AGENDA

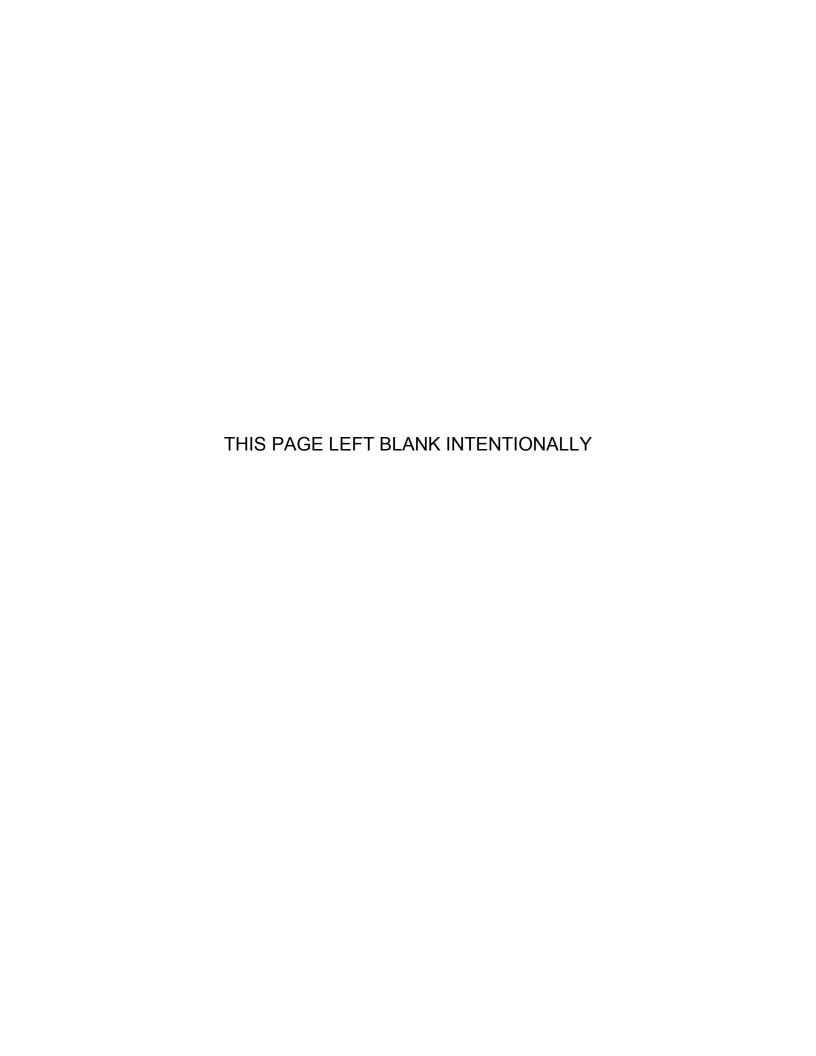
COMMITTEE OF THE WHOLE

Monday, November 25, 2013 5:00 p.m. Committee Room, Municipal Hall 355 West Queens Road, North Vancouver, BC

Council Members:

Mayor Richard Walton
Councillor Roger Bassam
Councillor Robin Hicks
Councillor Mike Little
Councillor Doug MacKay-Dunn
Councillor Lisa Muri
Councillor Alan Nixon





District of North Vancouver

NORTH VANCOUVER

355 West Queens Road, North Vancouver, BC, Canada V7N 4N5 604-990-2311

www.dnv.org

COMMITTEE OF THE WHOLE

7:00 p.m.
Monday, November 25, 2013
Committee Room, Municipal Hall,
355 West Queens Road, North Vancouver

AGENDA

1. ADOPTION OF THE AGENDA

1.1. November 25, 2013 Committee of the Whole Agenda

Recommendation:

THAT the agenda for the November 25, 2013 Committee of the Whole be adopted as circulated, including the addition of any items listed in the agenda addendum.

2. ADOPTION OF MINUTES

2.1. September 16, 2013 Committee of the Whole

p. 7-10

Recommendation:

THAT the minutes of the September 16, 2013 Committee of the Whole meeting previously adopted be amended by adding the following to section 3.1:

"Council requested that the Woodcroft community be included in the consultation. Council also requested that staff investigate the possibility of one way traffic in the laneways."

2.2. October 29, 2013 Committee of the Whole

p. 11-17

Recommendation:

THAT the minutes of the October 29, 2013 Committee of the Whole meeting be adopted.

3. REPORTS FROM COUNCIL OR STAFF

3.1. Developing a Climate Adaption Strategy for the District of North Vancouver

p. 21-26

File No. 13.6770.01/005.000

Recommendation:

THAT it be recommended to Council:

THAT the report of the Section Manager – Environmental Sustainability, dated November 14, 2013 entitled Developing a Climate Adaption Strategy for the District of North Vancouver be received for information.

3.2. Kinder Morgan File No.

Material to be circulated via agenda addendum.

4. PUBLIC INPUT

(maximum of ten minutes total)

5. RISE AND REPORT

Recommendation:

THAT the November 25, 2013 Committee of the Whole rise and report.

MINUTES

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DISTRICT OF NORTH VANCOUVER COMMITTEE OF THE WHOLE

Minutes of the Committee of the Whole Meeting of the Council for the District of North Vancouver held at 7:09 p.m. on Monday, September 16, 2013 in the Committee Room of the District Hall, 355 West Queens Road, North Vancouver, British Columbia.

Present: Mayor R. Walton

Councillor R. Bassam Councillor R. Hicks Councillor M. Little Councillor L. Muri Councillor A. Nixon

Absent: Councillor D. MacKay-Dunn

Staff: Mr. D. Stuart, Chief Administrative Officer

Mr. B. Bydwell, General Manager – Planning, Properties & Permits Mr. G. Joyce, General Manager – Engineering, Parks & Facilities

Mr. J. Gordon, Manager – Administrative Services Ms. E. Geddes, Section Manager – Transportation

Ms. T. Smith, Transportation Planner Ms. L. Brick, Confidential Council Clerk

Staff advised that the recording system in the Committee Room has been upgraded to provide a higher quality product for viewing on the internet.

1. ADOPTION OF THE AGENDA

1.1. September 16, 2013 Committee of the Whole Agenda

MOVED by Councillor LITTLE SECONDED by Councillor MURI

THAT the agenda for the September 16, 2013 Committee of the Whole be adopted as circulated, including the addition of any items listed in the agenda addendum.

CARRIED

2. ADOPTION OF MINUTES

2.1. July 8, 2013 Committee of the Whole

MOVED by Councillor MURI SECONDED by Councillor LITTLE

THAT the minutes of the July 8, 2013 Committee of the Whole meeting be adopted.

CARRIED

3. REPORTS FROM COUNCIL OR STAFF

3.1. 2013 Transportation Investments & 2014 Transportation Priorities File No. 16.8620.01/001.000

Ms. Erica Geddes, Section Manager – Transportation, provided an overview of the top priority projects identified in the 2012 Transportation Plan and reviewed the work completed in 2013. Council discussed the Marine Drive transportation and streetscape design; commenting on the need for increased planning for parking for Marine Drive. Staff noted that this item will be coming forward to Council in the near future.

Staff reviewed the 2013 Transportation Projects:

- Mt. Seymour Parkway widening for bike lanes staff commented that the
 benefits have not yet been realized as Phase 2 has not yet been built, staff
 noted that there have been some issues with grants and the work is being
 designed so that it does not encroach on reserve lands and they are
 addressing landscaping issues;
- 29th Street & William Avenue curb bulges staff advised that the project was postponed in 2012 and may be brought forward for completion in 2014. Council discussed the option of leaving this intersection in a temporary condition until 2014 and the possibility of creating a cut-through for bicycles.
- Speed Reader Boards staff advised that the preliminary data indicates they
 have been effective at reducing speed where they have been installed. ICBC
 is currently compiling the results and the full report will be available in the
 future.

Council requested further information regarding the Metro Vancouver watermain project on Capilano Road; staff advised that a link can be provided from the District's web page to the Metro Vancouver project information site.

Council discussed overgrown hedges on sidewalks and roadways where the hedges are creating hazardous conditions. Staff confirmed that the current policy is to respond to residential complaints regarding hedges and notify residents of the requirement to maintain their hedges.

Council discussed the Panorama Drive parking restrictions, staff advised that parking restrictions have been in effect for a few months and they will be meeting with residents to review the results of the implemented changes.

Ms. Geddes reviewed the proposed capital projects for 2014, understanding that these projects will still need to be considered along with all other capital submissions as part of the District's regular process:

- Road projects for submission include the Philip Overpass, rail crossing upgrades and the widening and replacement of the Keith Road bridge;
- Cycling projects proposed for 2014 include Mountain Highway at Arborlynn to permit cycling on sidewalks, as well as signs and markings in various locations in the District:

Key pedestrian and traffic calming projects to be brought forward for consideration in 2014 include Fullerton Avenue traffic calming plan and the Spirit Trail Central Section; and,

Councillor LITTLE left the meeting at 7:59 pm and returned at 8:03 pm.

Street lights including improved pedestrian street light infrastructure at Kirkstone and Rufus and three new street lights on East 27th Street.

Council noted that it would be beneficial to look at opportunities to introduce a second travel lane through the Lynn Valley interchange as part of the Lynn Valley bike lane project. Ms. Geddes advised that staff intend to meet with Ministry of Transportation to explore the feasibility of this project.

Ms. Geddes noted that staff will report back to Council on Spirit Trail planning. Council discussed an interest in being engaged in a hands-on manner, including looking at routing to Deep Cove and considering routing options on Dollarton.

Council discussed renaming options of the interchange when Fern Street is closed; staff informed Council that the Ministry has indicated a preference that it be named "Lillooet Road".

In conclusion staff advised that other possible 2014 activities will also include:

- Community education partnerships;
- School safety study (1 or 2 new schools);
- Deep Cove parking and circulation study;
- Parking wayfinding study;
- Review of transportation data;
- Upper Mountain Highway before/after parking study; and,
- Bus shelter contract renewal.

Council discussed interest in information about how new Broadview signal will function.

MOVED by Councillor MURI SECONDED by Councillor BASSAM

THAT it be recommended to Council:

THAT the September 5, 2013 memo of the Section Manager -Transportation be received for information.

CARRIED

4. **PUBLIC INPUT**

4.1 Mr. Corrie Kost, 2800 Block Colwood Drive:

- Commented 2013/2014 summary of project costs;
- Expressed concern regarding the bike lanes; and,
- Requested staff raise the speed limit on Capilano Road.

4.2 Mr. Rod Marining, 1200 Block East Keith Road

- Requested the public be provided opportunities for involvement of transportation planning for the Seymour OCP; and,
- Expressed concern regarding a proposed off ramp that may be considered by the Ministry of Transportation and Infrastructure, from Highway 1 to Brooksbank Avenue at the bottom of the Cut.

5. RISE AND REPORT

MOVED by Councillor MURI SECONDED by Councillor BASSAM

THAT the September 16, 2013 Committee of the Whole rise and report.

CARRIED (8:20 pm)

Mayor

Me little.

Municipal Clerk

DISTRICT OF NORTH VANCOUVER COMMITTEE OF THE WHOLE

Minutes of the Committee of the Whole Meeting for the District of North Vancouver held at 5:05 p.m. on Tuesday, October 29, 2013 in the Committee Room of the District Hall, 355 West Queens Road, North Vancouver, British Columbia.

Present: Mayor R. Walton

Councillor R. Bassam Councillor R. Hicks Councillor M. Little

Councillor D. MacKay-Dunn (5:21 pm)

Councillor L. Muri Councillor A. Nixon

Staff: Mr. D. Stuart, Chief Administrative Officer

Mr. B. Bydwell, General Manager – Planning, Properties & Permits Mr. G. Joyce, General Manager – Engineering, Parks & Facilities

Ms. C. Grant, Manager – Corporate Planning & Projects

Ms. N. Letchford, Deputy Municipal Clerk

Ms. J. Pavey, Section Manager – Environmental Sustainability

Ms. L. Brick, Confidential Council Clerk

Also in

Attendance: Ms. Carol Mason, CAO, Metro Vancouver

Ms. Marie Griggs, Manager, Public Involvement, Metro Vancouver Ms. Christine Banham, Chair, Lions Gate Public Advisory Committee Ms. Diana Sollner, Vice-Chair, Lions Gate Public Advisory Committee

Mr. Fred Nenninger, Project Manager, Metro Vancouver

1. ADOPTION OF THE AGENDA

1.1. October 29, 2013 Committee of the Whole Agenda

MOVED by Councillor LITTLE SECONDED by Councillor BASSAM

THAT the agenda for the October 29, 2013 Committee of the Whole be adopted as circulated, including the addition of any items listed in the agenda addendum.

CARRIED

2. ADOPTION OF MINUTES

Nil

3. REPORTS FROM COUNCIL OR STAFF

3.1. Metro Vancouver Lions Gate Secondary Wastewater Treatment Plant (LGSWWTP) Project Definition File No.

3.1.1 LGSWWTP Engagement and Consultation Process

Marie Griggs, Manager, Public Involvement, Metro Vancouver

Ms. Marie Griggs, Manager, Public Involvement, Metro Vancouver, provided an overview of the consultation and engagement program noting that there have been a total of 95 meetings held with the public and local government officials.

Communication methods during the engagement process included an on-line survey, newspaper ads, door-to-door surveys, and attendance at special events. It was noted that the majority of those surveyed were satisfied with the design and the process and that a good foundation of support and engagement with the community has been established. The regional interest focused primarily on cost-sharing and overall project costs while the local interest focused on odour, noise, and air quality.

The next steps include:

- Presentation of the indicative design and consultation reports to the Utilities Committee on November 7 and Metro Vancouver Board on November 15;
- Creation of a Board Sub-committee on delivery and construction 2014; and,
- Consultation on design and construction 2014 2020.

In response to Council comments, Ms. Griggs advised that they worked with leaders within the community with discussion focused on how to incorporate community interest and engagement given the fact that a new sewage treatment plant would be built at the identified site.

3.1.2 Lions Gate Public Advisory Committee

Christine Banham, Chair; Diana Sollner, Vice-Chair

Ms. Christine Banham, Chair, Lions Gate Public Advisory Committee (LGPAC) and Ms. Diana Sollner, Vice Chair, reported that the Advisory Committee membership represented a cross section of interested parties including the Norgate Community, environment, business, and non-affiliated citizens.

Councillor MACKAY-DUNN arrived at this point in the proceedings.

Meetings and workshops were held during 2012 and 2013 including a tour of two wastewater treatment plants in Washington State. The LGPAC provided advice to Metro Vancouver during the project definition phase related to the effects on North Shore communities of the planning and construction of the treatment plant. The final report will be included with the package to be submitted on November 7 to the Utilities Commission.

The recommendations from the LGPAC include:

- Odour control is a major priority for the community achieving a no-odour standard is recommended;
- Emissions from the co-generation and flaring of excess biogas is a concernan additional air quality monitoring emissions station within the community is recommended;

- Noise from the industrial area is a concern the indicative design of the building is supported to mitigate sound reflection;
- Restrictions for truck traffic to daytime hours is recommended;
- Construction plans were not discussed during the project definition phase; however, vibration concerns and their effect on the community were expressed. The LGPAC recommends that the consultation process continue during the construction phase;
- Recommending additional consideration for building treatment to improve aesthetics;
- Support public access to the grassed roof area and public access to building for research and educational purposes; and,
- Support consideration of revenue generation activities for roof space.

The LGPAC supports the indicative design that provides for secondary treatment allowing for:

- Future higher level of treatment if required;
- On-site digestion to reduce the mass of bio-solids:
- Proactive public education and source control to reduce contaminants;
- · Air emission containment and monitoring;
- Consideration of shoreline habitat enhancement, subject to cost;
- Energy efficient technologies where practical and cost efficient;
- Plant design that addresses risk of sea level rise and catastrophic events:
- Economic concerns are raised regarding the impacts on ratepayers and the LGPAC questioned the financial model assumptions as they may differ from market-based modeling;
- Recommend that the cost be spread out over a longer period as there is limited growth on the North Shore and support exploring Federal and Provincial Government funding options;
- Most LGPAC members support considering a P3 delivery model; and,
- Support for proactive public education to reduce contaminants in the waste stream.

In conclusion there is general support for the design; however, the final design should address in more detail:

- Odour control;
- Procurement delivery model;
- Construction plans and impact mitigation;
- Fair cost allocation to taxpayers; and,
- Proactive public education program.

Council thanked the LGPAC members and volunteers for their hard work on the project.

Council Discussion:

Metro Vancouver staff advised that following the upgrade the water coming out of the plant will be cleaner than current treatment and that the proposed design will use the same outfall pipes. The life expectancy of the building is 80 years; the equipment will be upgraded or replaced as needed during that time. Staff noted that there could be an opportunity to have a peer review conducted on the estimated costs of piping waste to an alternate location. It was noted that there are also other factors to consider with this option including passing through the City of Vancouver and the Musqueum First Nation, as well as laying pipe on the sea bed.

Ms. Griggs advised that the terms of reference for the LGPAC are structured such that they can continue forward throughout the different phases of the project and act as a monitoring committee similar in structure to the existing Community Monitoring Advisory Committee.

MV compared three project delivery alternatives with the assistance of KPMG:

- Design-Bid-Build approach: traditional contracting approach;
- Design-Build-Finance: Design build with an extended warranty period; and,
- Design-Bid-Build-Finance-Operate-Maintain: A full public private partnership.

Metro Vancouver staff advised that a subcommittee has been formed to review options and business cases and to recommend the procurement approach for the design and construction phase. Council requested that their oversight concerns be expressed to the Board chair. Council urged that Metro Vancouver Finance Committee be represented on the subcommittee.

3.1.3 LGSWWTP Project Definition

Fred Nenninger, Project Manager, Wastewater Secondary Treatment Upgrades, Metro Vancouver

Mr. Fred Nenninger, Project Manager, Wastewater Secondary Treatment Upgrades, Metro Vancouver, reported that the treatment plant being constructed is a secondary treatment plant 2 km east of the existing plant on a site between 1st Street and Fell Avenue and that the existing outfall pipe will be maintained.

Key project objectives:

- Secondary Wastewater treatment;
- Sustainability (environment, social, economic);
- Integrated resource recover (energy production for the North Shore); and,
- Community Integration.

The project definition phase is coming to a conclusion and the next phase will be the design and construction phase from 2014 to 2020. The final phase will be the decommissioning of the old plant and returning the land to the Squamish First Nation.

The indicative design specifications include:

- Secondary treatment for 2x average dry weather flow;
- 320 MLD wet weather capacity;
- Biogas production and energy recovery;
- Low grade effluent heat recovery;
- Reclaimed water recovery to offset the need for high quality GVWD water which can be used at plant or by industry; and,

 Phosphorus recovery not currently a strong business case for this but did leave space for future potential.

Odour issues will be addressed through activated carbon scrubbers. The plant is completely covered and will not discharge any air which has not been processed. Discussion is ensuing regarding a monitoring station in the community, but cannot be confirmed at this time. Measures are being taken within the plant to minimize noise and vibrations with acoustic enclosures around fans.

Council discussed the right-of-way at the end of the site; it was noted that rail crossing regulations require that it be closed except for emergency access and special access to industrial sites for large scale needs.

Mr. David Stuart, Chief Administrative Officer, noted that the three outstanding indicative design subjects for future discussion are:

- What the east park will look like;
- How to add value to the roof top area; and,
- The look of the remaining part of the wall which is facing the community.

Mr. Nenninger advised that there are two applications available for funding through the Federal government:

Building Canada

- Announced in 2013 budget;
- o Application process to be finalized, municipal projects identified;
- \$10 billion over 10 years for the country;
- o The process will be opened in 2014; and,
- o For projects that are valued at over 100 million there is a screening process to identify if it is a candidate for a P3 process.

P3 Canada

- Funding project life extended for another 5 years;
- Encourage projects that are full public private partnerships;
- o Funding is available in the amount of 25%.

In response to a query from Council, Metro Vancouver staff confirmed that the Board will not allow any contracts to be awarded unless funding is in place.

MOVED by Councillor BASSAM SECONDED by Councillor NIXON

THAT it be recommended to Council:

THAT the presentations by Metro Vancouver staff be received for information.

CARRIED

4. PUBLIC INPUT

4.1 Mr. Hazen Colbert:

- Expressed concern regarding the financing of the project;
- Suggested that there should be much more community engagement in the consultation;
- Commented on the anticipated \$3 million annual increase in operational expenses; and,
- Commented that the City of Victoria is going through the same process and have received a commitment from the Provincial Government for funding.

4.2 Mr. Peter Thompson:

- Spoke as a member of the committee and commented on the experiences of the committee and the process; and,
- Advised that no odour is a non-negotiable requirement for the community and expressed concern that this issue may be impacted if costs start to change.

4.3 Mr. Corrie Kost:

- Sought confirmation that two monitoring stations will be erected;
- Queried the maximum wet to dry flow and what the historic highs are;
- Commented on the increase in operational expenses; and,
- Sought clarification on final costs.

Metro Vancouver staff advised that there is a commitment for a monitoring station on site and a second community monitoring station is still under debate.

Staff noted that the wet weather to dry ratio is 4:1; it is anticipated that the inflow and infiltration programs will decrease this ratio. Pilot programs are being conducted as well as a cost benefit analysis.

4.4 Mr. Jan Timmer:

- Spoke as a member of the LGPAC;
- Commented on concerns expressed by members of the group regarding process and the response from Metro Vancouver; and,
- Commented on the tours of Brightwater and LOTT plants in Olympia and their education components.

In response to a query from Council, Metro Vancouver staff advised that the United States has had a secondary treatment standard since 1974; Canada implemented the standard in 2009.

Councillor LITTLE left the meeting at this point in the proceedings. (7:06 pm)

The cost allocation issue will be reported back to the Utilities Committee at the next meeting. All of the liquid waste costs projected out to 2030 will be included in the staff report for next week. Metro Vancouver staff will be able to translate the numbers to the municipal costs once they have the raw numbers that will be coming forward.

Councillor MURI left the meeting at this point in the proceedings. (7:18 pm)

In response to a query from Council, Metro Vancouver staff advised that there is an environmental monitoring program around the treatment plants that includes ambient monitoring in Burrard Inlet. The monitoring committee reports that there are no identified

environmental risks at this time; the treatment plant decisions are based on a base line of sanitary treatment improvement, not environmental need.

Councillor MACKAY-DUNN left the meeting at 7:32 pm and returned at 7:32 pm.

Council discussed their concerns with the debt financing for the project over 15 years rather than an amortization period of 25 years; it was noted that the actual life expectancy of the building is anticipated to be 50 years. Ms. Carol Mason advised that Metro Vancouver is introducing software to manage capital assets.

5. RISE AND REPORT

MOVED by Councillor BASSAM SECONDED by Councillor NIXON

THAT the October 29, 2013 Committee of the Whole rise and report.

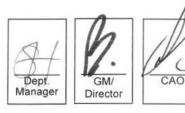
		CARRIED (7:35 pm)
Mayor	Municipal Clerk	

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REPORTS

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AGEN	DA INFORMATION
Committee of the Whole	Date: NOV. 25 . 2013
☐ Finance & Audit	Date:
Advisory Oversight	Date:
Other:	Date:



The District of North Vancouver REPORT TO COMMITTEE OF THE WHOLE

November 14, 2013 File: 13.6770.01/005.000

AUTHOR: Julie Pavey, Section Manager – Environmental Sustainability

SUBJECT: Developing a Climate Adaptation Strategy for the District of North Vancouver

RECOMMENDATION:

THAT the Committee of the Whole recommend to Council:

THAT the report of the Section Manager – Environmental Sustainability, dated November 14, 2013, *Developing a Climate Adaption Strategy for the District of North Vancouver*, be received for information.

REASON FOR REPORT:

To provide Council with information on the development of a Climate Adaption Strategy as part of the implementation of the Official Community Plan.

SUMMARY:

At the November 25th, 2013 Committee of the Whole meeting of Council, staff will present an overview of a proposed inter-departmental, multi-year initiative to prepare a Climate Adaptation Strategy (the "Strategy") consistent with the International Council on Local Environmental Initiatives (ICLEI) framework being adopted by many member municipalities in Metro Vancouver. This initiative is part of the efforts to implement the District's Official Community Plan (OCP). Council's awareness of and input on this initiative is being sought at this time.

BACKGROUND:

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. The IPCC was set up in 1988 by the World Meteorological Organization (WMO) and United Nations Environmental Program (UNEP) to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation. Scientists on the IPCC have pronounced the warming of the world's climate as "unequivocal" in their analyses of rising average air and ocean temperatures, increased concentrations of greenhouse gases (GHGs) in the atmosphere, sea level rise, changing precipitation patterns, and extensive melting of icecaps and glaciers worldwide (IPCC Assessment Report AR5, 2013).

November 14, 2013 Page 2

In response to climate change, there is a need for all levels of government to reduce GHG emissions. The District has set a 2030 target for a 33% reduction in community GHG emissions in the OCP. There are a number of initiatives and reduction measures for mitigation proposed or underway including buildings, district energy systems, renewable energy, waste diversion, transportation planning and support for low carbon vehicles.

While work is underway to reduce GHG emissions that contribute to climate change, the District must prepare for unavoidable impacts through adaptation. Climate adaptation planning is an emerging field of study in Canada, with local governments looking at adaptation issues in a coordinated and strategic way. The objective of climate change adaptation planning is to reduce risk where there are vulnerabilities and recognize benefits associated with climate variability and climate change. A robust Climate Adaptation Strategy can affect how infrastructure is planned and constructed, ensure community forests and ecosystems are managed to deal with changing climatic conditions, minimize negative impacts to our community and increase our resiliency to natural hazards.

The District has a number of efforts currently underway working towards adaptation from climate change impacts including:

- The protection of ecological health through the implementation of environmental development permit areas and guidelines for the protection of the natural environment, and streamside areas (OCP, Schedule B);
- The protection of development from natural hazards through the implementation of natural hazard development permit areas and guidelines (OCP, Schedule B);
- The Natural Hazards Management Program which facilitates mitigation measures to reduce the risks of landslides, flood, debris flow and forest interface fire;
- The Community Wildfire Protection Plan which supports the mitigation of risk from wildfire in the wildland urban interface to improve community safety;
- Flood risk assessments including joint modelling of overland flood risk and sea level rise with the City of North Vancouver;
- Utility and infrastructure Planning which includes drainage and stormwater planning with modelling to include changing precipitation patterns and storm intensities; and
- The Asset Management Program which provides a mechanism to look at infrastructure planning over a long time frame (i.e. 40-50 years).

There are considerable efforts underway in the region to collaborate on climate action (mitigation and adaptation). Staff participate in a number of regional environmental and climate action planning table as well as emergency planning and coordination.

However, while there are a number of the proactive initiatives underway, the District lacks a comprehensive and integrated Climate Adaptation Strategy to inform and support land use, utility, infrastructure and environmental planning and development initiatives.

November 14, 2013 Page 3

EXISTING POLICY:

The need to prepare a Climate Adaptation Strategy was recognized during stakeholder and community engagement and technical planning during the OCP process. The OCP includes a commitment to develop a Climate Adaptation Strategy and has a number of existing policies which reference climate change including:

OCP, 10.4 Climate Change Adaptation

The District's objective is to adapt proactively to climate change. This means integrating a climate change perspective into our infrastructure design and maintenance, ecosystem management and emergency preparedness.

- Work with federal, provincial, North Shore municipal and First Nations governments, Metro Vancouver, and other partners to assess potential climate change risks to our community to inform asset management decisions and to guide community and infrastructure planning and design.
- Encourage the management of shoreline area to adapt to potential climate change impacts as well as to protect ecologically sensitive areas.
- Consider climate change implications in environmental management efforts to conserve biodiversity and enhance forest health

OCP, 9.4 Natural Hazards

The District's objective is to reduce and mitigate the risk associated with natural hazards. Development in areas prone to natural hazards requires special consideration due to concerns for personal safety and risk of property damage as well as potential impacts to natural environments.

OCP, Schedule B, Development Permit Areas

Development Permit Areas (DPAs) in Schedule B of the OCP provide guidelines to:

- Protect development from hazardous conditions (flood, steep slope and wildfire);
- · Protect the natural environment, its ecosystems and biodiversity; and
- Establish objectives to promote energy conservation, water conservation and reduce GHGs (mitigation).

There are a number of policy areas that may be affected by climate change including storm drainage infrastructure design and management, environmental protection, community forests, development standards, natural hazards and emergency response. This initiative will increase staff capacity to review existing policies through the vulnerability and risk assessments that will be part of this project. The Climate Adaptation Strategy will also provide a long-term framework using a risk-based approach to prioritize actions for implementation and support grant applications.

ANALYSIS:

The International Council for Local Environmental Initiatives (ICLEI Canada – Local Governments for Sustainability) launched a new Climate Adaptation Planning Initiative in 2011 which offers participating cities the opportunity to plan for anticipated impacts related to local and regional climate change. Participating cities work in peer groups with facilitation, support, and direction from ICLEI Canada staff.

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For a fee, ICLEI will provide technical support at all stages of the initiative, from impact scoping and baseline reports, to risk assessment, to establishing indicators, and, finally, with implementation. This support over the next 2 years will include webinars/webshops, in person meetings and quarterly newsletters as well as online and phone support from ICLEI staff as needed. ICLEI will also facilitate a variety of online interaction opportunities across Canada where participants will be able to share their experiences and lessons learned.

Under this initiative, District staff, regional partners and ICLEI staff work individually (as municipal staff teams) and collaboratively on the following tasks:

- Milestone One Initiate Adaptation Planning
- Milestone Two Research
- Milestone Three Plan
- Milestone Four Implement
- Milestone Five Monitor

Locally, Vancouver, Delta, Surrey, City of North Vancouver and Metro Vancouver have already worked together on the five ICLEI planning milestones individually with their respective staff teams and collaboratively where there are issues of regional significance and/or where sharing insights and approaches benefits all participants. The ICLEI framework is considered a best practice and has been adopted by a number of Metro Vancouver municipalities.

By participating in this initiative the District would accomplish the following:

- Capacity Building: Collaborating and learning with other cities in a new area of
 planning will build the District's expertise and knowledge for addressing anticipated
 climate change issues. The development of the Climate Change Strategy with the
 involvement of a staff inter-departmental working group will be an effective approach
 as it draws expertise from key departments, involves learning and capacity-building to
 effectively deliver a climate adaptation strategy and will prioritize actions to be linked
 to budget planning
- Regional Significance: Many anticipated climate change induced impacts will require regional cooperation and it will be efficient if we have approached the development of our climate change strategies using a similar approach.
- Leadership and Profile: Participation in this initiative offers the opportunity to demonstrate its ongoing leadership and commitment to ensuring the long term sustainability of the District of North Vancouver and the region.

The framework developed by ICLEI is a current best practice in the region for climate adaptation strategies. Adopting this framework positions the District to coordinate with other jurisdictions in the region and to potentially attract funding for adaptation measures.

Timing/Approval Process:

The work program to develop a Climate Adaptation Strategy will begin in 2014 and anticipated to be completed in two years. It will be part of the 2014-2015 work program and budget for District staff to be approved by Council.

November 14, 2013 Page 5

Concurrence:

There were three interdepartmental workshops in 2013 that included Planning, Environment, Engineering and Parks, Utilities, Finance and Risk Management, North Shore Emergency Management Office (NSEMO). Staff reviewed modelled climate change projections for the Metro Vancouver region, discussed examples of climate change adaptation work already underway, reviewed the ICLEI framework and examples of climate adaptation strategies from other local governments. Staff are supportive of undertaking this inter-departmental initiative to develop a Climate Adaptation Strategy following the ICLEI framework.

Financial Impacts:

Funding request will be made as part of 2014 Financial Plan. The financial considerations for the development of the Climate Action Strategy include existing staff time and temporary staff resources (0.3 FTE) to support the initiative. The ICLEI framework tools and technical support will cost \$15k annually for 2 years.

Liability/Risk:

Proactive climate change adaptation planning will enhance the District's existing risk management by anticipating future risks based on best available science and provide measures to reduce the community impacts. Timely and strategic adaptation makes economic, social and environmental sense, and is expected to be far less costly than inaction and delay.

Social Policy Implications:

Climate change will affect different communities in different ways and adaptation planning is central to community resiliency. The District's poor and vulnerable populations may be particularly impacted by climate change and potential hazards due to lack of/or inadequate shelter, dry clothing and food; medical health related needs; mobility challenges and/or limited access to transportation.

Environmental Impact:

There is a growing body of scientific research showing that climate change will have a profound effect on BC forests and ecosystems (Association of BC Forestry Professionals position statement, 2008). Climate change is identified as one of the main threats to biodiversity in BC as there are animal and plant species that may not be able to adapt fast enough to changing temperature and precipitation patterns. There is an additional threat that climate change will further impact the spread of invasive plant and animals which are proving to be more adept at survival than native species.

Public Input:

A public engagement process will be developed and implemented for the Climate Adaptation Strategy. Advice from District Communications and from the OCP Implementation Committee will be sought to develop this process.

Staff anticipates that public engagement and outreach will be provided through social media, public service announcements, stakeholder working groups, and community dialogue.

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Conclusion:

The proposed inter-departmental, multi-year initiative to prepare a Climate Adaptation Strategy consistent with the International Council on Local Environmental Initiatives (ICLEI) framework will provide a comprehensive and integrated strategy that informs and supports the implementation of the District's Official Community Plan (OCP).

Respectfully submitted,

Julie Povez.

Julie Pavey

Section Manager Environmental Sustainability

	REVIEWED WITH:	
Sustainable Community Dev.	☐ Clerk's Office	External Agencies:
☐ Development Services	☐ Communications	☐ Library Board
☐ Utilities	☐ Finance	☐ NS Health
☐ Engineering Operations	☐ Fire Services	RCMP
☐ Parks & Environment	□ ITS	☐ Recreation Com.
☐ Economic Development	☐ Solicitor	☐ Museum & Arch.
☐ Human resources	☐ GIS	Other:

Kinder Morgan

Material to be circulated via agenda addendum.

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