## DISTRICT OF NORTH VANCOUVER COUNCIL WORKSHOP

Minutes of the Council Workshop for the District of North Vancouver held at 5:03 p.m. on Tuesday, June 20, 2017 in the Committee Room of the District Hall, 355 West Queens Road, North Vancouver, British Columbia.

- Present: Mayor R. Walton Councillor J. Hanson Councillor R. Hicks Councillor D. MacKay-Dunn Councillor L. Muri
- Absent: Councillor R. Bassam Councillor M. Bond
- Staff: Mr. G. Joyce, Acting Chief Administrative Officer
  Mr. B. Dwyer, Acting General Manager Planning, Properties & Permits
  Mr. J. Gordon, Manager Administrative Services
  Mr. S. Ono, Manager Engineering Services
  Ms. J. Paton, Manager Development Planning
  Mr. S. Bridger, Section Manager Engineering Design & Planning
  Ms. F. Dercole, Section Manager Public Safety
  Ms. C. Archer, Confidential Council Clerk
  Mr. R. Boase, Environmental Protection Officer
  Ms. A. Mawdsley, Project Engineer

### 1. ADOPTION OF THE AGENDA

1.1. June 20, 2017 Council Workshop Agenda

MOVED by Councillor MURI SECONDED by Councillor HANSON THAT the agenda for the June 20, 2017 Council Workshop is adopted as circulated.

### CARRIED

### 2. ADOPTION OF MINUTES

Nil

### 3. REPORTS FROM COUNCIL OR STAFF

3.1. Climate Change Adaptation Strategy File No. 13.6770

Ms. Fiona Dercole, Section Manager – Public Safety, reported that climate change adaptation planning is underway and the strategy is being developed to leverage work already in progress in areas such as asset management and hazard management.

Ms. Dercole provided an overview of the challenge of climate change, highlighting record-setting temperatures, windstorms, drought conditions, heavy rainfall and snow events in recent years.

It was reported that climate models predict that by 2050:

- Temperatures in September will be higher than current July and August temperatures and the number of days over twenty-five degrees will increase from eighteen to forty-four per year;
- The temperature on very hot days will increase from thirty-three to thirty-eight degrees;
- · The amount of rain falling on very wet days will double;
- · Summer precipitation will decrease by eighteen percent;
- Sea level will rise by 0.5 to one metre; and,
- Severe weather events of all types will increase in frequency.

Ms. Dercole explained the difference between mitigation and adaptation, noting that mitigation through the reduction of greenhouse gas emissions helps reduce future climate change. However, because there is a delayed response to greenhouse gas emissions, some degree of climate change is unavoidable. Adaptation is therefore necessary to deal with the impacts of climate change. Mitigation efforts already underway in the District include the Green Building Strategy, use of renewable energy and waste diversion.

Ms. Dercole reviewed the additional benefits of climate change adaptation:

- A return rate of an estimated \$9-38 in avoided damages for every dollar invested;
- Improved environmental and personal health;
- Enriched public spaces; and,
- Improved liveability.

Climate change adaptation in the District and other jurisdictions was reviewed, including local and international agreements such as the District's Official Community Plan and Corporate Plan, the Paris Agreement on Climate Change, the BC Climate Leadership Plan and Metro Vancouver's Regional Growth Strategy. It was noted that the District received the United Nations Sasakawa Award for Disaster Risk Reduction in 2011, positioning the municipality as a world leader in climate change adaptation.

The Climate Change Adaptation Strategy will build on existing District policies, strategies and projects, including risk assessments for natural hazards, Development Permit Areas for natural hazards such as wildfire and streamside protection, and long-term asset management. The strategy will bridge cross-departmental gaps, coordinate efforts by identifying synergies between policies, programs and projects, reduce costs and maximize results. By integrating adaptation and long-term thinking into programs, policies and other decisions, the strategy will improve resilience and reduce the long-term costs and impacts of climate change.

Ms. Dercole reviewed the five steps to climate change adaptation planning and progress to date, noting that the steps will be revisited as new science becomes available in order to keep the strategy current:

- 1. Initiate adaptation planning:
  - Created a team with representatives from a variety of District departments including Finance, Engineering, Public Safety, Environment, Planning, Emergency Management, Fire and Rescue Services, Corporate Services and Parks;
  - Interviewed District senior management; and,
  - Interviewed local and regional governments with existing climate change adaptation strategies.
- 2. Identify priority climate change impacts:
  - Worked with a climate modelling centre at UVIC to understand predicted climate changes;
  - Provided information from climate modelling to staff focus groups to identify specific impacts; and,
  - Conducted a vulnerability and risk assessment to prioritize impacts for action planning.
- 3. Create a climate adaptation strategy:
  - Developed action objectives to focus planning;
  - · Conducted cross-departmental workshops to brainstorm ideas;
  - · Refined ideas into adaptation actions;
  - Prioritized actions into must-do, monitor and investigate actions based on urgency, cost-benefit ratio and the availability of resources.
- 4. Implement the strategy:
- 5. Monitor progress and review actions.

Council discussion ensued and the following comments and concerns were noted:

- Commended staff for work to date;
- Noted climate change adaptation is important to the future of the District;
- Queried the extent to which District is working with regional and provincial governments, including the other North Shore municipalities;
- Expressed concern regarding changes to animal, plant and insect life, including the increase in insect-borne diseases;
- Commented on tidal surges in conjunction with sea level rise;
- Requested that costs associated with the different actions be included in the plan;
- Suggested that the public would be supportive of spending on climate change adaptation;
- · Commented on the effect of traffic congestion on greenhouse gas emissions;
- Expressed concern regarding materials used to construct homes in wildfire interface areas and suggested the use of fire retardant materials be made mandatory, including enforcement options; and,
- Commented on the impact of new home construction on the existing tree canopy.

In response to a question from Council regarding the existing flood works at Lynnmour-Inter River, Ms. Dercole reported that dikes are designed for a 200-year event and are considered adequate.

In response to a question from Council regarding priority climate change hazards, Ms. Dercole advised that wildfire is the top risk due to warmer, drier summers and lower snowpack levels, as well as the impact of invasive species on forest health. It was noted that the District has had a Community Wildfire Protection Plan since 2007 and that most of the thirty-eight recommendations from the plan have already been implemented. New homes located within the wildfire interface area must be built using fire retardant materials and fire resistant landscaping.

Ms. Dercole reviewed the next steps in the process:

- Incorporate Council feedback;
- Finalize the Climate Change Adaptation Strategy;
- Return the finalized plan to a Regular Meeting of Council for discussion and approval;
- Develop individual departmental plans, asset management plans and work with the Finance Department on annual finance planning; and,
- Monitor climate change indicators and conduct regular updates and reviews.

Council requested an additional workshop on this topic.

3.2. Integrated Stormwater Management Plan Framework and Objectives File No. 11.5225.50/001.000

Mr. Steve Ono, Manager – Engineering Services reported that the Integrated Stormwater Management Plan (ISMP) is a component of the Climate Change Adaptation Strategy and the purpose of this second workshop on the topic is to provide objectives for Council consideration and prioritization. A third workshop will focus on implementation plans, the impact of single-family redevelopment, proposed performance targets and the drainage section of the Development Servicing Bylaw.

Mr. Ono provided a brief review of the purpose of creating an ISMP, noting that an integrated approach will allow different departments that have an impact on drainage to work together and is required by the BC Ministry of Environment. The overall goal of the ISMP is to improve watershed health by addressing the impacts of stormwater drainage from properties and streets into creeks.

Ms. Angela Mawdsley, Project Engineer, reviewed the required elements of the ISMP, noting that the plan must be integrated at all stages including implementation.

Ms. Mawdsley reviewed the ISMP framework, highlighting the importance of objectives as they define what is important:

- Identify values and problems, including input from the public and stakeholders such as the North Shore Streamkeepers;
- Define objectives and measures;
- · Develop and evaluate alternatives;
- Implement plans; and,
- Monitor and evaluate implementation.

Ms. Mawdsley provided an explanation of the importance of release rates on watershed health, noting that development changes creates non-porous surfaces,

resulting in higher peak flows during storm events and negative impacts on the ecosystem.

Council discussion ensued and the following comments and concerns were noted:

- Commented on the visible impact of construction on small creeks leading to larger watersheds;
- Noted some watersheds are more sensitive and require immediate attention;
- Commented on the effect of the landscaping trend where porous surfaces are covered with paving materials instead of grass, plants and trees;
- Queried what can be required of developers and homeowners;
- Observed that some new technologies are not beneficial;
- Remarked on the common objectives between the Climate Change Adaptation Strategy and ISMP, noting there may be opportunities to use both to create building guidelines;
- Expressed concern regarding the ability to implement ISMP on all watersheds; and,
- Commented on the effect of the BC Building Act on the District's ability to enact certain policies.

Mr. Ono advised that solutions will be customized to each watershed based on the different attributes of each, including the geology of the riverbed and direction the creeks face and flow.

Mr. Richard Boase, Environmental Protection Officer, commented that approval of the ISMP Framework and Objectives allows staff to proceed with work on developing recommendations to be returned for Council discussion. Mr. Boase provided an example of a possible recommendation to replace piping with swales, which would meet several of the approved objectives:

- Maximize natural assets;
- Maximize social-ecological connection by making stormwater visible above the surface; and,
- Maximize base flows by storing water and slowly returning it to creeks.

Mr. Boase further noted that the objectives allow for a better evaluation of the costs versus benefits of different options.

Staff noted that implementation of some of the recommendations will require amendments to bylaws to avoid conflicting regulations.

# MOVED by Mayor WALTON

## SECONDED by Councillor MURI

THAT the Integrated Stormwater Management Plan Framework and Objectives as presented in the June 9, 2017 joint report of the Project Engineer and Section Manager – Engineering Planning and Design is approved.

CARRIED

## 4. Public Input

## 4.1 Mr. Doug Haymon, North Shore Streamkeepers:

· Expressed support for the use of swales in the District.

## 4.2 Mr. Corrie Kost, District Resident:

- Commented on the importance of establishing a baseline and ongoing measures; and,
- · Cautioned that open swales could be dangerous to children.

## 4.3 Ms. Barbara Frisken, North Shore Streamkeepers:

- Commented on a North Shore Streamkeepers workshop on the ISMP and the role
  of the community to protect creeks and prevent flooding; and,
- Noted that the recommendation from the workshop is to tax properties based on the amount of impervious surface area.

## 4.4 Ms. Janet Dysart, North Shore Streamkeepers:

- · Commended Council for adopting the ISMP objectives; and,
- · Remarked on the importance of educating the public.

## 4.5 Ms. Sandie Hollick Kenyon, District Resident:

- Advised that she is with the Department of Fisheries and Oceans as well as North Shore Streamkeepers;
- Commented on the importance of educating the public on watersheds;
- Thanked District staff for working with other levels of government and volunteers;
- Suggested focusing on enhancing natural assets; and,
- · Confirmed that some creeks are more vulnerable.

### 5. ADJOURNMENT

### MOVED by Councillor MURI SECONDED by Councillor HANSON THAT the June 20, 2017 Council Workshop is adjourned.

CARRIED (6:50 pm)

May Jim Hanson Acting Major

Municipal Clerk