. Underground wildlife crossings may not be feasible due to floodplain considerations.
  - Considering the need for environmental offsetting, there are plans to create environmental features to balance habitat values, including potential habitat for the pacific water shrew, which requires further investigation due to limited information on its current presence.
  - Council has requested further progress on detailed design and engagement, with an update scheduled later in the fall. There will be an opportunity to formalize the committee's feedback to Council during this process.
  - There is a lot of feedback in terms of how to maintain access concerns regarding the functionality of the road cultural performances.
  - The current designation of the road corridor is being changed to a multi-use pathway for pedestrians and cyclists only. This change is supported by Council and was recommended in a recent report.

The Committee provided the following comments:

- The Chair commented on the significant traffic flow between Newton and Maple Ridge highlights the impact of the 72nd Ave extension on traffic patterns, especially congestion on routes like 88 Avenue to 84 Avenue due to current capacity limitations.
- A committee member suggested utilizing the space within the Northview Golf and Country Club for elevated mini barns could provide nesting habitat without encroaching on farmers' fields, enhancing nesting opportunities for wildlife.
- Chair commented that farmers would welcome a barn owl nesting because they help clear out pigeons.
- A committee member expressed concerns regarding outdated planning from 1875 is being used in a rapidly growing urban area, without considering current needs or environmental impacts. They further stated with the projected population growth, consultation should have occurred prior to decision-making. They emphasize the importance of considering wildlife and farming concerns before implementing infrastructure projects, as post-decision consultations seem ineffective.
- Chair commented on the necessity of a road through Agricultural Land Reserve (ALR) for agricultural access, stating that the only legal route for farmers to access their land is via residential streets unsuitable for large vehicles. He also mentioned the importance of balancing environmental concerns with agricultural needs, highlighting that without the road, 600 acres of agricultural land would be unusable.

- Chair mentioned the recommendation from Agricultural and Food Policy Committee on this presentation were around benefits to agriculture and addressing irrigation and drainage issues.
- A committee member expressed their belief that once a decision is made to build a road, it will proceed regardless of concerns. They oppose the Bear Creek Connector being designated as a transportation route, fearing it will lead to road construction through agricultural land, golf courses, parks, and environmentally sensitive areas. They highlight that part of the proposed route traverses ALR land, expressing concern about its impact.

It was

Moved by S. Sajda

Seconded by D. Smith

That the Environment and Climate Change

Committee receive the presentation on 72nd Avenue Extension between 152 Street and 176 Street for information.

Carried

**2. Andrew Banks, BC Nature - Project Manager, Municipal Protected Areas Project, Kephra Beckett, BC Nature Conservation Coordinator, BC Nature**

The delegation provided a presentation regarding the Municipal Protected Areas Project (MPAP) and to request staff be given permission to engage with the BC Nature MPAP team to review eligibility of city owned or managed lands. The following information was highlighted:

- BC Nature, a federation of naturalist clubs, is dedicated to understanding and preserving nature. They have been actively engaged in the Municipal Protected Areas Project for the past year and a half, collaborating with four other Canadian organizations. This initiative aligns with the commitment made at COP 15 to protect 30% of land and water by 2030, a target both Canada and BC have pledged to. The project's main focus is assisting local governments in identifying areas that could contribute to this goal and potentially qualify as protected areas.
- Currently, federally, Canada has protected approximately 13.7% of its terrestrial area, while provincially it is just under 20%. The Municipal Technologies Project is a collaborative effort involving Nature Canada, Ontario Nature, Wildlands League, and the Alliance of Canadian Land Trusts. This project acknowledges the rich biodiversity within local government jurisdictions, highlighting their significance for communities in terms of access to nature and adaptation to climate change. Recognizing the need for all levels of government involvement, Canada supports such initiatives to achieve its biodiversity goals for 2030.
- At the local government level nationwide, there is a lack of data on protected lands, unlike the federal and provincial levels. However, it is known that local governments possess significant biodiverse lands. The Municipal Technologies Project aims to determine the extent of local land protection and identify areas for the 30 by 30 commitment. Participating in this project allows governments to validate existing conservation policies, support national commitments at the local level, and gain recognition for

biodiversity efforts. Moreover, it enhances their ability to secure funding for future protection efforts.

- Natural areas can qualify for inclusion in the Canadian Protected and Conserved Areas Database by meeting four main criteria. First, they must have a clearly defined boundary, typically established through data generation. Second, the area must demonstrate actual on-site conservation efforts, often supported by monitoring data. Third, mechanisms must be in place to prevent actions that are incompatible with conservation, such as conservation covenants or restrictive zoning. These mechanisms are intended to be long-lasting and difficult to reverse. The paperwork required for federal government approval of inclusion can be extensive, but BC Nature can assist municipalities in completing it, requiring minimal staff involvement. This support includes meetings to clarify questions, data requests, and final reviews. BC Nature also collaborates with local clubs to leverage their knowledge and monitoring data, as well as to promote public engagement with the 30 by 30 commitment.
- The focus of the work is on documenting existing natural areas and an interest in identifying new potential protected areas. This involves assessing areas that may or may not meet the criteria for protection. For areas close to meeting the criteria, feedback is provided on additional steps needed for potential entry in the future. This process often aligns with ongoing municipality projects, validating their efforts.
- BC Nature expressed interest to engage with staff to identify municipal natural assets for contribution to the Municipal Protected Areas Project.

In response to questions from the Committee, the following information was provided:

- BC Nature is in collaboration with Canadian Land Trust, which focuses on conserving private lands. In British Columbia, they work closely with BC Land Trust as their partner. When identifying suitable areas for conservation, they engage with private landowners or club members who encounter such lands.
- They leave a final report for the municipality that assesses their current conservation status and the potential for growth, including a breakdown of protected lands as private versus public. They aim to expand park education and bylaws, often found in most municipalities' conservation land zones within their Official Community Plans.
- The delegation clarified their mandate to focus on local government lands rich in biodiversity, with parks being a primary consideration.
- There is an allowance of up to 10% of an area to accommodate utilities corridor.

The Committee provided the following comments:

- A committee member expressed excitement and gratitude regarding the federal initiative to protect 30% of land and water and that municipalities would be included in this effort, as they believe it is crucial for ensuring people have access to natural spaces in the future. They foresee regional and municipal parks playing a vital role since accessing remote areas may become more challenging over time.
- A committee member emphasized the importance of considering private lands alongside federal, provincial, and municipal lands in conservation

efforts. While municipal lands may not offer significant opportunities in Surrey, other areas in the province, particularly large tracts of private land, present valuable opportunities for enhancing biodiversity. In Surrey, where most land is privately owned, initiatives like biodiversity projects can encourage residents to contribute by planting gardens, trees, and increasing greenery on their properties.

- A committee member mentioned the Fergus Preserve as the first biodiversity preserve protected by the federal government, with clear boundary lines. They also mentioned the loss of two highly valuable biodiversity hotspots to previous development, despite their protection efforts.
- The Environment and Climate Change Committee strongly support the initiative to engage with staff to identify municipal natural assets for contribution to the Municipal Protected Areas Project.

## C. NEW BUSINESS

1. **Transportation and Climate Change Series #2: Walking and Cycling**  
Peter Klitz, Senior Transportation Planner/Policy and Planning Lead  
Rafael Villarreal, Director, Transportation

Staff provided a presentation regarding the Surrey Transportation Plan - Cycling and Walking Action Plans. The following information was highlighted:

- The climate change action strategy of Surrey prioritizes walking and cycling to reduce greenhouse gas emissions. Surrey has low mode shares for walking and cycling compared to other areas in the Lower Mainland, indicating potential for improvement. The city aims to create a more attractive, greener environment by implementing a systematic and pragmatic plan that modernizes infrastructure to accommodate pedestrians, cyclists, cars, and buses. Efforts are focused on building safer, connected networks for active transportation to encourage people of all ages and abilities to walk and cycle. Closing the gaps in the active transportation network is a key goal for Surrey's transportation initiatives.
- The Surrey Transportation Plan is a long-term strategy aiming to connect one million residents by 2050 with safe, inclusive, and convenient transportation options. The plan envisions zero deaths and injuries on the roads and aims for zero greenhouse gas emissions from transportation. One key target is to achieve a 50% active mode share by 2050, with walking, cycling, and transit accounting for half of all trips. Specific action plans are being developed for each mode, with a focus on walking and cycling. Currently, walking has a 10% mode share, targeted to increase to at least 15%. Efforts will concentrate on filling critical sidewalk gaps around key destinations like schools, transit stops, and grocery stores. Over the next decade, around 40 sidewalk projects, totaling about \$12.7 million, will focus on arterial roads, collectors, and local roads to enhance pedestrian safety and accessibility. Additionally, new sidewalks will be integrated into redevelopment and road widening projects.
- Surrey aims to increase its cycling mode share to 5% by 2050, despite currently having the lowest mode share in Metro Vancouver. To achieve this, the city plans to build a network of connected, protected cycling

facilities centered around town centers and SkyTrain stations. Residents express a desire to cycle more but feel unsafe on roads with only painted bike lanes. Thus, Surrey is investing in safer cycling infrastructure, including concrete cycle tracks, extruded curbs, planters, and multi-use paths, to encourage cycling and enhance safety.

- Surrey plans to implement protected bike lanes through various projects, including road widening and redevelopment. Over the next decade, the focus will be on doubling down on protecting cycling infrastructure in North Surrey due to its high density, diverse land use, proximity to major destinations, and support for bike share initiatives. A two-year pilot project for bike share, starting in Surrey City Center and Guildford, will launch with 300 electric bikes using a Dockless system with geofencing. The city aims to gradually expand the network of protected facilities throughout Surrey, reallocating road space where necessary and conducting parking surveys to ensure adequate parking supply.
- The city of Surrey is actively promoting cycling culture through various initiatives. They are updating bike maps and website content more frequently to reflect new protective facilities and connections. Bike education and training programs are ongoing, including training for elementary school children. A cycling wayfinding signage program has been introduced, primarily focused on North Surrey, to help cyclists navigate the new protective network. Additionally, the city participates in community events like Party for the Planet and Car-Free Day to engage with residents, gather feedback, and raise awareness about cycling initiatives.

In response to questions from the Committee, the following information was provided:

- This initiative proposes dedicated cycling lanes that accommodate not only cyclists but also individuals using scooters and those with mobility challenges. It aims to provide a safe space for these alternative modes of transportation, keeping them off sidewalks and roads. However, it excludes high-speed scooters from utilizing these lanes.
- Supporting 15 minute cities is one of the initiatives in the Surrey transportation plan including density diversity, walkability and micro mobility. Redevelopment projects are already bringing about significant improvements in protected cycling infrastructure, with more redevelopment expected in the future. As the population grows, particularly in the concept of the "15-minute city," the demand for active transportation like cycling will increase, further emphasizing the need for such infrastructure in Surrey.
- The company who installed the planters will provide irrigation and maintenance in the initial one-year contract. Subsequently, the responsibility will transition to the Parks, Recreation & Culture department for ongoing watering and maintenance.
- Implementing the City Center Protected Cycling Network involves a learning process, particularly concerning the placement of planters on the road, which is a new approach.
- Surrey's geography as a factor in transportation challenges, particularly for cyclists traveling long distances from South to North Surrey. They believe electric bikes could help mitigate these challenges by increasing accessibility to transit and encouraging cycling within communities. They emphasize a



localized approach, focusing on connecting key town centers and improving connections within them, with a current emphasis on North Surrey as an experimental focus area.

- The speaker mentions outsourcing e-bike share operations to a leading global operator. These bikes are equipped with sensors to monitor their status, including charging and adherence to rules. The operator ensures bikes are well-maintained and charged, managing logistics to maintain optimal conditions at all times.
- There are use of single-wheel cyclists on facilities despite their current legal status is yet to be established.

The Committee provided the following comments:

- A committee member raised concerns regarding the use of water in maintaining the planters, suggesting alternatives such as choosing plants that require minimal water, using treated water, or covering water to reduce evaporation. They propose selecting plant species native to the area to minimize water usage and soil absorption, recommending a neutral gray color for the planters.
- A committee member suggests implementing rain gardens to separate cycling lanes from traffic, despite the need for pavement removal. They emphasize the importance of addressing heat concerns by strategically placing trees to provide shade and reduce temperatures for cyclists. They also advocate for double trees along sidewalks and bicycle areas to promote the health and well-being of cyclists and encourage outdoor activity.
- A committee member expressed concerns regarding a lack of bicycles on the road and in town centers, despite paying increased attention due to recent developments, and cyclists' disregard for vehicles and other cyclists, highlighting a need for increased awareness and adherence to road safety measures.
- A committee member raised concerns about the availability of electricity to meet the growing demand from electric vehicles, electric bikes, and increasing computing needs. They express uncertainty about whether there will be enough electricity to meet these demands, especially considering the declining availability of ice and water, which affects electricity generation.
- A committee member suggest if there is an opportunity to encourage the contractor to explore having charging on site and utilize solar panel charging for the electric bikes.

## **D. OTHER BUSINESS**

### **1. Civic Distinction Awards Program 2024 Committee Report**

The Committee provided the following comments:

- Chair announced the June committee meeting will have a closed portion to discuss and evaluate the nominations who will receive the Environment Civic Distinction Awards.
- Nomination applications are completed online on the city's website.

It was Moved by S. Sajda  
Seconded by M. Lamont  
That the Environment and Climate Change  
Committee receive the Civic Distinction Awards Program 2024 Committee Report for  
information.

Carried

**C. NEW BUSINESS (CONTINUED)**

**2. Levels of Protection of Parklands**

The Committee provided the following comment:

- Several committee members expressed the topic on Levels of Protection of Parklands was missed from the previous meeting minutes and request to receive a presentation from Parks, Recreation and Culture staff regarding an overview of each level of protection on biodiverse areas and parklands which contributes to the current workplan.

It was Moved by S. Sajda  
Seconded by M. Lamont  
That the Environment and Climate Change  
Committee request Council to direct Parks, Recreation and Culture staff to provide a  
presentation on the overview of different maximal and minimal levels of protection in  
biodiverse areas and parklands within the City of Surrey.

Carried

**D. OTHER BUSINESS (CONTINUED)**

**2. Roundtable**

A roundtable discussion ensued as follows:

- A committee member requested to add two items to the section New Business for a future committee meeting: an update on Bear Creek Subcommittee and Tree Bylaw.
- A committee member expressed concerns regarding the 2 year term appointment for committee members and expressed the need to extend it to a 4 year term appointment in order to accomplish more of the issues brought up to the committee.
- Chair stated a 2 year term appointment will have a possibility of being re-appointed up to 3 terms and that all committees operate in the same process.
- Several committee members expressed concerns regarding being informed by various delegations and seeing the lack of action taken after the discussions made at the committee meeting.
- Chair clarified that the role of an advisory committee is to use the expertise and local knowledge of the committee members and to make recommendations to council or through council to staff on topics that are pertinent.

- Chair stated for the public to address their concerns to the committee by sending them in a letter.
- A committee member requested to add the item Heat Bylaw for Rental Units to the section New Business for the next committee meeting.
- A committee member expressed concerns regarding how water retention is crucial and that minimizing impervious surfacing on yards helps with water retention throughout the year which can prevent water runoff into drainage systems that could negatively affect watercourses, wildlife, and poses risks to houses in the area.
- A committee member added a comment regarding solar panel roofing on homes and Chair mentioned there is a covenant from the developer indicating the City cannot implement that.

**E. NEXT MEETING**

The next meeting of the Environment and Climate Change Committee is scheduled for 5:00pm on May 8, 2024.

**F. ADJOURNMENT**

It was

Moved by S. Sajda

Seconded by D. Smith

That the Environment and Climate Change

Committee meeting be adjourned.

Carried

The Environment and Climate Change Committee meeting adjourned at 7:14 p.m.

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Jennifer Ficocelli,  
City Clerk and Director of Legislative Services

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Councillor Mike Bose, Vice-Chair

**ENVIRONMENT AND CLIMATE CHANGE COMMITTEE  
RECOMMENDATION INDEX  
Wednesday, April 17, 2024**

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**1. Levels of Protection of Parklands**

That Environment and Climate Change Committee recommends that Council direct Parks, Recreation and Culture staff to provide a presentation on the overview of different maximal and minimal levels of protection in biodiverse areas and parklands within the City of Surrey.