



**REPORT TO ELECTORAL AREA SERVICES COMMITTEE
MEETING OF WEDNESDAY, APRIL 17, 2013**

SUBJECT **APPLICATION TO UNION OF BRITISH COLUMBIA MUNICIPALITIES (UBCM)
FOR GRANT FUNDING OF A FUEL MANAGEMENT PRESCRIPTION PROGRAM
ON PENDER ISLAND**

PURPOSE

To request a Capital Regional District (CRD) Board resolution in support of a grant application to the UBCM Strategic Wildfire Prevention Initiative for the purposes of a fuel management prescription to provide a secondary fire escape route into Magic Lake Estates, Pender Island.

BACKGROUND

The goal of Pender Island Risk Mitigation Action Plan is to reduce wildfire risk on Pender Island by 50% as measured by the Southern Gulf Islands Wildfire Risk Assessment Model. A working group reviewed the results of the model and chose to focus the action plan on the four most effective risk mitigation management objectives. One of these objectives is an alternative vehicular emergency evacuation route from the Magic Lake Estates subdivision. This subdivision contains 1260 lots and a population of 1500 which doubles during the fire season, and currently has only one fire escape route.

Both the emergency program and the fire service on Pender Island have been working to create a secondary access point to Magic Lakes as a significant objective towards community safety. Any blockage of the single access currently in place creates significant risk to the large subdivision including the inability of police, fire or ambulance to access residents requiring emergency service support.

An opportunity to create a secondary access has become available through the Lively Peak Park, which is managed by the CRD through the Pender Island Parks and Recreation Commission. This route would connect Scarff Road with Sailor Road using an existing, but overgrown trail through the park. This route would be used for vehicles only in emergency events. In non-emergency times, the route would be a community trail for use by pedestrians or cyclists. The trail would be owned and maintained by the park.

The application for this project was discussed and supported by both the Southern Gulf Islands Emergency Program Advisory Commission and Pender Island Parks and Recreation Commission.

ALTERNATIVES

1. The CRD Board authorize staff to make application to UBCM for grant funding for a Fuel Management Prescription for Pender Island to support a secondary emergency access route into Magic Lakes.
2. Staff be directed to look for alternative routes for emergency access into Magic Lakes.

FINANCIAL IMPLICATIONS

UBCM provides 75% funding for projects such as this that meet the requirements of the Strategic Wildfire Prevention Initiative. This initial phase is for a prescription to be created outlining the best way to develop this secondary emergency access. Once completed, the CRD will be able to apply for a second 75% grant for the actual works involved in creating the route. Funding for the 25% residual is within the Southern Gulf Islands Emergency Program budget and work plan.

PUBLIC SAFETY IMPLICATIONS

Creation of a secondary emergency access route into Magic Lakes Estates will provide a significant level of improvement in the ability of emergency responders to access the area in the event of a wildfire or any other event that impacts the primary route. Additionally, the route will also provide a fire break within the park in the event a wildfire.

SUMMARY

A secondary access point into Magic Lakes is a key priority identified in the Southern Gulf Islands Community Wildfire Protection Plan. UBCM, through their Strategic Wildfire Prevention Initiative, provides 75% funding for the development of a Fuel Management Prescription, outlining how to best achieve the results identified, in this case, a secondary emergency access route. This route will allow for emergency access of emergency response vehicles into the area or for the evacuation of residents out of the area in the event of a wildfire. In order to apply for the grant, a Board resolution supporting the application is required.

RECOMMENDATION

That Electoral Area Services Committee recommends to the CRD Board that:

1. Staff be authorized to make application to the Union of British Columbia Municipalities for grant funding for a Fuel Management Prescription for Pender Island to support a secondary emergency access route into Magic Lakes.

****ORIGINAL SIGNED****

Travis Whiting
Senior Manager, Protective Services

Marg Misek-Evans, MCIP, RPP
Acting General Manager
Planning & Protective Services
Concurrence

Robert Lapham, MCIP, RPP
Chief Administrative Officer
Concurrence

Attachment: 3

Strategic Wildfire Prevention Initiative

Fuel Management Prescription Program

E-mail: lgps@ubcm.ca
Mail: 525 Government Street, Victoria, BC, V8V 0A8

2013 APPLICATION FORM

Please type directly in this form or print and complete. Additional space or pages may be used as required. For detailed instructions regarding application requirements please refer to Fuel Management Prescription Program Guide.

SECTION 1: APPLICANT INFORMATION	
Local Government: Capital Regional District - Southern Gulf Islands Electoral Area Programs	Date of Application: April 28, 2013
Contact Person*: Ian Elliott	Title: Manager, Electoral Area Emergency Programs
Phone: 250.415.1695	E-mail: ielliott@crd.bc.ca

* Contact person must be an authorized representative of the applying local government or First Nation.

SECTION 2: PROJECT INFORMATION
<p>1. NAME OF PROJECT.</p> <p>Fire Smart - Second Magic Lake Estates Escape Route Demonstration project for Lively Peak Park, Pender Island, BC.</p>
<p>2. DESCRIPTION. Please provide a geographic description of the proposed area, including treatment units as identified in the CWPP.</p> <p>CWPP STUDY AREA DESCRIPTION</p> <p>The Pender Islands, composed of North Pender and South Pender, are located in the Southern Gulf Islands in the Strait of Georgia between the cities of Vancouver and Victoria (Figure 1). Combined, the two islands cover just under 36 km² with North Pender over twice the size of South Pender. Both islands are in the Coastal Douglas-fir biogeoclimatic zone, characterized by a Mediterranean climate regime with mild winters and dry, hot summers, and Douglas-fir (<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>) forests. Although North Pender has much more residential development than South Pender, both islands host a mosaic of rural residential areas and second-growth mixed-species forests. Forests are usually Douglas-fir leading and may contain Arbutus (<i>Arbutus menziesii</i>), Grand fir (<i>Abies grandis</i>), western redcedar (<i>Thuja plicata</i>), western hemlock (<i>Tsuga heterophylla</i>), Rocky Mountain juniper (<i>Juniperus scopulorum</i>), bigleaf maple (<i>Acer macrophyllum</i>), or red alder (<i>Alnus rubra</i>). The Gulf Islands National Park Reserve holds several parkland properties scattered across North and South Pender.</p> <p>Linear fuel break to reduce potential fire spread in Magic Lake Estates, Pender Island</p>

Date of current CWPP: 2010

3. PROPOSED NUMBER OF HECTARES TO BE INCLUDED. Please provide the gross and net hectares to be assessed. If applicable, please separate hectares on Crown land from hectares on local government land.

The area is all local government land (CRD Park) and is 0.4 ha.

4. MOUNTAIN PINE BEETLE AFFECTED TIMBER. Please indicate if this project includes Mountain Pine Beetle fuel type:

Yes No

5. CURRENT THREAT RATING OF PROPOSED AREA. Please indicate the current threat rating. Please note: the *2012 Wildland Urban Interface Wildfire Threat Assessments* guide and worksheet must be used and submitted.

This area is high risk, and has the highest risk rating on Pender Island, the actual WUI-WTA will be completed by a Registered Professional Forester, which is the purpose of this phase 1 application

RISK ASSESSMENT METHOD

The Southern Gulf Islands Risk Assessment Model was used to complete the Pender Islands risk assessment. In this model, Wildfire Risk is equal to Wildfire Probability x Wildfire Consequences. Wildfire Probability is expressed as the product of Ignition Probability and Escape Probability. Ignition Probability and Escape Probability are expressed as relative probabilities, illustrating changes in relative event probability across the landscape rather than absolute probabilities of events. The term risk element is used to refer to factors that contribute to the evaluation of Wildfire Risk, such as fuel type, slope, or the presence of residential homes. In practice, risk elements are used as input data to the wildfire risk assessment model, providing the data needed to calculate Ignition Probability, Escape Probability, and Wildfire Consequences. Figures 2.1-2.5 show the structure of the wildfire risk assessment model, listing the risk elements used to model Ignition Probability, Escape Probability, and Wildfire Consequences. It also illustrates how these probabilities and consequences are combined to produce Wildfire Probability and Wildfire Risk. The document Southern Gulf Islands Risk Assessment Model: Methods, available upon request from Fireweed Consulting, contains a detailed description of the risk assessment method used.

6. OTHER ACTIVITIES. Please describe the extent to which your community is undertaking wildfire risk mitigation activities as outlined in Section 6 of the Program & Application Guide (Screening Criteria).

There has been considerable progress towards mitigating wildfire risk on the Pender Islands. Whereas many other jurisdictions are looking to begin a program of risk mitigation with the adoption of a CWPP, leadership from the local CRD services, such as the Pender Island Fire Department, SGI Emergency Programs and CRD Building Inspection have already initiated many effective strategies to reduce the danger of wildfire. These include:

- Improved building bylaws regulating emergency access and water supply for fire fighting.
- A comprehensive neighbourhood emergency program which will increase communication within the community during a wildfire event.
- A well developed emergency management program to coordinate resources and support emergency response.
- A well-trained structural fire department with interface training.

- Annual emergency exercises (on all Southern Gulf Islands) bringing together multiple agencies involved with emergency response.
- Communication exercises for ensuring multi agency communication are preplanned.
- Public education efforts by the fire departments at BC Ferries terminals and other venues.

These efforts have reduced wildfire risk on the Pender Islands and provide a strong foundation from which to continue mitigating wildfire risk by implementing the Pender Islands CWPP Action Plan

Also regular July/Aug Public education sessions at BC Ferries Swartz Bay terminal to reduce probably fire starts, high volume water supply survey, fuel treatment second exit recommendation

7. REVIEW OF APPLICATION. Were any other agencies consulted with in the development of the application prior to submission? Please check all that apply:

- | | |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Wildfire Management Branch Fuel Management Specialist | <input checked="" type="checkbox"/> Land manager |
| <input checked="" type="checkbox"/> Fire Zone staff | <input type="checkbox"/> First Nations' Emergency Services Society |
| <input checked="" type="checkbox"/> Local fire officials | <input checked="" type="checkbox"/> Other: Islands Trust, CRD Parks (landowners/fire zone staff) |

8. CONSULTANT INFORMATION. If a consultant is being utilized to do some or all of the work, please describe how you will select a qualified individual. If possible, please include the name(s) of the consultant(s):

The process for phase 1 (PRESCRIPTION) is to procure three quotations to determine the successful consultant.

Prescription Consultant: Blackwell & Associates

GIS Consultant: Capital Regional District GIS Department

Eligible activities and costs are outlined in Section 4 of the Program & Application Guide. In Section 3 below, please include all proposed eligible costs for the development of your prescription.

SECTION 3: PROPOSED ACTIVITIES & COSTS	
Activity	Proposed Cost
Evaluation of the site(s), field reconnaissance, data collection and inventory of stand structure	\$1,000.00
Completion of threat plots as per the 2012 Wildland Urban Interface Wildfire Threat Assessments guide.	\$1,000.00
Updates to existing threat plots and related spatial data to conform to the 2012 WUI Wildfire Threat Assessment standards.	\$500.00
Assessment(s) that are directly related to the resource values affected by the prescription within the proposed area	\$500.00
Lay out and traversing of treatment area(s) in the field	\$1,500.00
Danger tree assessments	\$500.00

Preparation of the prescription, maps, spatial data, and metadata	\$1,000.00
Staff and contractor costs directly related to the development of a fuel management prescription. <u>Please describe:</u> All related field study and data collection, with support from the Local Fire Chief Charles Boyte (CFO)	\$5,000.00
Local government administration costs directly related to the development of a fuel management prescription. <u>Please describe:</u> assistance from CRD Protective Services (project sponsor)	\$1,000.00
Planning, consultation with stakeholders and public information directly related to the development of a fuel management prescription. <u>Please describe:</u> Phase 1, consultation with Local and Regional Park Commissions, Fire Department, Local Emergency Program, Southern Gulf Islands Community Wildfire Protection Plans Working Group	\$500.00
Other proposed activities. <u>Please describe:</u> Phase 2 after prescription, actual fuel treatments, estimated at \$30,000 apx	\$
Total Proposed Costs:	\$12,500.00

The Fuel Management Prescription program can contribute a maximum of 75% of the cost of eligible activities and the remainder (25%) is required to be funded through community contributions.

Total Grant Requested (75% of total cost):	\$9375
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Please note that you will be required to provide detailed information on the community contribution in the final report. This includes information on contributions from other grant programs. If information is available now, please complete Section 4 below:

SECTION 4: OTHER GRANTS	
Grant(s) Description:	Estimated Grant Value
	\$0.00

SECTION 5: SIGNATURE (To be signed by Local Government Applicant)
I certify that the area covered by the proposed prescription: (1) is not scheduled for development; (2) is not scheduled for sale; and (3) is within the jurisdiction of the local government (or appropriate approvals are in place)
Signature:
Name & Title: Travis Whiting, Senior Manager, Protective Services, Capital Regional District

In addition to the Application Form, the following separate attachments are required to be submitted as part of your application:

- Council or Board resolution indicating support for the proposed activities and willingness to provide overall grant management.
- Maps and photos that clearly identify the area(s) that are the subject of the application

- If not UBCM funded, a copy of the completed CWPP for the proposed area. If UBCM funded, the CWPP final report, maps and spatial data must be completed, submitted and approved.

Applications should be submitted directly to Local Government Program Services (UBCM).

E-mail: Igps@ubcm.ca

Mail: 525 Government Street, Victoria, BC, V8V 0A8

Pender CWPP UBCM application mapping supplement

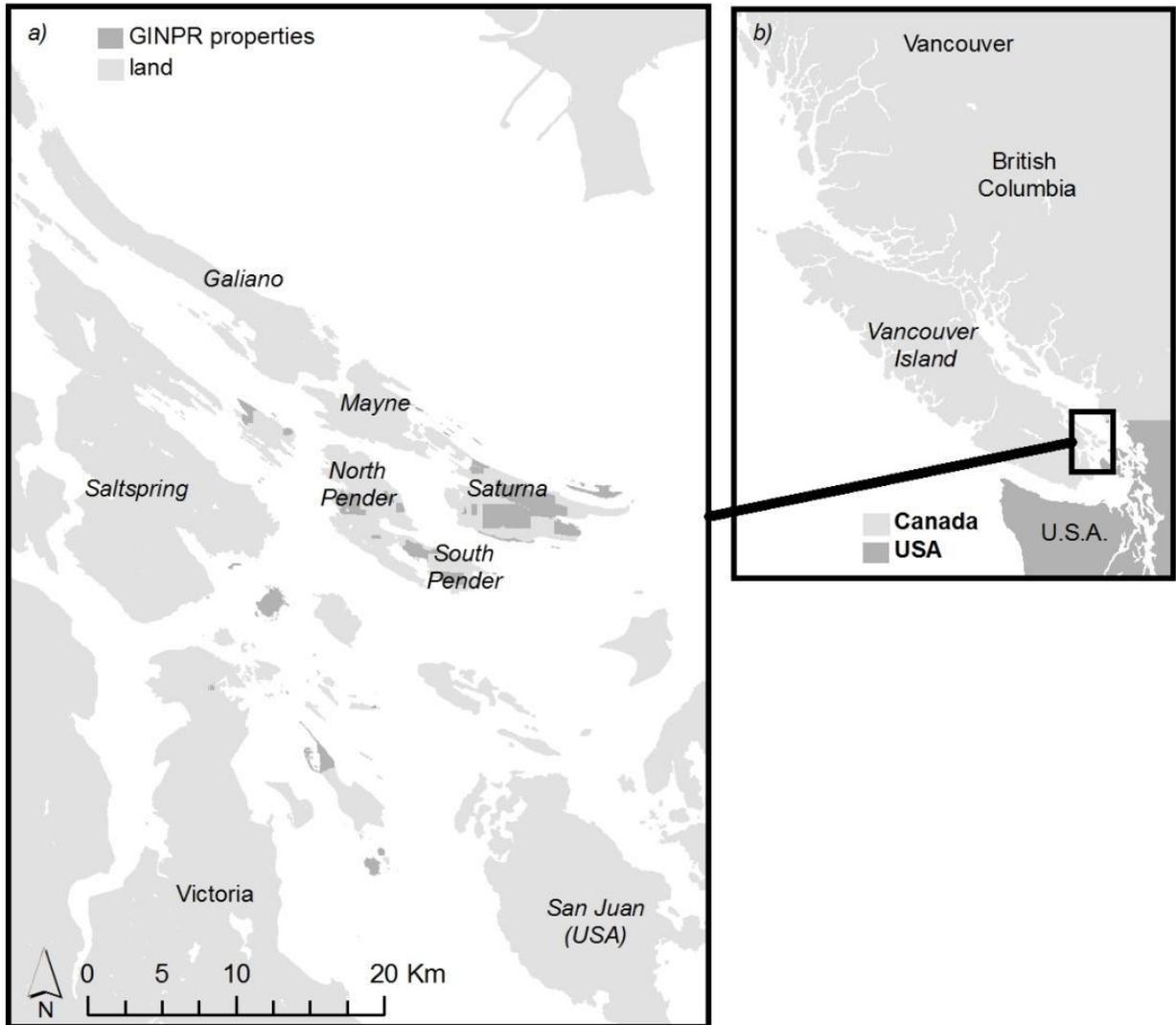


Figure 1 - North and South Pender Island a) are located in the southern Gulf Islands between the mainland and Vancouver Island b).

Pender CWPP UBCM application mapping supplement

Figure 2.1

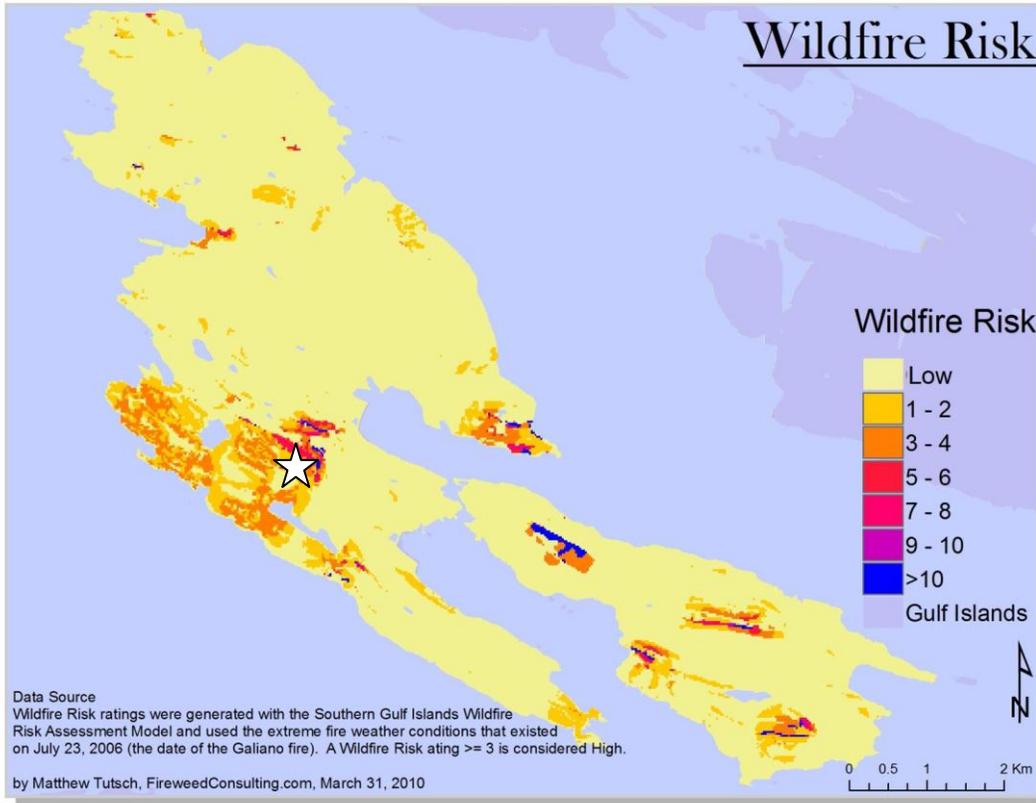
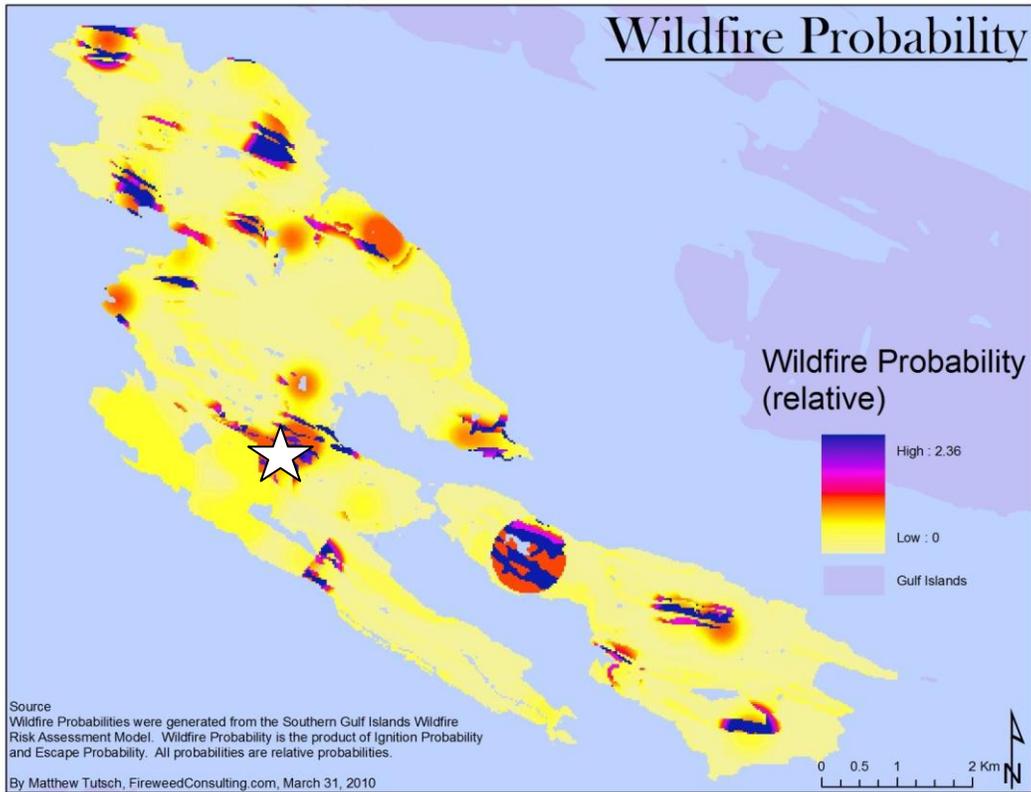


Figure 2.2



Pender CWPP UBCM application mapping supplement

Figure 2.3

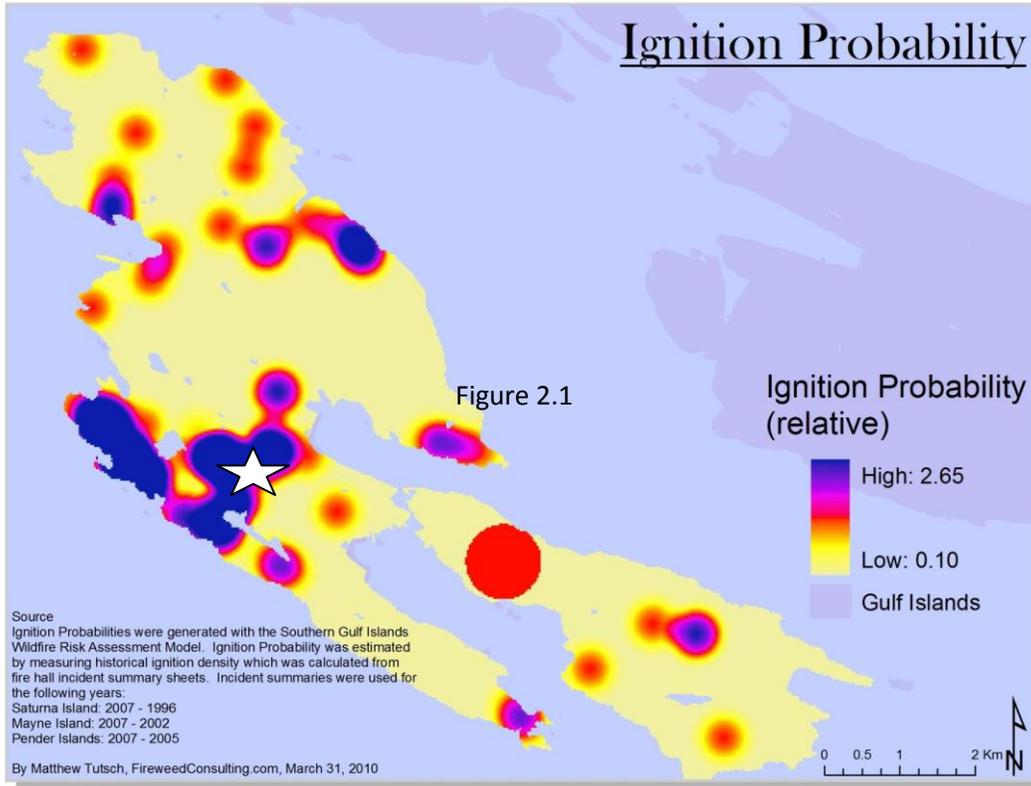
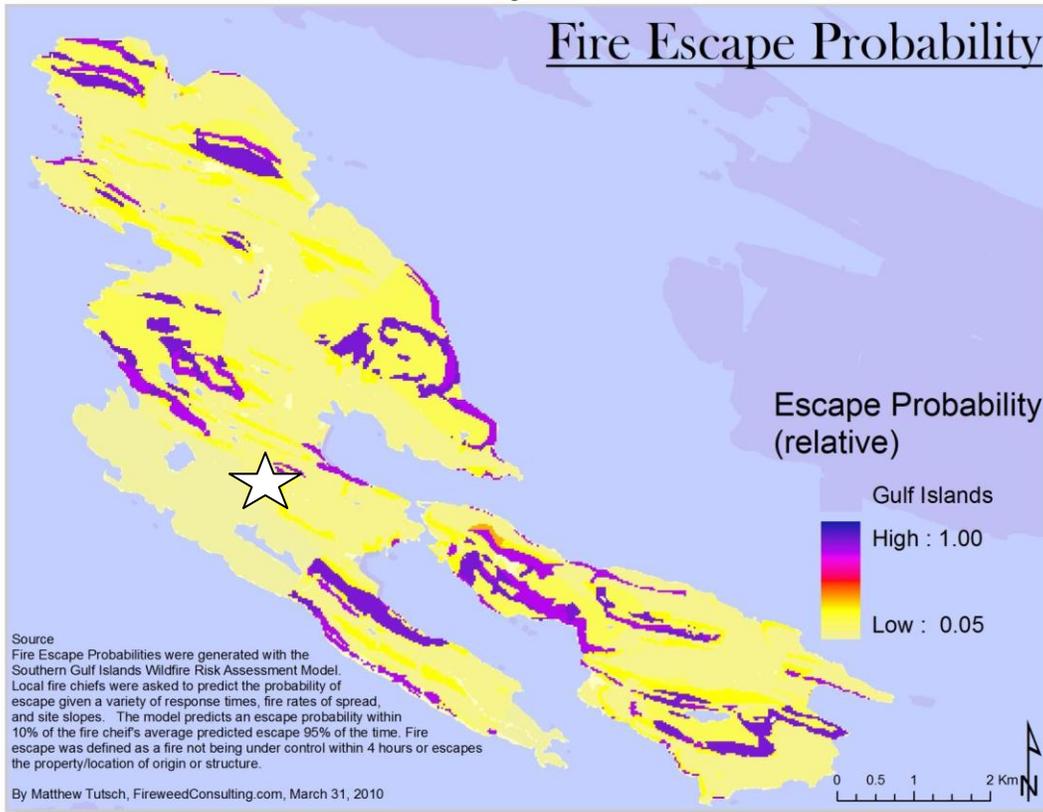
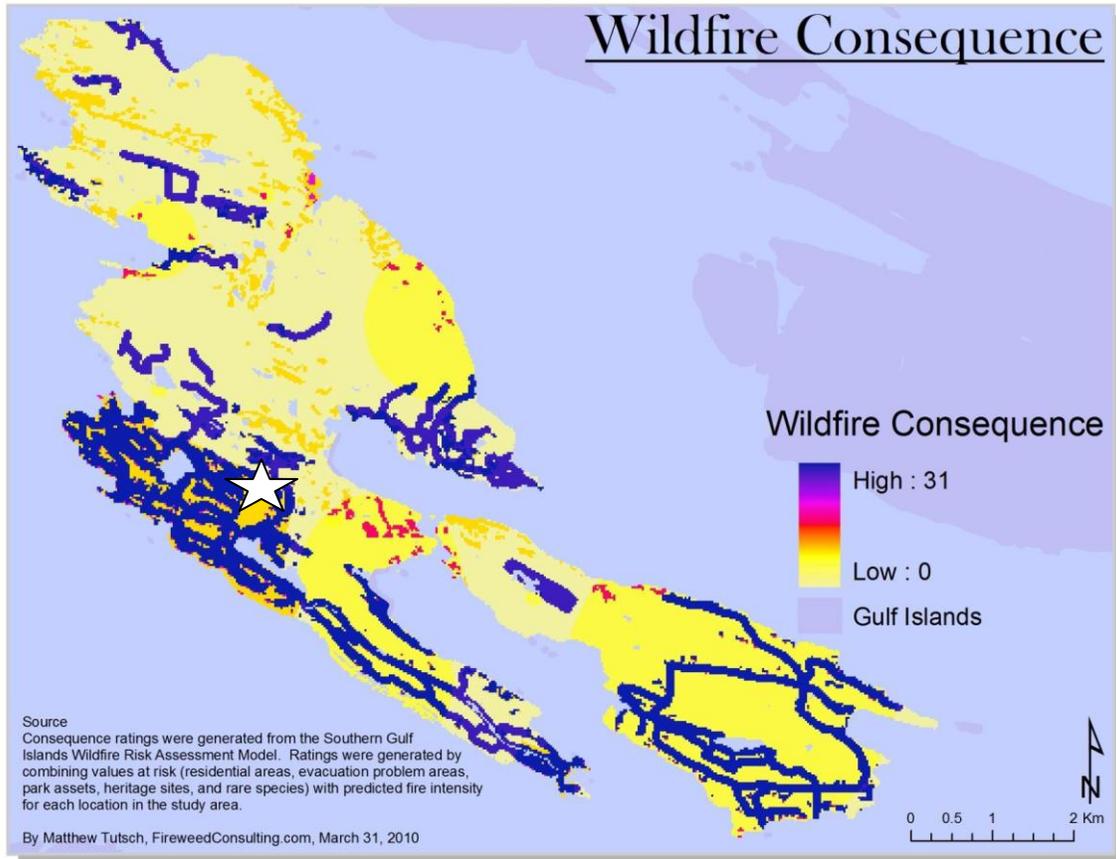


Figure 2.4



Pender CWPP UBCM application mapping supplement

Figure 2.5



Capital Regional District, Protective Services

Southern Gulf Islands Emergency Program

Pender Island Division

2013-04-03

PROJECT PROPOSAL OVERVIEW

Purpose: to create and maintain a gated alternate evacuation and access route from Magic Lake Subdivision (1260 lots). Also to provide an easily accessible public FireSmart demonstration project showing the positive effects of thinning and spacing.

This meets the spirit of the primary recommendations of the Pender Community Wildfire Protection Plan.

THE PENDER ISLANDS RISK MITIGATION ACTION PLAN

The Pender Islands Risk Mitigation Action Plan's goal is to reduce wildfire risk on the Pender Islands by 50% (as measured by the Southern Gulf Islands Wildfire Risk Assessment Model). The Working Group reviewed the results of the above evaluation and chose to focus the Action Plan (Table 1) on the four most effective risk mitigation management objectives. In order of effectiveness, these were:

1. Reducing ignition by 50%.
2. A second Magic Lake Estates escape route.
3. FireSmarting homes in evacuation problem areas.
4. Building high volume water stations in high risk areas.

The first objective in the action plan is the establishment of local leadership on risk mitigation initiatives through the creation of a CWPP advisory committee because the Working Group recognized that leadership in the implementation of the Pender Islands CWPP was essential to the plan's success. The Action Plan's recommendations relate to reducing ignitions and FireSmarting took the form of both public education (ie. multimedia tools, education programs, and FireSmart demonstration sites) and legislation (ie. Wildfire risk development permit areas, building permit bylaw amendments requiring FireSmart building standards, FireSmart landscaping, sprinkler systems, vehicle access, and water supply).

Scope: Create a fire-break and gated soft-surface roadbed through the Lively Peak CRD Park, leading from the Sailor Road intersection (BC Highways maintained) through the Park to a **proposed** new easement (10 meters long by 6 metres wide) that connects to the cul-de-sac at the end of Scarff Road.

Owner: CRD Parks, controlled access by locked gate/post.

Executive summary: the number 1 public safety concern in the SGI Electoral Area for the last several decades has been the need for an alternative vehicular emergency evacuation route from the Magic Lake Subdivision (1260 lots, apx 1500 persons, double during fire season).

We have tried numerous times over the last several decades (I have worked on this file since late 1995), but we have been unable to secure a route that linked to an outside road system, even with exploring public/private partnership opportunities.

Now we have received an offer from a landowner to donate the small piece of land separating the Lively Peak Park from the Scarff Road cul-de-sac. This will connect with the existing “grown-over” roadbed through the Park.

Potential advantages:

- Alternate Wildfire evacuation route
- New walking/cycling pathway that will substantially shorten the distance from Magic Lake to the Driftwood Centre, (Paths on Pender eco-friendly)
- Donated property, low cost
- Access controlled public safety pathway
- Connects with existing BC Highways maintained thoroughfares
- Hydrant located at Sailor intersection, so very defensible
- Would allow for potential extension of water main for hydrant placement at Scarff Road cul-de-sac to enhance public safety on Scarff Road
- CWPP UBCM funding eligible as a protective fire-break within the CRD Park
- Very positive political/social profile with the Magic Lake Property Owners Society and the public in general
- Below sightline of existing trail so minimum negative impact on aesthetics
- Meets the specifics and intent of the primary Pender CWPP recommendations