

Deborah Liske

Subject: FW: Vegetation Management Strategy - Next Step
Attachments: 08 - 27 - CRD - UBCM Funding - RVMS.pdf

From: Tina Neurauter [mailto:tneurauter@highlands.ca]

Sent: August-29-19 12:31 PM

To: Emilie Gorman; Rachel Dumas; tammie van swieten; Tina Hansen; Curt Kingsley; dhopkins@oakbay.ca; Sandi Nelson; Carolyn Mushata; Elena Bolster; Sarah Jones

Subject: Vegetation Management Strategy - Next Step

Good morning,

Enclosed please find information regarding the next proposed steps for this project. If any additional information is required Councillor Gord Baird is the lead on this initiative (he has been working with the CRD and the Province) and would be happy to answer any addition questions. I've addressed the letter as I have so that you are kept up to date with the other municipalities who have shown interest in the project as well.

A hard copy will follow.

Thank you,

Tina



Tina Neurauter
Corporate Officer

District Office
 1980 Millstream Road
 Victoria, BC V9C 6H1
 E tneurauter@highlands.ca
 P 250 474 1773 | F 250 474 3677
www.highlands.ca

CORPORATION OF THE TOWNSHIP OF ESQUIMALT		
For Information:		
<input type="checkbox"/> CAO	<input type="checkbox"/> Mayor/Council	
<input type="checkbox"/>		
RECEIVED: AUG 30 2019		
Referred: <i>Rachel</i>		
<input type="checkbox"/> For Action	<input type="checkbox"/> For Response	<input type="checkbox"/> COTW
<input type="checkbox"/> For Report	<input checked="" type="checkbox"/> Council Agenda	<input type="checkbox"/> IC

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File: 0400.05.01

August 27, 2019

Capital Regional District
Attention: Emile Gorman
625 Fisgard Street
Victoria, BC V8W 1R7

Township of Esquimalt
Attention: Rachel Dumas
1229 Esquimalt Road
Esquimalt, BC V9A 3P1

District of Metchosin
Attention: Tammie Van Swieten
4450 Happy Valley Road
Victoria, BC V9C 3Z3

District of North Saanich
Attention: Curt Kingsley
1620 Mills Road
North Saanich, BC V8L 5S9

District of Oak Bay
Attention: Deb Hopkins
2167 Oak Bay Avenue
Victoria, BC V8R 1G2

Town of Sidney
Attention: Sandi Nelson
2440 Sidney Avenue
Sidney, BC V8L 1Y7

District of Sooke
Attention: Carolyn Mushata,
Laura Hooper and Matt Barney
2205 Otter Point Road
Sooke, BC V9Z 1J2

Town of View Royal
Attention: Elena Bolster and
Sara Jones
45 View Royal Avenue
Victoria, BC V9B 1A6

Dear Colleagues:

RE: REGIONAL VEGETATION MANAGEMENT STRATEGY

On January 24, 2019, your local government received a letter from the District of Highlands regarding a proposed joint grant application to UBCM's Community Resiliency Investment Program (2020 intake) for the development of a Regional Vegetation Management Strategy. The intention was for the CRD to undertake this initiative on behalf of the interested local governments in the region.

The CRD Board endorsed the initiative, and through collaboration with various stakeholders, including the Province of BC, a path forward for the proposed development of a regional strategy has been laid out.

The purpose of this letter is to engage those communities that indicated interest in being co-applicants for a funding application to develop a regional strategy, inform them of the proposed approach to engage a consultant to undertake the work with the interested local government partners, and obtain any feedback or answer any questions in this regard.

.../2

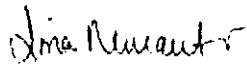


Please refer to the attached Draft outline for a request for proposals from qualified consultants to carry out the work.

Should you or the appropriate contact person in your local government have any input regarding the proposed outline, or should any questions arise, please contact District of Highlands Councillor Gord Baird via the undersigned.

Your participation in this initiative is appreciated.

Yours truly,



Tina Neurauter
Corporate Officer



Draft Proposal Outline

The Services

The contractor shall provide the following services:

Phase 1

Meet with key staff and stakeholders to:

- confirm project objectives,
- lead the creation of a project workplan including milestones and deliverables, and
- identify the project planning team and associated terms of reference.

Phase 2

- Gather and review information regarding planning and policy information and spatial data to support the context of this project.
- Meet with planning team to review this information and confirm the context of the project.
- Jointly with planning team, meet with stakeholders, First Nations, and local governments, as necessary, to review the context of the project and solicit input.

Phase 3

- Review the information and data gathered in Phase 2 to identify values at risk within and adjacent to CRD.
- Develop, implement and lead a one-day values workshop to confirm and rank the values at risk. Participants at this workshop will be identified by planning team and will include provincial, local, and regional government staff, First Nations and key stakeholders.
- Utilize BC Wildfire Service (BCWS) Provincial Strategic Threat Analysis data, CRD Parks data, BCWS specialist knowledge, and Forest Professional input regarding wildfire hazards within and adjacent to CRD. This information will be used to inform the risk analysis and create the management strategies.
- Meet with planning team as required.
- Please note: a formal burn probability analysis is not part of this project.

Phase 4

- Using the information gathered in Phase 3, complete an analysis of the wildfire risks to the identified values and the planning team can influence:
 1. the likelihood of wildfire events,
 2. impacts to the identified values.
- Develop management strategies that address regional wildfire resiliency and adaptation, communications, education, prevention, mitigation, response, and recovery related to wildfire risk within the CRD. These strategies must identify actions, key personnel, partners, and proposed timelines.
- Review community evacuation plans and identify concerns associated with overlapping evacuation routes.
- Develop Firesmart/Vegetation Management strategies for specified areas (vegetation types)
- Meet with the planning team as required.

Phase 5

- Create a draft report that encompasses all the information from the 4 phases above.
- Review the draft report with the planning team and incorporate any updates to the plan.
- Submit a final report to the planning team



Key Personnel

The Services shall be overseen and the project team lead by Registered Forest Professional(s) from the Associated of BC Forest Professionals (ABCFP).

Deliverables

A final report encompassing all the information gathered, analysed and prepared as identified in the Services above. A document that can be utilized for inclusion in a Staff Report to the Parks and Environment Committee.

Timeframes

The Phase 1 meeting with planning team must occur by _____.

The Phase 3 values workshop must occur by _____.

The Phase 5 final report must be submitted to the planning team by _____.



Deborah Liske

Subject: FW: Please see the attached correspondence
Attachments: 01 24 - CRD - UBCM Funding.pdf; Regional Vegetation Management Strategy.pdf

From: Tina Neurauter [mailto:tneurauter@highlands.ca]
Sent: January-28-19 4:06 PM
To: Emilie Gorman
Cc: Liz Cornwell (Liz.Cornwell@csaanich.ca); Selina Williams; Anja Nurvo; Braden Hutchins; tvanswieten@metchoshin.ca; ckingsley@northsaanich.ca; 'Warren Jones'; angila.bains@saanich.ca; Sandi Nelson; cmushata@sooke.ca; prear@sooke.ca; Christine Havelka; Chris Coates; 'Elena Bolster'; Sarah Jones
Subject: Please see the attached correspondence

Good afternoon Emile,

Attached please find correspondence and a report from one of our Councillors regarding a joint funding opportunity. Please give me a call should you have any questions. Original will follow in mail.

Thanks,
Tina



Tina Neurauter
Corporate Officer
District Office
1980 Millstream Road
Victoria, BC V9C 6H1
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P 250 474 1773 | F 250 474 3677
www.highlands.ca

CORPORATION OF THE TOWNSHIP OF ESQUIMALT		
For Information:		
<input type="checkbox"/> CAO	<input type="checkbox"/> Mayor/Council	
<input type="checkbox"/>		
RECEIVED: JAN 28 2019		
Referred: <u>Anja</u>		
<input type="checkbox"/> For Action	<input type="checkbox"/> For Response	<input type="checkbox"/> COTW
<input type="checkbox"/> For Report	<input checked="" type="checkbox"/> Council Agenda	<input type="checkbox"/> IC

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File: 0530.01
January 24, 2019

Capital Regional District
625 Fisgard Street
Victoria, BC V8W 1R7

Atten: Emilie Gorman,
Manager, Legislative Services

Dear Ms. Gorman:

RE: REGIONAL VEGETATION MANAGEMENT STRATEGY

On Monday, January 21, 2019, Councillor Gord Baird presented Council with information regarding a potential joint grant application to UBCM's Community Resiliency Investment Program (2020 intake) from interested CRD municipalities regarding a "Regional Vegetation Management Strategy: A Regional Low Carbon Resilience (LCR) approach to address tree canopy death with respect to fire risk, flood mitigation, and carbon sequestration".

District of Highlands Council passed the following motion:

That staff be directed to write letters to the Capital Regional District and all member Local Governments requesting an indication of their interest in participating in a co-application submitted by the CRD on behalf of its members to UBCM's Community Resiliency Investment Program (2020 intake) for the development of a regional vegetation management strategy to assess the following: forest die-off, recommend alternative fire-resistant vegetation replacements, initiate a pilot project, and use the results to create a regional strategy, model policy and implementation plan,

and further, pending the responses from the CRD and member local governments, request that the CRD convene a meeting of interested parties to develop and submit an application.

The report from Councillor Gord Baird is attached for further information. Should you have any questions please contact the undersigned.

Yours truly,

Tina Neurauter
Corporate Officer

cc: CRD Local Governments (list attached)

- District of Central Saanich – Liz Cornwell
- City of Colwood – Selina Williams
- Township of Esquimalt – Anja Nurvo
- City of Langford – Braden Hutchins
- District of Metchosin – Tammie VanSwieten
- District of North Saanich – Curt Kingsley
- District of Oak Bay – Warren Jones
- District of Saanich – Angila Bains
- Town of Sidney – Sandi Nelson
- District of Sooke – Carolyn Mushata
- Town of View Royal – Sarah Jones





To Council
January 21, 2019

To: Council Members
From: Councillor Gord Baird

File: 0530.01
Date: January 16, 2019

Subject: Regional Vegetation Management Strategy: A Regional Low Carbon Resilience (LCR) approach to address tree canopy death with respect to fire risk, flood mitigation, and carbon sequestration

Our bio-region has observed an alarming increase in die-off of Douglas Firs and Cedar trees, both in number of tree deaths and speed of individual tree death. This has been predicted in climate models; however this climate impact is occurring much sooner than expected. Research from Northern California, Oregon and Washington has observed similar trends, with Oregon State having performed the most research to date.

The cause of the die-off is initiated by drought stress, which the trees are not able to overcome, that then leads to a variety of secondary afflictions from fir beetle to various fungi that take advantage of the weakened trees and expedite their death. The result is rapidly increasing areas of dead trees that become an increased fuel load in both the rural and urban areas.

These natural assets are relied upon for ecological services including temperature management, soil stabilization, storm water management, water filtration, air cleaning, and supporting intact wildlife habitat including fish bearing streams.

With hotter drier summers, fires move faster, burn hotter and are more destructive as recently witnessed in the past several years throughout BC, Washington, Oregon and most notably, California.

Fire Smart BC has been working to educate community policy makers that vegetation management is the single biggest action we can perform to reduce fire risk. Communities ravaged by fire have focused on fuel reduction and planting deciduous buffer strips in replacement of highly flammable coniferous forests to mitigate the wildfire interface to protect communities (Gov. of Alberta, 2012; Prov. of BC, n.d.; "Tree Species List - Wood Buffalo," n.d.).

In the CRD region we have been spared to date, but the risks associated with wildfire continue to rise. In addition to the direct human impacts including the potential loss of life, smoke inhalation, and infrastructure loss that wild fire poses, there are several other impacts often not considered:

- **Temperature moderation:** Loss of forest canopy leads to increased regional temperatures. Tree canopies provide the natural asset of keeping areas cooler – reducing energy use in cities, (Alexander & McDonald, 2014).
- **Storm water management and water filtration:** Increased soil erosion occurs due to direct rainfall upon soils that have lost the 'calming effect' that vegetation and tree canopies offer during heavy rain events. Additionally, damaged soils from wildfire are less infiltrative (due to less carbon) and hence more susceptible to soil erosion. Additionally, we observe less filtration of surface waters. We have seen repeatedly that flooding follows wildfires, (Moench & Fusaro, n.d.)
- **Ground and surface water contamination:** In areas of wildfire fighting activities, where retardants are used, we see rapid infiltration of retardants into aquifers, and hence we see Health Authorities across the province with new testing procedures. Fire retardants used in wildfire fighting are not the toxic halogenated ones we use on clothes, personal items, and

building materials but they will still render groundwater and surface waters non-potable until enough precipitation has occurred to flush them out the aquifers. This could result in rural areas with no access to potable water ("Island Health - Recommended Precautions for Water and Food Affected by Fire Retardants," n.d.)(Wilson, n.d.)

- **Impacts to Riparian areas:** Loss of stability and ecology in watersheds most notably impact the salmon bearing streams. Increased silty runoff due to lower canopy impairs spawning beds while decreased tree canopy increases stream temperatures. Increased stream temperatures lend to impaired fish spawning and lower stream levels and higher predation on fish species in streams.
- **Loss of wildlife habitat** for large areas.
- **Social and health Implications** of communities suffering impacts of wildfire show trends of higher drug and alcohol use, higher rates of domestic violence, and higher rates of mental illness. Mitigating risk is directly linked to maintaining the health of a community (Financial Post, In the Shadow of the Beast, 2018).
- **Loss of sequestered forest carbon:** The loss of the forest canopy is a loss of sequestered carbon. Using ecological methods to increase eco-sequestration is becoming a mature science, (Nijnik, 2010).
- **Loss of sequestered soil carbon:** The loss of forest canopy exposes the soil and results soil carbon loss that stems from lower soil moisture and enhanced nitrification of stored carbon, (Achat, Fortin, Landmann, Ringeval, & Augusto, 2015).

The Ask

Request the CRD and the participating municipalities co-apply for a grant application to the Community Resiliency Investment program's (CRI) Strategic Wildfire Prevention Initiative. This grant is up to \$100k per municipality, per year, and local/regional governments can co-apply and receive more funds. Potentially the region could leverage \$1.5 million over three years to fund a three-year, three phase regional Vegetation Management Strategy and draft Policy.

The three phases:

1. **Research and draft a vegetation management strategy**
 - Research the rate of actual tree species die-off
 - Review research on replacement species (deciduous fire-resistant species) which both environment Canada and the BC Forestry Centre have completed, as well as the research from Oregon State
2. **Test vegetation management strategy**
 - Design one or more pilot projects based on the draft strategy
 - Implement the pilot project
 - Review results and lessons learned
3. **Finalize vegetation management strategy**
 - Based on the results of the pilot project, update the management strategy
 - From the strategy, draft a model policy that municipalities can implement
 - Draft a framework for implementing policy through an implementation plan.

Elephants to consider

As we move into a predictably hotter, dryer future with a robust scientific imperative for a rapid timeline of 11 years to make drastic cuts to emissions. We must simultaneously seek solutions to decrease GHGs, sequester carbon, and build local resilience. Our choices are limited and we must act rapidly. We are faced with the dilemma of reforestation using native species that are no longer suited to handle our changing climate versus using non-native species that are better suited for a hotter, dryer climate. We have to be aware that we do not have the luxury of time on our side. Delaying action will result in greater fire impacts to our communities.

Another issue relates to private forested lands and working with these private land owners to participate in reforesting their changing lands. This issue requires education and incentive programs while developing strategies to aid private property owners.

Motion:

That staff be directed to write letters to the Capital Regional District and all member Local Governments requesting an indication of their interest in participating in a co-application submitted by the CRD on behalf of its members to UBCM's Community Resiliency Investment Program for the development of a regional vegetation management strategy to assess the following:

- forest die-off,
- recommend alternative fire-resistant vegetation replacements,
- initiate a pilot project, and
- use the results to create a regional strategy, model policy and implementation plan,
- and further, pending the responses from the CRD and member local governments, request that the CRD convene a meeting of interested parties to develop and submit an application.

References:

- Achat, D. L., Fortin, M., Landmann, G., Ringeval, B., & Augusto, L. (2015). Forest soil carbon is threatened by intensive biomass harvesting. *Scientific Reports*, 5.
<https://doi.org/10.1038/srep15991>
- Alexander, C., & McDonald, C. (2014). *Urban Forests: The Value of Trees in the City of Toronto* (Special Report). Retrieved from
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- Financial Post, C. C. F. (2018, May 11). In the shadow of the Beast: Two years after the monster fire, Fort McMurray struggles for a different future | Financial Post. Retrieved January 3, 2019, from <https://business.financialpost.com/feature/in-the-shadow-of-the-beast-two-years-after-the-monster-fire-fort-mcmurray-struggles-for-a-different-future>
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- Nijnik, M. (2010). Carbon capture and storage in forests. *Iss Environment Sci Tech*, 29, 203–238.
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- Tree Species List - Wood Buffalo. (n.d.). Retrieved January 3, 2019, from https://www.rmwb.ca/Municipal-Government/municipal_departments/Public-Operations/Parks---Trails/Tree-Species-List.htm
- Wilson, E. K. (n.d.). California wildfires caused unexpected benzene contamination of drinking water. Retrieved December 20, 2018, from <https://cen.acs.org/environment/water/California-wildfires-caused-unexpectedbenzene/96/i26>



CORPORATION OF THE TOWNSHIP OF ESQUIMALT

Municipal Hall, 1229 Esquimalt Road, Esquimalt, B.C. V9A 3P1
Website: www.esquimalt.ca Email: info@esquimalt.ca

Voice: (250) 414-7100
Fax: (250) 414-7111

Via email to egorman@crd.bc.ca

February 8th, 2019

Emilie Gorman
Deputy Corporate Officer, Manager of Legislative and Corporate Services
Capital Regional District
625 Fisgard Street, PO Box 1000
Victoria, BC V8W 2S6

Dear Ms. Gorman:

Re: UBCM's Community Resiliency Investment Program (2020 intake)

At its Regular Meeting of February 4th, 2019, the Council of the Corporation of the Township of Esquimalt approved the following resolution:

"That the Email from Tina Neurauter, Corporate Officer, District of Highlands, dated January 28, 2019, Re: Regional Vegetation Management Strategy be received and direct staff to forward a letter of support to the Capital Regional District pertaining to a co-application submitted by the CRD on behalf of its members to UBCM's Community Resiliency Investment Program (2020 intake)."

The Township supports the development of a regional vegetation management strategy to assess the following: forest die off, recommend alternative fire-resistant vegetation replacements, initiate a pilot project, and use the results to create a regional strategy, model policy and implementation plan. The Township requests the Capital Regional District convene a meeting of interested parties to develop and submit a joint grant application to UBCM's Community Resiliency Investment Program (2020 intake).

Should you require further information, please contact me on 250-414-7157 or by email Rachel.dumas@esquimalt.ca.

Yours truly,

Rachel Dumas
Deputy Corporate Officer

Encl.