

# *Environmental Sustainability Advisory Committee - Minutes*

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**Present:**

Chair – Councillor Starchuk  
A. Idemudia (Youth Rep.)  
R. Bains  
N. Hogan  
G. James  
K. Otting  
J. Young  
G. Sahota (Rep. to DAC)  
J. Zelazny (Rep. to AFSAC)  
S. VanKeulen (AFSAC Rep.)

**Regrets:**

S. Sabharwal  
M. Sharma  
D. Skaey

**Staff Present:**

S. Godwin, Environmental Manager  
C. Baron, Drainage Manager  
D. Luymes, Manager, Community Planning  
N. Aven, Urban Forestry & Envir. Manager  
L. Luaifoa, Legislative Services

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**A. ADOPTION OF MINUTES**

1. Environmental Sustainability Advisory Committee (ESAC) Minutes of June 1, 2016 to be approved.

It was

Moved by K. Otting  
Seconded by R. Bains

That the minutes of Environmental  
Sustainability Advisory Committee meeting held on June 1, 2016 be approved.

Carried

**B. DELEGATIONS**

1. **Climate Adaptation Strategy Update**  
File: 5280-01

Carrie Baron, Drainage Manager and Maggie Baynham, Sustainability Planner, provided an update on the Climate Adaptation Strategy.

The following comments were made:

- Through the Sustainability Charter, Council directed that Risk Assessment and action planning be done to identify the risks of Climate Change and how the City can plan to respond to those risks. The impacts of Climate Change were identified and categorized from Very Low to Extreme.
- 91 Actions were identified and the key goals were organized into the following six sectors: 1) Flood Management and Drainage, 2) Infrastructure, 3) Health and Safety, 4) Ecosystems, 5) Urban Trees and 6) Agriculture and Food Security which represent the key risks.

- 11 of the 91 Actions are flagged as high “Priority Actions” for implementation. Staff has reported annually on these actions to Council through corporate reports.
- A few examples of Priority Actions are as follows:
  - The implementation of measures to protect ecosystems (e.g. acquisition of the green infrastructure network (GIN) and improvements to riparian setbacks) will improve the quantity and quality of the City’s habitat to enable species migration and resilience.
  - Ensuring there is adequate space for trees to mature to optimal size and selecting tree species that will adapt to Surrey’s future climate projections.
  - Encourage development to incorporate passive building design features that keep buildings cool while reducing reliance on air conditioning.
- Planning for resilience and climate adaptation has become increasingly imbedded within the City’s policy documents at both higher and lower levels. The Sustainability Charter provided the direction to develop the Community Climate Action Strategy (including the Climate Adaptation component), the Biodiversity Conservation Strategy (BCS), and provided a lens for the new Official Community Plan (OCP) in 2014. These plans in turn have helped support and provided direction for our more granular plans at an operational level – for example, the Coastal Flood Protection Strategy and the Shade Tree Management Plan.
- A large portion of Surrey is located in the flood plains. Sea levels are rising 2 m per year while the peatlands are sinking between 0 to 10 mm per year.
- Numerous studies have been undertaken to determine how the coastal surge affects Surrey’s rivers; where the vulnerable areas are in Surrey, what kinds of things can be built on the soil in the future; whether Surrey can continue to service certain areas once the rain patterns increase and whether infrastructure have to be designed differently in the future. These studies will help determine what is required to be prepared for the potential changes. A few examples are as follows:
  - **Coastal Flood Protection Strategy** – Council approved the strategy in 2016. Staff will be going to the stakeholders to determine what we are the values and what is important to them and figuring out what they want to see. Feedback received will tie into the Regional Strategy.
  - **Climate Change Rainfall Strategy** – Will determine areas with rainfall patterns changing and whether Surrey can continue to service the areas the way they have service now. The Strategy will answer the question of whether designing needs to be done differently for example, houses not directly connected to pipes.

- **Serpentine, Nicomekl & Little Campbell Rivers Climate Change Floodplain Review – Phases 1 & 2** – Surrey has 150 km of dykes. Many sections of the dyke along the Serpentine and Nicomekl Rivers will eventually be too low. By 2100, of the 24 bridges on the river, 5 will be completely submerged and 10 will be partially submerged – none have been designed for these scenarios. Changes are required for the future. Surrey will need to determine what will be changing and why. Phase 2 will look at timing and when these dykes will be overtopped.

### **Sea Level Rise Impacts**

- The current elevation of Colebrook West is 3.15 m and the new target elevation in 2100 is 6.76 m.
- If a dyke in Surrey broke today, it will not affect the whole community. If a dyke breaks in 2100, the impacts are significant because of how high the water is. There is time to figure out a strategy with no rush. Currently, the City is incorporating adaptation philosophies.
- A number of current projects in Surrey have been completed. To name a few; preliminary design for sea damn replacements, preliminary design for Nicowynd Dyke upgrades and Crescent Beach servicing for Climate Change Phase 1 complete and Phase 2 in design.

### **Sea Dam Replacement**

- Surrey's original sea dams were constructed in the early 1900's and are nearing end of service life. The City is looking at replacement of the dams with consideration of seismic, flood control and seal level rise in the design. The design will include gates that can be moved up, review of how fish passages may change and the ability to enable future extensions to the dams. The City will determine what is required and design it into concepts.
- Crescent Beach used to have cottages that are now full scale houses. The grade of houses has changed and residents have found ground water showing up on the surface in the winter. The area will need to be raised up over time. The City has started with the lower grids and has put in a new pump station. One of the challenges experienced is that with the area is located on First Nations land requires work with archeologists.

### **Colebrook Dykes**

- The Province has committed to \$10.4 million in funding to upgrade the Colebrook Dykes to current standards. The City owned 2.4 km of land on either side of the dyke. The upgrades will be done to 7.2 km of the dyke rather than segments. The City will ensure the base is designed for future upgrades. Construction is scheduled for 2017 to 2021.

**2. South Campbell Heights Local Area Plan (LAP)**

File: 6520-01

Don Luymes, Community Planning Manager, presented an update on the LAP process in the South Campbell Heights area of Surrey.

The following comments were made:

- The area is located along 16 Avenue and the Langley Border (188 Street and 196 Street) and is bisected diagonally by the Little Campbell River. Campbell Heights industrial area is situated to the north.
- The land use planning process for the area was prompted by development applications and other inquiries to the City about the area. As a result of this development activity, Council directed staff to prepare a Land Use Plan.
- The process began by commissioning two studies to identify any issues and concerns. Once the studies were complete, a stakeholder group was formed with representatives from the various citizen and environmental groups with an interest in the area, as well as landowners. A public open house was organized with property owners and was well attended. A second open house will be held in the fall after the land use options for the area have been refined with the stakeholder group.
- This area had been identified in the City's Employment Lands Strategy (created in November, 2008) as a good candidate for industrial expansion. There currently is a shortage of industrial land in the region generally.
- The environmental study also looked at land cover and sensitive ecosystem units, and to the Biodiversity Conservation Strategy (BCS).
- In addition to the environmental studies the City commissioned, A Rocha Environmental Organization completed broader environmental studies of the Campbell River generally including some species at risk observations as well as habitat that is suitable for species at risk, including Barn Swallows, Red-Legged Frogs and Salish Suckers.
- The area overlays an aquifer which is a source of drinking water for many residents in area. The water underground feeds the Little Campbell River in low flow periods in the summer. The aquifer underground is important in terms of environmental sustainability and sensitivity. The study commissioned identified areas where land cover was important to retain and identified areas where the ability was for soil infiltration was to ensure retention of the aquifer.
- An important area for consideration is the Little Campbell River watershed which has been a route for First Nations coming from Semiahmoo Bay up to the Fraser River in Fort Langley. The area consists of archeological sites as well as fisheries.

- The studies identified areas that have sensitivity along the river and areas like the aquifer and also what areas are remaining for industrial or similar employment uses. Some areas have high environmental values and are likely not to be converted to industrial lands.
- There is a need for industrial land; however, the area is sensitive for agriculture land which creates a difficult planning situation. Industrial expansion is limited for operations that require larger parcels (+30 acres) which are particularly short in supply. Regional employment land (especially industrial land) supply is constrained, with between a 20 to 40 year supply of land remaining. Light industrial uses and business park uses may be in demand in South Campbell Heights.
- Several factors that are paramount to the planning process including: protection of the aquifer, fisheries and watercourses, servicing issues, environmental and habitat, access and transportation and agricultural land interface. The City is seeking to identify blocks within the larger planning area that might be appropriate to different kinds of planning strategies.

Draft Planning Principles have been developed and are as follows:

1. Protect and enhance the integrity of Little Campbell River and its supporting riparian area.
2. Protect the integrity of the aquifer and groundwater resource from contamination and depletion.
3. Establish and protect significant wildlife corridors along the Little Campbell River in keeping with the Biodiversity Conservation Strategy.
4. Protect significant forest stands and tree specimens.
5. Ensure appropriate buffers and land use interface between any development and the Agricultural Land Reserve, both in Surrey and Langley.
6. Respect sensitive land uses and sites such as heritage and archaeological sites, educational and institutional facilities and cemeteries within and adjacent to the plan area through compatible interface land uses and appropriate buffers.
7. Ensure safe road conditions, intersection and access points, particularly along 16 Avenue and 192 Street.
8. Ensure that urban development includes an interconnected local street network to distribute traffic effectively and to provide efficient accessibility within the plan area.
9. Emphasize a high standard of building and site design including low impact development features such as raingardens, bioswales, green roofs and energy-efficient buildings.
10. Ensure an attractive visual image for any development fronting major roads or adjacent to conservation and recreation areas through architectural design and landscaping.
11. Prioritize reserving sufficient land for supplying future regional demand for employment lands through a phased approach to development.
12. Reserve appropriate lands for potential land exchange and inclusion into the agricultural land reserve.
13. Limit new residential development to accessory units and institutional housing uses.

After Council approval (Stage 1), the OCP will require amending and since the area is also designated as rural, the City is required to go to Metro Vancouver to get that plan changed to reflect the approved Council plan.

**C. OUTSTANDING BUSINESS**

**D. NEW BUSINESS**

**E. ITEMS REFERRED BY COUNCIL**

**F. CORRESPONDENCE**

**G. INFORMATION ITEMS**

**1. Agriculture and Food Security Advisory Committee (AFSAC) Update**

No update was provided.

**2. Development Advisory Committee (DAC) Update**

No update was provided.

**H. OTHER BUSINESS**

**1. A Rocha Tour**

If any Committee members would like a tour of A Rocha, contact the Chair to organize a visit.

**2. Fusion Festival – July 23 – 24**

The Committee was reminded of the Fusion Festival and encouraged to attend.

I. NEXT MEETING

The next meeting of the Environmental Sustainability Advisory Committee is scheduled for Wednesday, July 27, 2016 at 6:00 p.m. at City Hall, in room 1E Committee Room B.

It was	Moved by K. Otting
	Seconded by R. Bains
	That the Environmental Sustainability
Advisory Committee meeting do now adjourn.	
	<u>Carried</u>

The Environmental Sustainability Advisory Committee adjourned at 7:30 pm.

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Jane Sullivan, City Clerk

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Councillor Starchuk, Chair