



**REPORT TO PLANNING AND PROTECTIVE SERVICES COMMITTEE
MEETING OF WEDNESDAY, APRIL 25, 2018**

SUBJECT **Board Determination of Regional Growth Strategy Consistency – Shirley-Jordan River Official Community Plan**

ISSUE

To consider the proposed Shirley-Jordan River Official Community Plan (OCP) (Bylaw No. 4001) for a determination of consistency with the 2018 Regional Growth Strategy (RGS) (Bylaw No. 4017).

BACKGROUND

Section 445 of the *Local Government Act* requires that all bylaws and services adopted by a regional district be consistent with an adopted RGS. The Juan de Fuca (JdF) Development Procedures Bylaw (Bylaw No. 3110) requires that any OCP amendments be considered by the full Capital Regional District (CRD) Board for a determination of consistency with the RGS.

On April 17, 2018 the JdF Land Use Committee (LUC) referred the proposed Shirley-Jordan River OCP (Bylaw No. 4001) to the full CRD Board for a determination of RGS consistency in accordance with the development procedures bylaw. The proposed Shirley-Jordan River OCP will replace the adopted OCP (Bylaw No. 3717) with new policy and land use designations and updated content and mapping that reflect the aspirations and interests of the community. See Appendix A for additional information on the proposed updates to the OCP.

On March 14, 2018 the CRD Board adopted an updated RGS bylaw. The 2018 RGS provides objectives and policies across seven theme areas to guide how the region will sustainably accommodate population growth over the next 20 years.

ALTERNATIVES

Alternative 1

That the Planning and Protective Services Committee recommends to the Capital Regional District Board:

That the proposed Shirley-Jordan River Official Community Plan (Bylaw No. 4001) be reviewed as it relates to the Regional Growth Strategy (Bylaw No. 4017) and deemed consistent with the RGS.

Alternative 2

That the Planning and Protective Services Committee refer the report back to staff for additional information.

DISCUSSION

Regional and Strategic Planning staff have reviewed the proposed Shirley-Jordan River OCP from an RGS policy perspective to analyze potential impacts. See Appendix B for a summary analysis.

The proposed Shirley-Jordan River OCP was prepared concurrently to the RGS update. OCP adoption was held pending the outcome of the RGS to ensure OCP policy alignment to the RGS.

IMPLICATIONS

Regional Growth Strategy Implications

The Shirley-Jordan River OCP is a key mechanism for implementing the RGS in the JdF Electoral Area (EA). The population projections and policies proposed in the Shirley-Jordan River OCP align to the RGS and work toward achieving the RGS vision and objectives. Proposed OCP policies have been adjusted to reflect the outcome of the RGS update. Alternative 1 allows for OCP adoption to move forward and begin working toward RGS implementation.

Process Implications

Alternative 1 would allow the Board, through Voting Block A, to give first and second reading to Shirley-Jordan River OCP Bylaw No. 4001, hold a public hearing and subsequently adopt the OCP. Any revisions to the Shirley-Jordan River OCP after public hearing resulting in impacts to the RGS would require Board determination of consistency with the RGS.

CONCLUSION

Provincial legislation requires that all bylaws and services adopted by a regional district be consistent with an adopted RGS. The proposed Shirley-Jordan River OCP aligns to the 2018 RGS and is a key mechanism for RGS implementation.

RECOMMENDATION

That the Planning and Protective Services Committee recommends to the Capital Regional District Board:

That the proposed Shirley-Jordan River Official Community Plan (Bylaw No. 4001) be reviewed as it relates to the Regional Growth Strategy (Bylaw No. 4017) and deemed consistent with the RGS.

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Attachments: Appendix A - JdF LUC Staff Report on the Shirley-Jordan River OCP
Appendix B - RGS Policy Analysis of Shirley-Jordan River OCP



REPORT TO THE JUAN DE FUCA LAND USE COMMITTEE
MEETING OF TUESDAY, APRIL 17, 2018

SUBJECT Shirley – Jordan River Official Community Plan Update

ISSUE

To consider Bylaw No. 4001, Shirley – Jordan River Official Community Plan (OCP), which would repeal and replace the existing Shirley/Jordan River OCP, Bylaw No. 3717.

BACKGROUND

The communities of Shirley and Jordan River are located within the Juan de Fuca Electoral Area (JdFEA) of the Capital Regional District (CRD) and are bounded to the east by Muir Creek and the Otter Point area, to the north by the Rural Resource Lands, to the west by Juan de Fuca Provincial Park, and to the south by the Strait of Juan de Fuca (Appendix A).

Staff and consultants have been working with the communities of Shirley and Jordan River, and a 10 member Citizens' Committee, since November 2013 to review and update the existing OCP, Bylaw No. 3717, to complete a sensitive ecosystem inventory, and to prepare policy amendments and new mapping. The overall goal of the OCP update was to provide an opportunity for the communities to review the existing OCP and to identify policies they wanted to add, retain, or amend. The proposed OCP, Bylaw No. 4001, contains a set of goals, objectives and policies for future land use in Shirley and Jordan River that follow provincial legislation and relevant best practices, and that promote the aspirations and interests of the communities (Appendix B).

The LUC directed referral of proposed Bylaw No. 4001 to 35 agencies and appropriate CRD departments for comment in April, 2016. Comments have been received from 14 agencies including CRD departments, the Juan de Fuca Agricultural Advisory Planning Commission (AAPC), the JdFEA Parks and Recreation Advisory Commission, and the Shirley/Jordan River Advisory Planning Commission (APC) (Appendix C).

A change to the OCP area boundary was considered by the Citizens' Committee during the preparation of the OCP. To accommodate the proposed boundary realignment, staff prepared amendments Bylaw No. 4079 (Rural Resource Lands OCP), Bylaw No. 4070 (Land Use Bylaw for Rural Resource Lands) and Bylaw No. 4071 (Juan de Fuca Land Use Bylaw). These bylaws were also referred to agencies for comment (Appendix D). Since there was lack of support for the proposed boundary re-alignment from the Shirley/Jordan River APC, the Bylaws are not included in the recommendation for first reading.

The LUC also recommended referral of Bylaw No. 4001 to the CRD Board for a determination of consistency with the Regional Growth Strategy (RGS). The Board will review the most recently revised version of the Plan prior to consideration of first and second readings.

ALTERNATIVES

That the Land Use Committee recommends to the CRD Board:

1. a) That the referral of proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", directed by the Juan de Fuca (JdF) Land Use Committee to the Agricultural Land Commission, BC Hydro, Cowichan Tribes, Cowichan Valley Regional District, District of Metchosin, District of Sooke, Esquimalt Nation, Halalt First Nation, Hul'qumi'num Treaty Group, Island Health, JdF Agricultural Advisory Planning Commission, JdF Electoral Area Parks and Recreation Advisory Commission, Lyackson First Nation, Malahat First Nation, Managed Forest Council, Ministry of Agriculture, Ministry of Environment, Ministry of Forests, Lands, Natural Resource Operations (MFLNRO) – Arch Branch, MFLNRO – Crown Lands/Foreshore, Ministry of Transportation and Infrastructure, Pacheedaht First Nation, Pauquachin First Nation, Penelakut Tribe, Scia'new First Nation, School District #62, Sheringham Waterworks, Shirley/Jordan River Advisory Planning Commission, Shirley Fire Department, Stz'uminus First Nation, Te'Mexw Treaty Association, Tsartlip Indian Band, Tsawout First Nation, Tseycum Indian Band, T'Sou-ke First Nation, and appropriate CRD departments, be approved and the comments received;
- b) That proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", be considered by the CRD Board for consistency with the Regional Growth Strategy;

- c) That proposed Bylaw No. 4079, Bylaw No. 4070 and Bylaw No. 4071 not proceed;
 - d) That proposed Bylaw No. 4001, “Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018”, be introduced and read a first and a second time; and
 - e) That in accordance with the provisions of Section 469 of the *Local Government Act*, the Director for the Juan de Fuca Electoral Area, or Alternate Director, be delegated authority to hold a Public Hearing with respect to Bylaw No. 4001.
2. That the CRD Board not proceed with proposed Bylaw No. 4001.
 3. That the bylaw be referred back to staff for more information.

FINANCIAL IMPLICATIONS

The Shirley – Jordan River OCP was a major project undertaken by a consultant and Local Area Planning staff through the fall of 2013 to the spring 2015. The Federal Gas Tax Community Works Fund was accessed in the amount of \$150,000 for the OCP reviews for both Shirley/Jordan River and East Sooke under the Integrated Community Sustainability Planning program. Funds were allocated for professional planning expertise, consultation materials and services in support of the OCP, such as the ecological studies. The JdFEA Planning budget provided for costs associated with staff time and legal advice.

INTER-DEPARTMENTAL IMPLICATIONS

Due to possible impacts on programs, other CRD divisions have been involved in the review of the bylaw, including Building Inspection, Environmental Services, Integrated Water Services, Protective Services, Regional Parks, Regional and Strategic Planning and JdFEA Parks and Recreation.

LEGISLATIVE IMPLICATIONS

Pursuant to Section 475 of the *Local Government Act (LGA)*, an OCP requires that local government provide one or more opportunities for consultation with persons, organizations and authorities that may be affected by the adoption, repeal or amendment of an OCP. Specific consideration must be given to referring the proposed bylaw to the adjacent regional districts or municipalities and First Nations. Consideration should also be given to referring the proposed bylaw to improvement districts and to applicable provincial and federal agencies.

Pursuant to Sections 476 and 477(3)(b) of the *LGA*, an OCP must also be referred to the School District and to the Agricultural Land Commission (ALC). The proposed bylaw also must be referred to the Ministry of Transportation & Infrastructure (MoTI), since it applies to land within 800 m of a controlled access highway and MoTI owns and operates the roads in Shirley and Jordan River.

Consultation under the above noted sections of the *LGA* must occur prior to the requirement under Section 477(3)(c) to hold a public hearing as part of the adoption process. In this case, the LUC recommends that the referral of proposed Bylaw No. 4001 be approved prior to proceeding to first reading of the bylaw.

The Juan de Fuca Development Procedures Bylaw, Bylaw No. 3110, established a process that requires that the proposed OCP be referred to the CRD Board for a determination of consistency with the RGS.

Should the Regional Board grant first and second readings, a public hearing pursuant to Section 465 of the *LGA* will be required prior to the bylaw passing third reading.

PUBLIC CONSULTATION IMPLICATIONS

Prior to beginning the OCP review process, a consultation plan was prepared in order to outline how the community, government agencies, First Nations and interest groups would participate in the OCP review. The consultation plan called for the establishment of a Citizens’ Committee, and a series of Citizens’ Committee meetings and community events were held to work through key issues and policies, and to review several drafts of the OCP. A total of 15 Citizens’ Committee meetings and four community events were held. Comments and concerns raised at these meetings and events were considered by staff in preparing the OCP.

The APCs were established to make recommendations to the Land Use Committee on land use planning matters referred to them relating to Part 14 of the *LGA*; therefore, Bylaw No. 4001 was referred to the Shirley/Jordan River APC. As the proposed OCP addresses agricultural land policies and includes policies related to park land acquisition and trail development, the bylaw was also referred to the Juan de Fuca AAPC and to the JdFEA Parks and Recreation Advisory Commission.

REFERRAL COMMENTS

Referral responses for the proposed OCP Bylaw were received from 14 agencies, including CRD departments, the Shirley/Jordan River APC, the AAPC, and the JdFEA Parks and Recreation Advisory Commission. The comments are summarized below and are provided in their original form in Appendix C.

Cowichan Tribes, Cowichan Valley Regional District, Esquimalt Nation, District of Metchosin, Ministry of Agriculture and School District #62 indicated that their interests are unaffected by the proposed OCP.

Island Health – Outlined evidence-based information related to community health for the Sooke region. Island Health requires construction and operating permits where water supplies provide water to more than one single-family residence. Island Health also discourages rainwater capture systems as potable water supplies for subdivision. Support was given for road safety improvements, food security and provision of affordable and rental housing options.

MoTI – The Ministry had no objections to the proposed OCP, but requested a re-referral if substantive changes are made.

CRD Environmental Services – The CRD Climate Action Program recognized that while rural communities of Shirley and Jordan River face certain challenges in reducing Greenhouse Gas (GHG) emissions generated by transportation and buildings, they encourage a higher reduction target than 3%. Suggestions included support for installing electric vehicle infrastructure and upgrading wood stoves to low-emission appliances.

CRD Regional & Strategic Planning – At the time of comments were received, the RGS review was still underway. Staff commented that any potential need for an RGS amendment would be identified through the Board's evaluation.

AAPC – The Commission acknowledged that the potential for agricultural opportunities may increase with climate change. Support for the proposed OCP was stated.

JdFEA Parks and Recreation Advisory Commission – The Commission provided edits to Section 330 Parks and Trails. Support for the proposed OCP was stated.

Shirley/Jordan River APC – The Commission provided edits to Sections 310 and 410 Water, Sections 330 and 430 Parks and Trails, and to Section 380 Development and Local Economy. Suggestions were made to not identify the location of eagle's nests on the maps. Additions to Section 450 Transportation for traffic improvements, and to Section 460 Services and Emergency Planning were also outlined. Support was indicated for re-designating smaller parcels from Coastal Upland to Pacific Acreage on Schedule B and in Section 480 Development and Local Economy. Discussion on development permit areas (DPAs) related to enforcement issues and improving the design guidelines in Section 550 Commercial and Industrial DPA. The proposed boundary amendment to include a parcel from the Rural Resource Lands OCP area was not supported.

Since there was lack of support for the proposed boundary re-alignment from the Shirley/Jordan River APC, the Bylaws are not included in the recommendation for first reading. All other comments received have been incorporated into the plan presented for first reading. Staff recommend that the Board approve the referral of Bylaw No. 4001 and accept comments received.

RGS IMPLICATIONS

Section 445 of the *LGA* requires that all bylaws adopted by a regional district board after the board has adopted an RGS, be consistent with the RGS. The Shirley/Jordan River Official Community Plan, Bylaw No. 4001, will be considered by the CRD Planning and Protective Services Committee on April 25, 2018. The Committee's recommendation regarding consistency will be forwarded to the CRD Board to make a final determination of consistency prior to consideration of first reading on May 9, 2018.

PLANNING ANALYSIS

The primary goal of this OCP update was to review the objectives and policies that guide decisions on planning and land use management in Shirley and Jordan River. The OCP aims to protect the rural character and natural environment of the community, while accommodating rural residential, resource, and limited commercial uses in appropriate locations. The Plan has been restructured around themes identified by the community and includes a focus on protecting water quantity and quality. New policy areas include community services, resources, emergency planning, community health, and a provision for temporary use permits. A sensitive ecosystem inventory was prepared by Madrone Environmental Services Ltd. in 2014. This inventory was used to determine the extent of the Sensitive Ecosystem Development Permit Area and to establish development permit guidelines.

The Plan accommodates limited growth in Shirley and Jordan River. New land use designations (LUDs) are established that more accurately represent the range of current uses and the desired development potential. The establishment of the new Settlement, Pacific Acreage, Commercial, Coastal Upland, and Renewable Resource LUDs results in a decrease in the development potential of 856 lots when compared with the land use designations in the current OCP. The development potential is outlined in Section 386 and changes are summarized below:

Bylaw No.	Land Use Designation	Development Potential
3717 (Existing OCP)	Settlement Containment (1 ha)	1
	Settlement Area (2 ha)	1,438
	TOTAL	1,439
4001 (Proposed OCP)	Settlement (1 ha)	3
	Pacific Acreage (2 ha)	163
	Commercial (120 ha)	0
	Coastal Upland (4ha)	416
	Renewable Resource (120 ha)	1
	TOTAL	583
Reduction in Development Potential		856

The Coastal Upland LUD is applied to privately owned lands in the Private Managed Forest Land program. This LUD supports the continued use of parcels for forestry, residential, and limited low-impact tourism uses. The Coastal Upland designation supports a density that reflects the minimum lot size established by the Forestry zone in the Juan de Fuca Land Use Bylaw, Bylaw No. 2040, which is 4 ha with one dwelling per parcel.

The Renewable Resource LUD is applied to Crown Land in Tree Farm License #61, the existing industrial forestry log sort parcel, and land owned by BC Hydro being used for power generation. This designation supports resource uses and a density of one parcel per 120 ha.

The Commercial LUD is applied to lands in Jordan River. This designation restricts residential and tourist accommodation uses while supporting commercial, institutional and light industrial uses with a density of one parcel per 120 ha.

Proposed Bylaw No. 4001 retains the Settlement Containment Area LUD from the 2007 OCP for parcels in the 1 ha range, but renames it as Settlement. The designation includes parcels within the Sheringham Water Works service area and incorporates a small community park owned by the CRD.

The Pacific Acreage LUD is applied to parcels in the 2 ha range that were designated as Settlement Area in Bylaw No. 3717. Only those lands already zoned for rural residential or commercial uses outside the Settlement LUD are included in Pacific Acreage.

Policies that support rezoning of lands zoned Rural A, which permits multiple dwelling units on a single parcel, are included in Section 484 of Bylaw No. 4001. The intent of these policies is to provide property owners an alternative to building strata development under provisions of the *Strata Property Act*, and to provide the community an opportunity to obtain park dedication.

A Restricted Development LUD is applied to lands within the flood inundation zone identified by BC Hydro. Overnight accommodation uses are not permitted in this designation.

The OCP update process involved extensive public consultation and review, and edits to the document have been made to incorporate referral comments received. Should the Board determine that the Plan is consistent with the RGS, staff recommend giving first and second reading to Bylaw No. 4001 and proceeding to public hearing.

CONCLUSION

The Shirley – Jordan River OCP has undergone extensive community consultation and proposed Bylaw No. 4001 addresses the comments and vision of the community based upon the referral and review process. Staff recommend that the referral of the proposed bylaws to agencies, CRD departments, First Nations and the Shirley/Jordan River APC be approved, that the CRD Board consider the proposed OCP Bylaw for a determination of consistency with the RGS, that the Bylaw be granted first and second readings, and that a public hearing be held.

RECOMMENDATIONS

That the Land Use Committee recommends to the CRD Board:

1. a) That the referral of proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", directed by the Juan de Fuca (JdF) Land Use Committee to the Agricultural Land Commission, BC Hydro, Cowichan Tribes, Cowichan Valley Regional District, District of Metchosin, District of Sooke, Esquimalt Nation, Halalt First Nation, Hul'qumi'num Treaty Group, Island Health, JdF Agricultural Advisory Planning Commission, JdF Electoral Area Parks and Recreation Advisory Commission, Lyackson First Nation, Malahat First Nation, Managed Forest Council, Ministry of Agriculture, Ministry of Environment, Ministry of Forests, Lands, Natural Resource Operations (MFLNRO) – Arch Branch, MFLNRO – Crown Lands/Foreshore, Ministry of Transportation and Infrastructure, Pacheedaht First Nation, Pauquachin First Nation, Penelakut Tribe, Scia'new First Nation, School District #62, Sheringham Waterworks, Shirley/Jordan River Advisory Planning Commission, Shirley Fire Department, Stz'uminus First Nation, Te'Mexw Treaty Association, Tsartlip Indian Band, Tsawout First Nation, Tseycum Indian Band, T'Sou-ke First Nation, and appropriate CRD departments, be approved and the comments received;
- b) That proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", be considered by the CRD Board for consistency with the Regional Growth Strategy;
- c) That proposed Bylaw No. 4079, Bylaw No. 4070 and Bylaw No. 4071 not proceed;
- d) That proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", be introduced and read a first and a second time; and
- e) That in accordance with the provisions of Section 469 of the *Local Government Act*, the Director for the Juan de Fuca Electoral Area, or Alternate Director, be delegated authority to hold a Public Hearing with respect to Bylaw No. 4001.

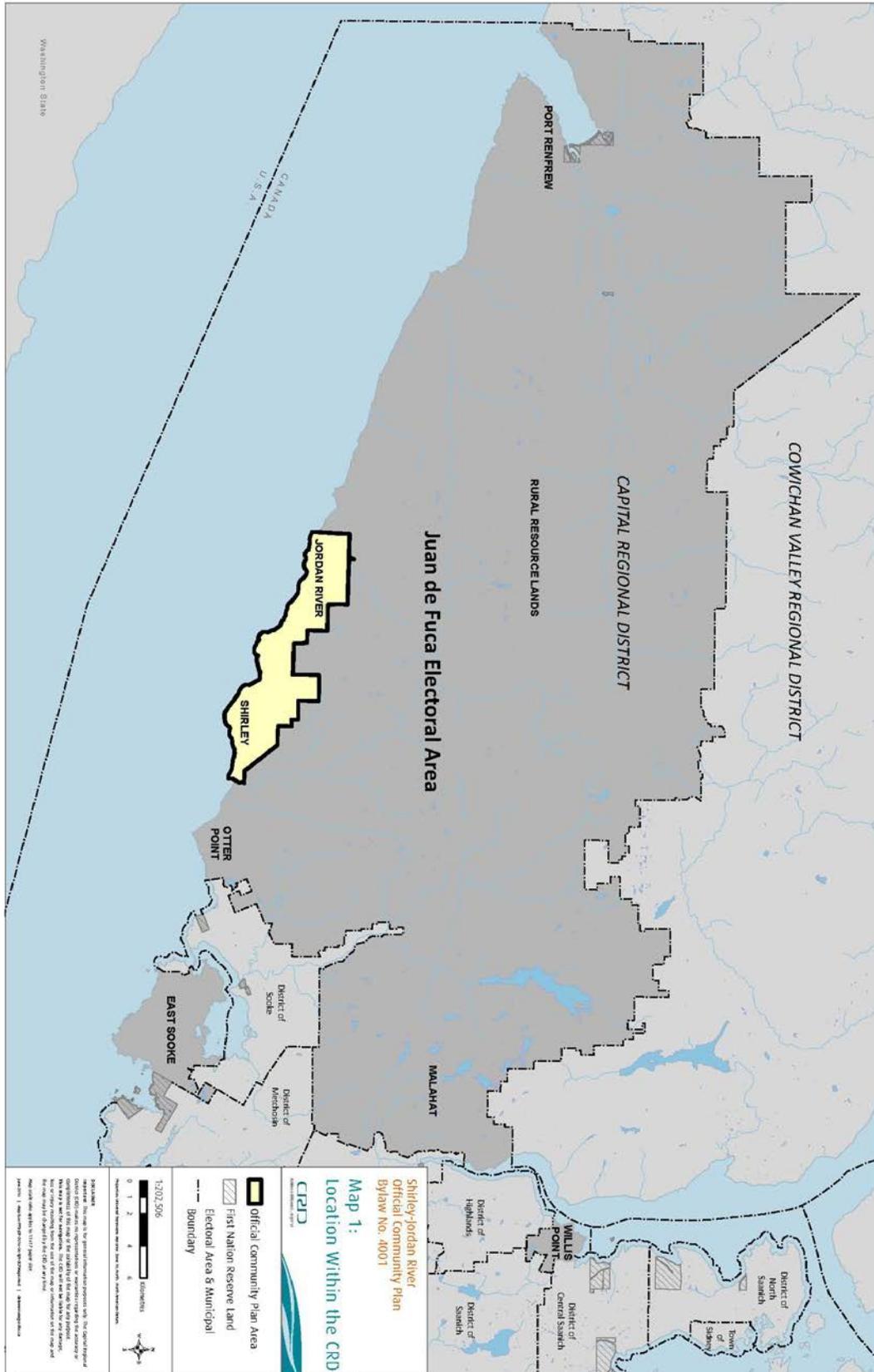
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Concurrence:	Kevin Lorette, P.Eng., MBA, Acting Chief Administrative Officer

ET:wm

Appendices:

- A. Shirley/Jordan River Area
- B. Proposed Bylaw No. 4001
- C. Referral Comments
- D. Bylaw No. 4079, Bylaw No. 4070 and Bylaw No. 4071

Appendix A – Shirley/Jordan River Area



SHIRLEY – JORDAN RIVER
OFFICIAL COMMUNITY PLAN

Bylaw No. 4001

2018

Acknowledgements

This Official Community Plan (OCP) was developed through a collaborative effort which involved a broad cross-section of Shirley and Jordan River residents and stakeholders. This OCP would not have been possible without the hard work and dedication of those involved. The CRD would like to acknowledge and thank all those who participated in the OCP review. Special thanks go out to the Shirley – Jordan River OCP Review Citizens' Committee and to the Shirley/Jordan River Advisory Planning Commission who all devoted a significant amount of time and energy to produce this document.

Shirley – Jordan River OCP Review Citizens' Committee:

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The preparation of this sustainable Community Plan was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are those of the Capital Regional District. The Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

CAPITAL REGIONAL DISTRICT

BYLAW NO. 4001

A BYLAW TO ESTABLISH AN OFFICIAL COMMUNITY PLAN FOR SHIRLEY AND JORDAN RIVER

A **WHEREAS** the Capital Regional Board wishes to update the Community Plan for the Shirley and Jordan River area of the Regional District;

B **AND WHEREAS** the residents of Shirley and Jordan River, the adjacent municipality and various external provincial and federal government agencies have reviewed this Community Plan;

C **AND WHEREAS** this Community Plan has been considered in conjunction with the Capital Regional District's Financial and Capital Expenditures program and the Capital Regional District's Regional Growth Strategy;

D **AND WHEREAS** Division 4 (Sections 472-478), Division 6 (Sections 484-487), Division 7 (Sections 488-491), and Division 8 (Sections 492-497) of the *Local Government Act* authorize the Capital Regional District to develop a bylaw to address all of the following issues:

- The development of an Official Community Plan
- The establishment of Greenhouse Gas reduction targets
- The designation of Development Permit Areas
- The designation of Development Approval Information Areas
- The designation of Temporary Use Permit Areas

E **NOW THEREFORE** the Board of the Capital Regional District in open meeting assembled, enacts as follows:

SECTION 1 GEOGRAPHIC AREA OF THE BYLAW

This bylaw covers the area referred to as Shirley and Jordan River, which is a part of the Juan de Fuca Electoral Area within the Capital Regional District, as outlined on Map 1: Location Within the CRD, which is attached to and forms a part of this bylaw.

SECTION 2 SEVERABILITY

If any section, subsection, sentence, paragraph, schedule, or map forming part of this bylaw is for any reason held to be invalid by the decision of any Court of competent jurisdiction, the section, subsection, paragraph, schedule, or map may be severed from the bylaw without affecting the validity of the bylaw or any portion of the bylaw or remaining schedules or maps.

SECTION 3 INCORPORATION OF SCHEDULES AND MAPS

Schedules "A" to "I" attached hereto are hereby made a part of this bylaw.

SECTION 4 REPEAL OF BYLAWS

The following bylaw is hereby repealed:

The Capital Regional District Bylaw No. 3717, cited as the "Official Community Plan for Shirley/Jordan River Bylaw No. 1, 2010".

SHIRLEY – JORDAN RIVER OFFICIAL COMMUNITY PLAN



SHIRLEY – JORDAN RIVER OFFICIAL COMMUNITY PLAN BYLAW No. 4001

SCHEDULE A

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LIST OF ABBREVIATIONS

ALC	Agricultural Land Commission	PID	Property Identifier
ALR	Agricultural Land Reserve	PMFL	Private Managed Forest Lands
CRD	Capital Regional District	QEP	Qualified Environmental Professional
CHI	Community Health Initiative	QP	Qualified Professional
CPSP	Community Parks Strategic Plan	RGS	Regional Growth Strategy
DCCs	Development Cost Charges	<i>RAR</i>	<i>Riparian Areas Regulation</i>
DPA	Development Permit Area	SAR	Search and Rescue
EBMP	Ecological Based Management Plan	SA	Settlement Area
GHG	Greenhouse Gas	SCA	Settlement Containment Area
JdF	Juan de Fuca	SEI	Sensitive Ecosystem Inventory
JdFEA	Juan de Fuca Electoral Area	SEAPARC	Sooke & Electoral Area Parks and Recreation Commission
<i>LGA</i>	<i>Local Government Act</i>	SRCHN	Sooke Region Communities Health Network
OCP	Official Community Plan	SPEA	Streamside Protection and Enhancement Area
OIE	Other Important Ecosystem	TFL	Tree Farm Licence
PCMP	Pedestrian and Cycling Master Plan	TUP	Temporary Use Permit
PATH	Pacheedaht Andersen Timber Holdings Ltd. Partnership	<i>WSA</i>	<i>Water Sustainability Act</i>
		WUP	Water Use Plan

PART ONE – GUIDING PRINCIPLES

“We never know the worth of water till the well is dry.” ~Thomas Fuller, Gnomologia, 1732

Maintaining the Rural Character

Shirley and Jordan River are two small communities nestled along the southwest coast of Vancouver Island (see Map 1). With amazing vistas and easy access to nature and the ocean, the residents treasure the peaceful ambience of this special area. Limited commercial development, large lot sizes and a slow rate of change are seen as ways to maintain the area’s rural character.

Protecting Water Quality and Quantity

Over the years, the quality and quantity of water in local creeks and aquifers have been affected by timber harvesting, hydro-electric generation, mining, and the siltation caused by increased runoff, road construction and *stream* crossings at higher elevations. Fish habitat in Jordan River and Muir Creek has been degraded by these types of activities. Individual wells and surface water provide much of the potable water supply and Goudie Creek is the domestic water source for a large *subdivision*. Residents are very concerned about the impact that future resource activities and development might have on existing domestic water supplies. They wish to see more



controls in place for residential development and to have a voice in the decisions made by senior government regarding resource use and its impacts.

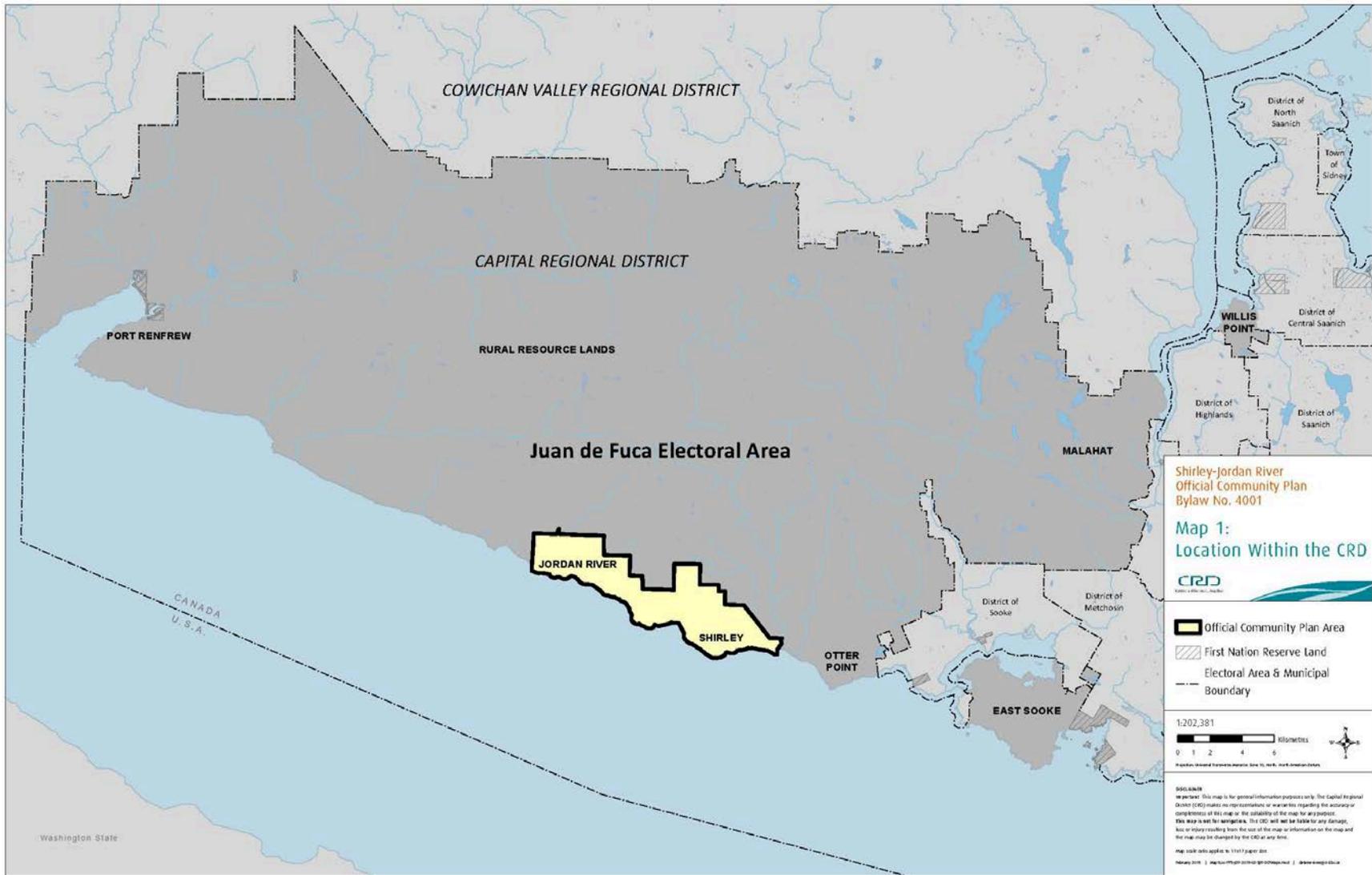


Protecting Biodiversity

Based on a 2014 Sensitive Ecosystem Inventory (SEI) commissioned by the Capital Regional District (CRD), rare and unique flora and fauna have been identified. There is strong support for policies and regulations to protect the biodiversity of the Shirley – Jordan River Plan area. Residents also wish to influence provincial standards regarding forestry practices and protection of the environment.

Safety and Connectivity

The safety of pedestrians, cyclists and vehicles using Highway #14 is of great concern to local residents. It is recognized that infrastructure upgrades will be needed to improve safety and this will take planning, time and money. Connecting these neighbourhoods with regional trails and other focal points will enhance safety and decrease reliance on car travel. To start this process, a plan for trails, as well as specific improvements to Highway #14, is described in this Plan.



PART TWO – ADMINISTRATIVE STRUCTURE

201 Purpose of the Official Community Plan

The Official Community Plan (the Plan) will guide and direct decision making on all aspects of land use and development for the communities of Shirley and Jordan River within the JdFEA. The Plan is an important statement of community values and goals, and must be used to assess any applications for rezoning or *subdivision*. The Plan takes a long-range view of land use, and forms the basis for regulatory bylaws. As the population changes and development occurs in the area, the Plan should be used to assist the CRD Board with its decision-making process.

The policies in the Plan provide for an orderly and attractive pattern of land use that respects the physical and rural characteristics of the land. In addition, the Plan provides for parks, open spaces and the preservation of valuable natural features. The Plan also gives residents some certainty as to what future developments may be permitted in the community and it guides prospective development toward appropriate locations.

The Plan is reviewed on a regular basis to keep pace with changing attitudes, lifestyles and economic factors that might affect some aspects of the Plan. It is also recognized that the Plan may require amendments in response to future changes in legislation, changing community values and the Regional Growth Strategy (RGS).

Housing needs and anticipated development for a period of 5 to 10 years are addressed in the Plan. Population projections and estimates of housing demands to the year 2024 can be found in Part Three of the Plan. The projections and policies in this Plan should be reviewed at five-year intervals to ensure that they reflect current conditions and needs.

202 Legislative Authority

Authority for the Board of a Regional District to prepare or revise an Official Community Plan is set out in Section 472 of the *Local Government Act (LGA)*. An Official Community Plan does not commit the Board or any other administrative body to undertake any of the projects suggested or outlined in the Plan, but once the Plan is adopted, further bylaws adopted by the CRD Board or works of the CRD must be consistent with the Plan.

Under the terms of Section 471 of the *LGA*, an Official Community Plan is: "... a statement of objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government." The required and optional content of an Official Community Plan is described in Sections 473 and 474 of the *LGA*. The objectives and policies for the Plan area are contained in Part Four of this Plan.

This Plan is the result of a community-driven exercise reflecting the community's values with respect to growth and development. It is not the intention of the CRD in adopting this Plan to create a conflict with provincial or federal enactments. As provided for in Section 474 (2) of the *LGA*, only broad objectives have been stated in regard to the regulation of matters that are not within the jurisdiction of the CRD.

203 Plan Area

This is the fifth Official Community Plan bylaw for the Shirley and Jordan River area. Previous bylaws include:

Bylaw No. 226, Official Community Plan (Sooke) By-law, 1975;

Bylaw No. 1645, Sooke Official Community Plan By-law, 1988;

Bylaw No. 3352, Official Community Plan for Shirley/Jordan River Bylaw No. 1, 2006;

Bylaw No. 3717, Official Community Plan for Shirley/Jordan River Bylaw No. 1, 2010.

The Plan area encompasses all land within the boundaries as outlined on Schedule B. The Plan area includes all areas below the shoreline extending 300 metres waterside of the natural boundary of the sea including the surface of the water except where the foreshore boundaries are shared with the Otter Point OCP Area as shown on Schedule B.

The Shirley – Jordan River Citizens’ Committee and the Otter Point OCP Citizens’ Committee agree that the Muir Creek boundary is considered to be a working boundary for the purposes of the OCPs. However, the administrative boundaries used for planning purposes are not necessarily the same boundaries used for other purposes. Many residents of the Plan area consider the sign welcoming the public to Shirley to be the eastern boundary of Shirley. This sign is sited at the top of a hill on the east side of Muir Creek outside of the Plan area.

204 Organization and Format

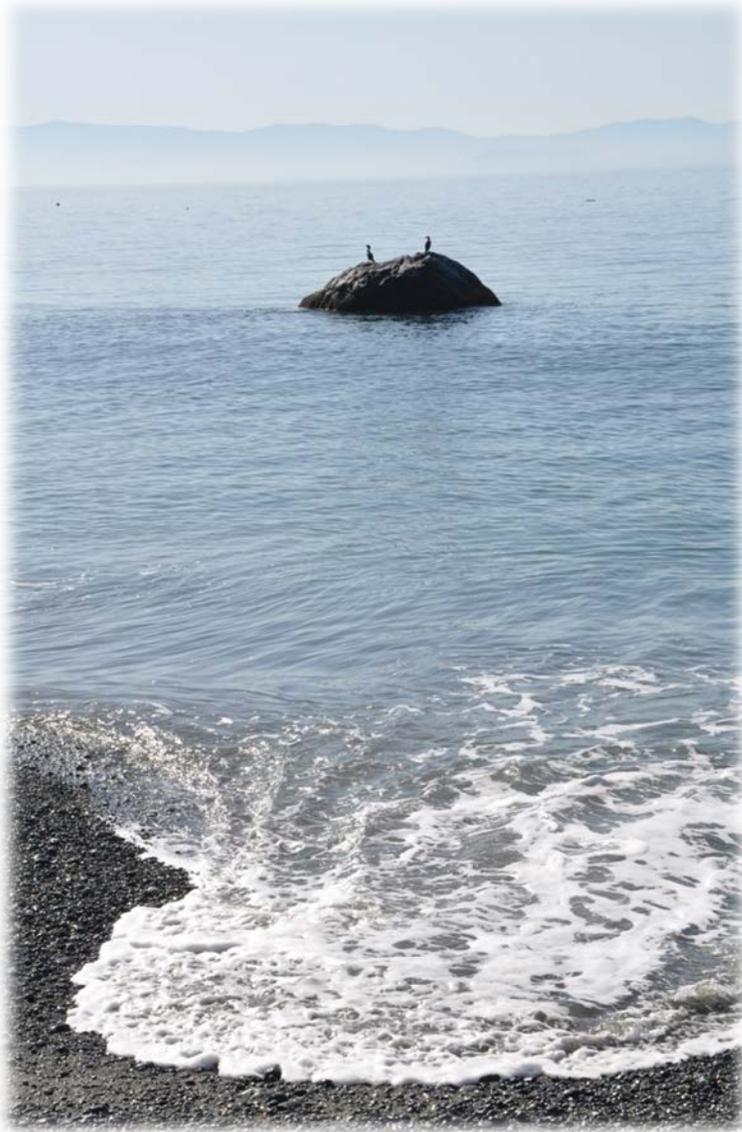
This Plan is organized into seven parts. Part One introduces the guiding principles of the Plan. Part Two outlines how the OCP conforms to provincial legislation and recounts the consultation process. Part Three is organized by key themes and provides the context for the Plan including the physical setting, projected population, servicing levels and a description of existing land uses within the community. Part Four establishes the land use designations and policies. Part Five designates and creates six development permit areas (DPAs) with corresponding guidelines. Parts Six and Seven fulfill the statutory requirements for development approval information areas and temporary use permits. Appendix A includes relevant definitions of terms used in the document. These terms are italicized and hyperlinked throughout the document. Appendix B is a list of sources used in developing the Plan. Schedules B through I also form part of the Plan.

Although the legal name for the community is “River Jordan”, most people refer to the community as “Jordan River”. For this reason, the Plan also refers to this community as “Jordan River”.

To accommodate future changes to the OCP that might be required by provincial legislation or the RGS, there are deliberate gaps in the numbering of sections. The pagination of Parts Four and Five is specifically intended to allow for more efficient printing and reproduction of key pages. Landscape orientation was used to facilitate easier reading of this document on electronic devices.

205 Public Consultation

A key feature of the preparation of this Plan is that it has been community-driven. Since the OCP review process began in 2013, community members have been involved and have taken advantage of the opportunities for public input. The CRD website has been used throughout the process to inform the community about opportunities to participate in the planning process, as well as providing project-specific information including the open house displays, meeting notes, drafts of the OCP and the final documents. Additionally, newspaper advertisements and mail-outs were used to notify the public of meetings and events. At their request, interested parties were added to an e-mail list to receive notification of upcoming events and information on the project.



Shirley – Jordan River Citizens’ Committee

Ten individuals who lived or owned property in Shirley and Jordan River who expressed their interest in participating were appointed by the Juan de Fuca Electoral Area Director to sit on the Shirley – Jordan River Citizens’ Committee. Over the course of fifteen meetings, the 2007 OCP was reviewed in its entirety by the Committee. Important and emergent issues facing Shirley and Jordan River were identified and discussed. Reports on the results of the open houses were prepared for the Committee’s consideration. Three rough drafts of this OCP were distributed to the Citizens’ Committee for its review prior to preparation of a final draft.

Public Events

Four open houses were held during the preparation of this Plan. They were timed to launch the project, share initial background information and identify key issues, and then share information and receive feedback on drafts of the OCP. One of the sessions was held specifically for the residents of Jordan River. All of the Citizens’ Committee meetings were open to the public and opportunities were provided for the public to speak at these meetings. Feedback from the public was gathered at the open houses by way of questionnaires, comment sheets, facilitated sessions and face to face conversations with Committee members as well as staff.

Consultation with other Committees and Groups

As required by Section 476 of the **LGA**, School District #62 Sooke has been consulted with and asked for input on its actual and anticipated needs for school facilities within the Plan area. A presentation regarding the OCP was made to the JdFEA Parks and Recreation Advisory Commission on June 24, 2014.

Referral Process

The draft Plan was referred to federal, provincial and regional agencies, and First Nations with an interest in the area, as well as numerous stakeholder groups. Referral comments were considered and many were incorporated into the final Plan.

206 First Nations

The Shirley and Jordan River areas have been used by the First Nations for settlement, hunting, fishing, foraging and cultural activities. Shirley and Jordan River both lie within the traditional territory of the T'Sou-ke First Nation and Pacheedaht First Nation. Other First Nation and Treaty groups have identified an interest in the Shirley – Jordan River Plan area including the Cowichan Tribes, Halalt First Nation, Hul'qumi'num Treaty Group, Te'Mexw Treaty Association, Lake Cowichan First Nation, Lyackson First Nation, the Penelakut Tribe, and the Stz'uminus First Nation. There may be interest by some of these groups in land owned by the Crown within the Plan area.

Due to the long term use of the area by First Nations, significant archaeological resources exist in the area. The OCP supports the identification and preservation of these resources and addresses the matter in Part Four.

207 Collaboration with Other Agencies and Authorities

The CRD will strive to work in collaboration and partnership with First Nations, the Agricultural Land Commission (ALC), provincial ministries, federal departments, Island Health, School District #62, and all other necessary agencies and groups to address infrastructure, services, transportation, energy and emissions management, and environmental concerns.

208 Regional Growth Strategy Consistency

The RGS adopted by the Capital Regional District Board in March 2018 establishes several goals for the region and outlines the desired pattern of growth for the CRD. The Shirley – Jordan River Plan area lies within the JdFEA of the CRD (see Map 1). The goals, objectives and policies of this Plan work towards the seven strategic objectives, the four land use policy designations, and the Growth Management Concept Plan in the RGS, in the following ways:

- A. To keep settlement compact, lands within the Plan area intended for settlement have been designated as Settlement and Pacific Acreage. These areas are coincident with the Rural/Rural Residential Policy Area in the RGS. All other lands in the Plan area have been designated for commercial, rural, resource, agricultural or park uses. These areas align with the Capital Green Lands and the Renewable Resource Lands policy designations in the RGS.
- B. To protect the integrity of the rural communities in the Plan area, only certain land uses and densities are supported. In the Settlement and Pacific Acreage Land Use Designations, low-density residential and community uses are supported. Home based businesses and small-scale commercial uses that service local needs are supported, as well as certain types of tourism activities, provided that these uses are of a scale and size appropriate for a rural community. Other types of commercial uses and industrial uses are not supported in these two designations.

The Settlement Containment Area designation from the 2007 OCP has been replaced with Settlement and retains a density of one *parcel*/per hectare for the residential areas in Shirley. The Pacific Acreage Land Use Designation includes all lands outside of the new Settlement Land Use Designation that are generally zoned for or developed at a density of one *parcel*/per two hectares, or in the range of four dwelling units per four hectares, as well as existing tourism commercial operations with the appropriate zoning. The overall development potential of the Plan area has been significantly reduced from what was possible in the 2007 OCP through the application of these two new land use designations.

A Commercial Land Use Designation has been applied to lands in Jordan River that are deemed not safe for residential habitation. While the 2007 OCP designated a small Settlement Containment Area (SCA), much of the remaining Plan area was designated as Settlement Area with a density greater than 2 hectares per *parcel*. Significant areas of land being used for resource-based purposes

were included in the Settlement Area of the 2007 OCP. To improve the relationship between the land use designations in the OCP and existing land uses, large tracts of land designated as Settlement Area in the 2007 OCP are designated as Coastal Upland and Renewable Resource in this OCP, with policies favouring natural resource uses and densities of 4 hectares and 120 hectares per *parcel* respectively. Lands designated as Coastal Upland are primarily enrolled in the PMFL program with policy statements that support the use of these lands for forestry. If the lands are removed from the PMFL program, their use for low-impact tourism development is supported. All lands in Provincial Crown Forest have been designated as Renewable Resource. Policy statements support the continued use of these lands for forestry. Land owned by BC Hydro used for power generation has been designated as Renewable Resource. A parcel used for a log sorting station adjacent to Jordan River is also designated as Renewable Resource.

- C. To protect, conserve and manage ecosystem health, areas in the Capital Green Lands Policy Area within the Plan area are designated as Park. Riparian areas, sensitive ecosystems, marine uplands and shoreline areas have been designated as a DPA for environmental sensitivities. All of the marine waters in the Plan area have been designated as Marine.
- D. To manage regional infrastructure services sustainably, the community water servicing policy provisions for Shirley – Jordan River are not to exceed the existing 126 parcels within the Sheringham Water District. No CRD water systems are proposed in the Plan area. No community sewer systems are proposed in the Plan area and the CRD supports the Ministry of Environment and Island Health in their regulation of sewage.
- E. To build Shirley and Jordan River as complete communities, a number of policies in this OCP support community safety, such as the Restricted Development Land Use Designation on lands within the flood inundation zone identified by BC Hydro and the designation of DPAs for hazardous conditions. Ways to build a healthy community include community volunteerism and local delivery of health care services, social programs and recreational programs. There is a desire for a community meeting place in Jordan River and improvements to the Shirley Community Hall.
- F. To improve the affordability of housing, suites and home based businesses are supported by this Plan. Alternative forms of housing such as manufactured and modular homes are also supported, as are alternative sources of energy for homes such as geothermal.
- G. To increase transportation choices, this OCP strongly encourages senior government to improve the safety of Highway #14 (West Coast Road) so that it can be used for alternative transportation choices. The creation of an off-street trail network to link neighbourhoods,

community focal points and parks is supported. Carpooling, ride-sharing and approaching School District #62 Sooke to see if an agreement to allow community members to ride on school buses are presented as ways to increase transportation choices.

- H. To strengthen the regional economy, the reliance on other regional centres is recognized in this Plan. Agriculture, home based businesses, renewable resource activities and low-impact tourism uses are viewed as Shirley – Jordan River’s contribution to the regional economy.
- I. To foster a resilient food and agriculture system, all land in the ALR within the Plan area and the Renewable Resource Lands Policy Area has been designated as Agriculture. Policy statements in this OCP support the use of lands designated Agriculture for farming and, to reduce land use conflicts, a DPA establishes a buffer strip between lands in the Agricultural Land Reserve (ALR) and adjacent properties.
- J. This OCP also discusses the impact of climate change on the Plan area and suggests ways to ameliorate potential impacts including protection of ecosystems, consideration of energy efficient building standards, development of alternative transportation infrastructure, addressing sea level rise and through education and outreach initiatives.

209 Minimum Parcel Size

Minimum *parcel* sizes are expressed in this bylaw as policies to guide current and future planning. However, it is recognized that there are existing *parcels* which have been created by *subdivision* within the Plan area that do not meet the general minimum *parcel* size policies expressed in this Plan. Nothing in this Plan is intended to make *parcels* that do not meet the minimum *parcel* sizes set out in this Plan, but that conform to current zoning regulations under Bylaw No. 2040 inconsistent with the Plan. However, it is intended that any further amendments to the zoning bylaw applicable within the Plan area will be consistent with the minimum *parcel* sizes as specified in this Plan to reflect the vision for the community.

210 Greenhouse Gas Reduction

For the purpose of Section 473 of the *LGA*, the target for the reduction of Greenhouse Gas (GHG) emissions in the CRD is 33% below 2007 levels by 2020. This figure is consistent with the provincial target. The CRD has established a Climate Action Program to act as a regional hub and facilitator on climate change issues and collaborate with other entities on ways to reduce emissions and plan for future climate change.

As its contribution to the CRD target, the communities of Shirley and Jordan River will work to reduce GHG emissions in the Plan area by 3% below 2007 levels by 2020. The CRD will meet the targets by developing a carbon reduction plan for CRD operations including operations in the Shirley – Jordan River Plan area and by undertaking the following:

- A. Educating residents, businesses and tourists about climate change as it relates to community priorities;
- B. Establishing new policies and objectives in Part Four of this OCP with the intent of reducing energy use and protecting valuable carbon sinks; and
- C. Collaborating with other governments in examining and exploring GHG reduction strategies on a regional basis through one or more of the following:
 - development of GHG reduction standards for buildings by addressing issues such as energy performance, local material, orientation and density;
 - development of additional infrastructure for cycling, walking, transit and carpooling as alternatives to single occupant vehicle use;
 - waste reduction including enhanced waste diversion of recyclable materials;
 - protection of ecosystems through the conservation and enhancement of forested areas;
 - development of a renewable energy generation plan; and
 - development of programs and policies that increase local food security and local food supply options.

211 Sand and Gravel

No new sand or gravel deposits suitable for future sand and gravel extraction were identified during the preparation of this Plan. There are several known gravel pits in the Plan area which are shown on Map 2 as well as a number of known sand and gravel reserves.

PART THREE - CONTEXT

301 Introduction

Water has been the central focus for the community during the preparation of this Plan. Reflecting the importance of this topic, separate sections dealing exclusively with water have been written. Other important issues identified during the preparation of the Plan are protection of the natural environment, traffic safety and maintaining the rural nature of the Plan area. Although there is support for resource-based industries occurring in the Plan area, residents are increasingly concerned about the impacts that resource-based activities have on the communities of Shirley and Jordan River. They wish to see more controls in place to protect the environment and remediate areas affected by past activity. Appreciating that much of the responsibility for these types of activities is within the purview of senior government, local area residents expressed interest in finding ways to engage in a dialogue with government agencies and companies involved in resource management activities.

310 Water

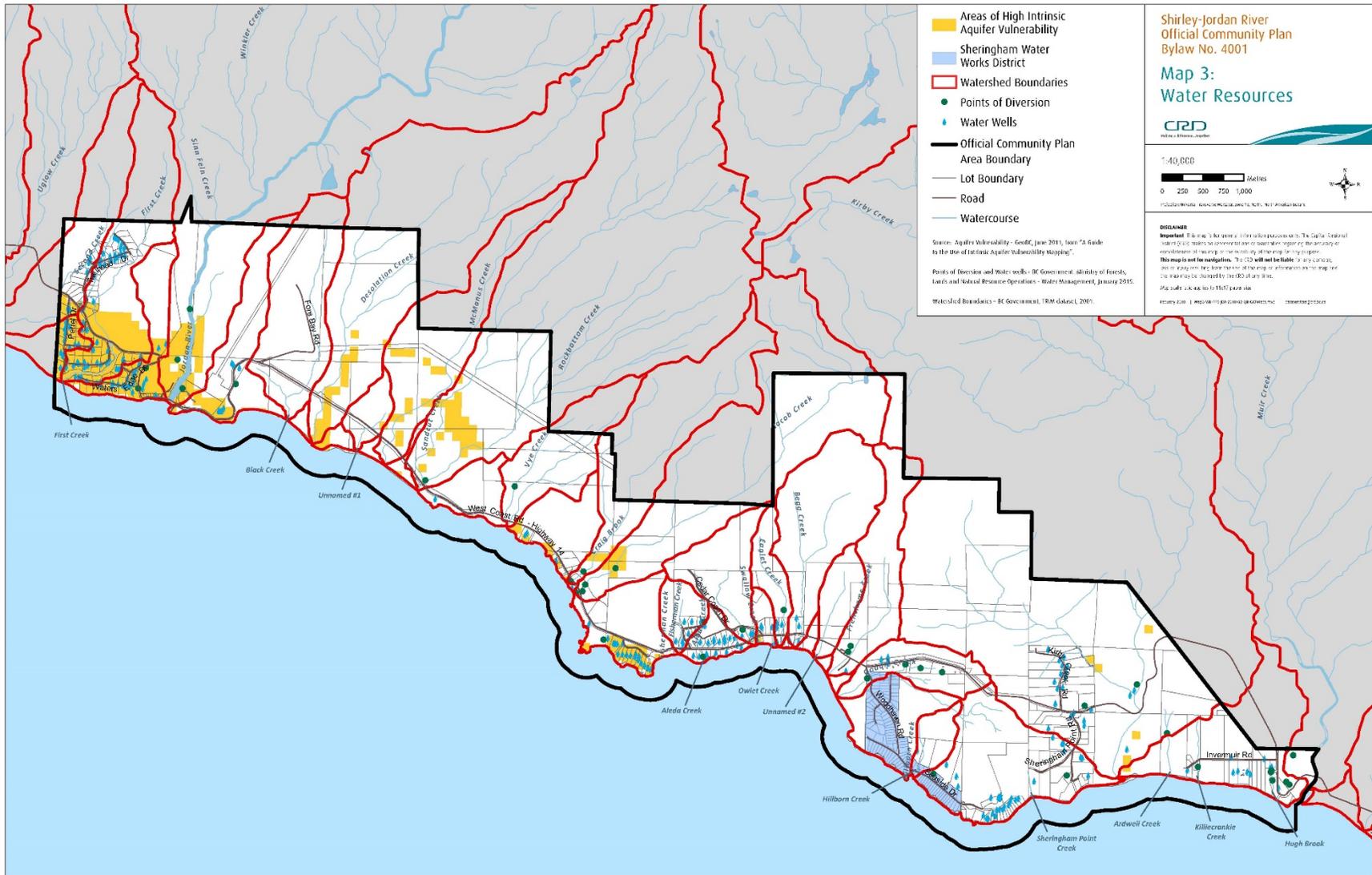
Water is a main element shaping the land. Rivers, creeks and wetlands flow from higher elevations into the ocean, with snowmelt contributing to these flows in the spring season. All water sources are inherently connected and land use activities are dependent on water.

In the Plan area, there are approximately 38 major watersheds (see Map 3). Many of the watersheds encompass the adjacent planning areas of Otter Point and Rural Resource Lands and originate in areas utilized by resource industries for forestry whose activities can

have downstream effects on the natural features, functions and conditions of wetlands and *watercourses*. In the Plan area, rainfall totals approximately 1,150 mm annually, which is slightly higher than Victoria where the yearly rainfall is 926 mm.

Jordan River is the largest *watercourse* in the Plan area and the only river. Creeks in the Plan area from east to west include Muir, Killiecrankie, Ardwell, Kirby, Sheringham Point, Hillborn, Goudie, Frenchome, Begg, Eaglet, Swallow, Aleda, Fisherman, Jacob, Vye, Sandcut, McManus, Desolation, Black, Sinn Fein, First and Second as well as Grace and Craig Brooks (see Map 3). The provincial base mapping of the Plan area does not include all of the *watercourses* or accurately show the current location of some *watercourses*. This shortcoming has the potential to compromise biophysical studies unless field work is done to confirm the location of *watercourses*. The mapping of *watercourses* conducted during the 2014 SEI was relied upon to establish a DPA for riparian areas.





The Province, in partnership with the Vancouver Island Water Resources Vulnerability Mapping Project and other groups, mapped the intrinsic aquifer vulnerability in the region to describe the relative degree of natural protection of the groundwater from contamination due to the physical characteristics of the land and subsurface. Coastal areas around Point No Point, Sandcut Creek and Jordan River were identified in the mapping project as having highly vulnerable, unconfined aquifers due to the high water table and permeable sand and gravel soils.



Industrial or commercial uses which have the potential for spills, leeching or produce pollutants should not be sited in these areas (see Map 3).

Future climate change may result in a net increase in rainfall, with more severe heavy rain events leading to potential flooding and landslides. Increased drought in summer could see slower groundwater recharge resulting in insufficient *in-stream* flow to support fish habitat and domestic water supply.

311 Hydrology

Monitoring of river flows and flood events can assist with land use planning to avoid hazard areas, as well as to understand the water flow required to sustain ecosystems.

The Province prepared a Water Allocation Plan for the San Juan River in 1996. Although the San Juan is outside the Plan area, the report does include Muir, Kirby and Jacob Creeks. The report examines climatic and hydrological data to determine *in-stream* flow requirements for these creeks to aid in water allocation decisions.

Although there are no freshwater lakes within the Plan area, the Elliott, Diversion and Bear Creek Reservoirs to the north of the Plan area are part of the Jordan River watershed and hydro-electric system. In 2002, the Provincial Comptroller of Water Rights accepted BC Hydro's Jordan River Water Use Plan (WUP), which defines how the Jordan River hydro-electric system will be operated. In its implementation of the WUP, BC Hydro has prepared annual reports since 2006 that monitor compliance with the WUP and are available to the public. As part of the WUP, BC Hydro conducts monitoring and research on water use, flows, ecosystem health and restoration in order to maintain a proper functioning condition.

In 2010, the Sheringham Water Works Ltd. conducted a professional hydrological assessment of development impacts on the Goudie Creek watershed. The final report recommended developing a drinking water protection plan for the Goudie Creek watershed, as well as regular monitoring of creek flows and water quality.

To protect the environment and their potable water supply, residents would like to see a watershed management approach to development implemented and the designation of a DPA for water



conservation and protection. The collection and mapping of data for ground and surface sources of potable drinking water in the Plan is integral to implementing this type of approach.

312 Drinking Water

According to provincial records, there are over 250 individual domestic wells within the Plan area. The Province regulates the construction of wells greater than 15 metres deep. Island Health requires that wells be separated from septic systems by at least 30 metres. Well capture zones or recharge areas may extend beyond *parcel*/boundaries and be vulnerable to contamination. Reliance on groundwater supply can be uncertain due to limited data available on the aquifer itself, seasonal fluctuations in aquifer recharge, the overall volume of extraction from various users, and potential sources of contamination.

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development regulates water diversion through licensing. In 2014, there were 37 licensed points of diversion in the Plan area. The majority of licenses are for domestic purposes; however, there is a waterworks local authority license on Goudie Creek; enterprise licenses on Jacob Creek, Rudd Spring and Bliss Spring; a public facility license on Rudd Spring; irrigation licenses on Goudie Creek and Hillborn Creek; a storage license on Craig Brook; a residential lawn/garden license on Hugh Brook; a storage-power license on Bear Creek; and a general power license on Jordan River.

As a condition of *subdivision*, all *parcels* are required to have proof of potable water. Where a *parcel* is not served by a community water system, each lot is required to have a proven source of potable water. CRD building regulations permit engineered, on-site rainwater collection systems as residential potable water supplies. These systems are becoming more common with advancements in technology and a general increased awareness of water conservation measures. Rainwater can also be collected for non-potable uses and for garden irrigation.

313 Water Sustainability

The Ministry of Environment's Water Stewardship Division regulates freshwater resources in British Columbia, including drinking water supplies, groundwater, dams and dikes, flooding, river forecasting and ecosystem health. The Ministry also regulates development in and around *watercourses*. Proponents retain a *Qualified Professional (QP)* to oversee the development, including installation of bridges and culverts. Such work requires notification to the Province and may also require notification to any water license holders.

The *Water Sustainability Act (WSA)* received Royal Assent in 2014 and replaces the *Water Act*. Key changes in the *WSA* include the designation of areas for developing water sustainability plans, the establishment of water advisory boards, changes to water pricing and license terms, and increased consideration of environmental flow needs and beneficial use of water. As provided for in the *WSA*, residents of Shirley and Jordan River have a keen interest in establishing either a water advisory board or some other type of stakeholder group, which would facilitate consultation with the Province and other stakeholders on matters related to water.



320 Environment

A SEI of the Shirley – Jordan River Plan area was commissioned by the CRD in 2014. The inventory, conducted by Madrone Environmental Services Ltd., has provided much of the information for this section. Relying on aerial imagery, existing biophysical reports and field verification, 413 polygons were mapped using the provincial standards for SEI classification. Of these, 261 represented pure polygons of a single type of sensitive ecosystem or other important ecosystem (OIE). Only 23 polygons were mapped with a component of non SEI or OIE such as road or rural development. Standardized terrestrial ecosystem mapping labels were applied to each polygon. Species and ecosystems at risk were identified by using the Conservation Data Centre database.

321 Sensitive Ecosystem Inventory

The Plan area falls into two subzones of the Coastal Western Hemlock biogeoclimatic zone: the Western Very Dry Maritime subzone “CWHxm2” and the Submontane Very Wet Maritime subzone “CWHvm1”.

The CWHxm2 zone is characterized by warm, dry summers and moist, mild winters with little snowfall. There is a long growing season and some sites experience water deficits. Zonal forests are dominated by Douglas-fir, and accompanied by Western hemlock and minor amounts of Western red cedar. On drier sites, Douglas-fir dominates with minor components of lodgepole pine and arbutus. Moist sites feature Western red cedar and Sitka spruce with red alder, black cottonwood and willow in flooded areas.

The CWHvm1 zone is characterized by a wet, humid climate with cool summers and mild winters with relatively little snow. Forests in this zone are dominated by Western hemlock and Amabilis fir. Drier sites are dominated by Western red cedar, lodgepole pine and Western hemlock. Floodplain sites feature Sitka spruce on high bench areas and red alder and black cottonwood on the middle and lower benches. Provincial mapping indicates that the CWHvm1 zone can be found west of Jordan River at elevations between sea-level and 400 metres. Ground observations indicate that the CWHvm1 zone may actually occur to the west of the Plan area, but as refinements to the biogeoclimatic base mapping were beyond the scope of the SEI, the provincial delineation was relied upon.

Ten sensitive ecosystems and one OIE were identified within the Plan area (see Table 1 and Map 4). There is documented evidence of four species at risk within the Plan area: the Northern Red-legged frog (*Rana aurora*) within the Desolation Creek watershed near Fore Bay Road; the Warty Jumping slug (*Hemphillia glandulosa*) near the mouth of Muir Creek; seaside bone fungus (*Hypogymnia heterophylla*) observed near Sheringham Point; and, nodding semaphoregrass (*Pleuropogon refractus*), a plant identified in French Beach Provincial Park. In addition to the reported occurrences of rare species, the SEI identified and mapped thirteen ecosystems with the potential to be ecological communities at risk or of special concern (i.e. either red- or blue-listed).

There are several known bald eagle nests within the Plan area near Muir Creek, Jordan River and Point No Point Resort. The field survey for the 2014 SEI confirmed the location of eagle nests near the Sheringham Point Lighthouse and Waters Edge Drive.

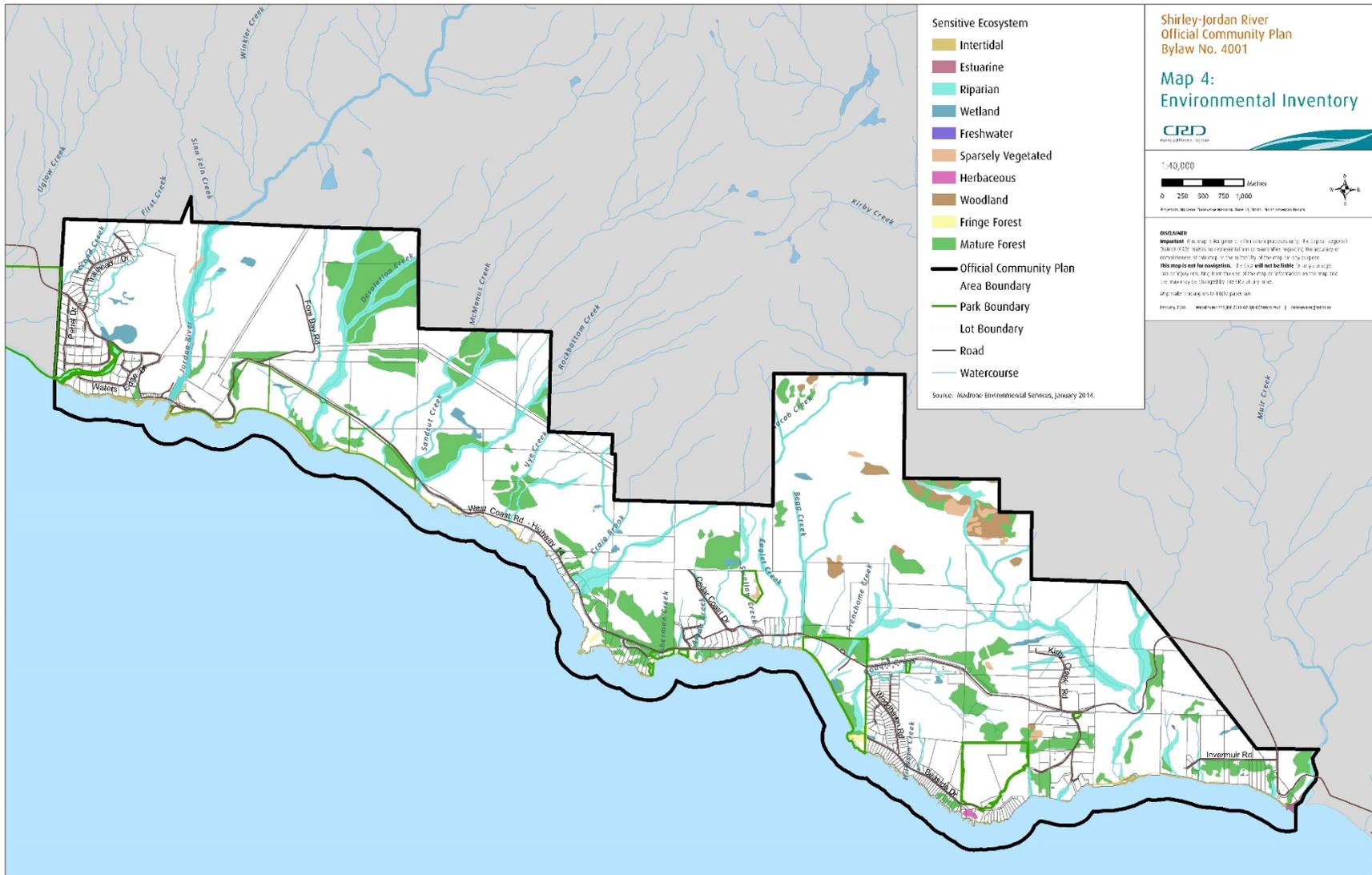
Riparian ecosystems occur next to water bodies, support a disproportionately high number of species for the area they occupy and are distributed throughout the Plan area. They have a greater diversity of plant composition and structure than uplands ecosystems and a unique micro-climate due to increased humidity, a higher rate of transpiration and greater air movement.

Wetlands are amongst the most threatened habitats in the world and are vulnerable to small changes in hydrology. Even limited changes to the nutrient levels of wetlands can affect the parameters that specific wetland communities require to survive. Wetlands support a high number of habitat niches, which provide critical habitats for numerous mammal, bird, reptile, amphibian, fish and vertebrate species. There are a number of small wetlands in the Plan area and a larger one near Cormorant Way.

A number of wildlife species are completely dependent upon freshwater ecosystems for their entire life cycle, while others such as amphibians utilize these habitats during critical life stages. Only two polygons of freshwater ecosystems, totalling 0.2 hectares, were mapped. Due to their small size, they have been classified as ponds and are considered noteworthy because of their scarcity.

Table 1: Sensitive and Other Important Ecosystems

ECOSYSTEM TYPES	AREA (HA.)	NOTEWORTHY SITES
SENSITIVE ECOSYSTEMS		
RIPARIAN (RI)	283	Muir Creek (large mature trees, known eagle nests); Kirby Creek (diverse hydrology, large floodplain); Jacob Creek (steep-sided gully); Craig Brook (variety of in- <i>stream</i> characteristics).
WETLAND (WD)	28.6	Large wetland located north of West Coast Road near Cormorant Way.
FRESHWATER (FW)	0.2	The pond south of Sheringham Point Road and the pond at the top of Ardwell Creek.
INTERTIDAL (IT)	35.8	The largest and longest expanses of beach are at French Beach and Jordan River.
ESTUARINE (ES)	1.9	Only one site at the mouth of Muir Creek.
OLDER FOREST (OF)	1.2	An area adjacent to Muir Creek and another area off Fishboat Bay Road.
FRINGE FOREST (FF)	10.5	Sites in French Beach Provincial Park and Fishboat Bay Community Park.
WOODLAND (WD)	27.4	Woodland mixed with sparsely vegetated rock outcrops and cliffs at top end of Kirby Creek.
HERBACEOUS (HB)	1.5	Site west of the trail leading to Sheringham Point Lighthouse.
SPARSELY VEGETATED (SV)	28	Priest Cabin Community Park.
OTHER IMPORTANT ECOSYSTEMS		
MATURE FOREST	378	Along Invermuir Road, Fishboat Bay Road and adjacent to the Muir Creek riparian zone.
TOTAL AREA	796.1	Approximately 21% of the land base in the Plan area.



Estuarine habitats are among the most productive on the planet. Their sheltered waters support unique communities of plants and animals especially adapted to this type of ecosystem. In the Plan area, the only area of estuarine tidal flat is at the mouth of Muir Creek.

There are 35.8 hectares of intertidal ecosystems with much of the shoreline varying between rocky headland and gravel/sand beach, and only 1.12 hectares of mud flat. A range of species live within the intertidal zone, and vary based on the amount of exposure.

Older forests are biologically rich and distinct from younger, second-growth forests. They support a rich community of wildlife, plant and invertebrate species with many species dependent upon specific habitat features only found in older forests. Fungi, lichens and the red-listed warty jumping slug are examples of species dependent upon old growth forest features. There are no pure stands of old growth forest in the Plan area, only older individual trees interspersed in mature stands near Muir Creek and Fishboat Bay Road.

Fringe forest is a new SEI classification created specifically for this project due to the presence of Sitka spruce within 200 metres of the coastline. This ecosystem is common in the CWHvh1 biogeoclimatic zone but does not typically occur east of Port Renfrew. All of the shoreline units in this biogeoclimatic zone are blue-listed when mature. Most of the fringe forest mapped was between Jordan River to just east of French Beach Provincial Park.

Woodland ecosystems, distinct in ecology and biological diversity, are one of the most threatened ecosystems on Vancouver Island. Many species of plants, animals, reptiles and birds are attracted to this ecosystem. Because of the ecosystem's small size, neighbouring ecosystems strongly influence the wildlife living there.

Herbaceous ecosystems are natural grasslands and moss-dominated ecosystems that may take more than 100 years to reach their current state and composition. The thin soils and herbaceous plants can easily be disturbed. Sparsely vegetated ecosystems can be highly unstable, evolving and eventually stabilizing over thousands of years. Since they rarely have an organic layer to protect the surface from erosion and disturbance, the plant root systems can be easily disturbed or destroyed. Some plant species, including several rare species are only known to occur in these ecosystems. Bats use crevices in rocks for roosting and hunt over these open sites. The area of both these ecosystems is limited within the Plan area.

OIEs are mapped to identify important elements of biodiversity or recruitment sites for ecosystems at risk or important wildlife habitat requiring recovery or restoration. Mature Forest older than 80 years but less than 250 years are classed as OIEs. The majority of the Mature Forest OIE was located adjacent to West Coast Road within residentially developed areas.

Designation of a DPA to protect sensitive ecosystems was a key recommendation of the SEI. Another recommendation was a 100 metre buffer around active wildlife trees increasing to 200 metres for development occurring during breeding season.

Bears, cougars, deer, elk, beaver and otters are some of the mammals common to the Plan area. Protection of habitat, connectivity between habitats and minimizing the interaction between wildlife and residential uses are important considerations in land use planning.

Because of Jordan River's hydro-electric facilities, there have been several biophysical studies of this *watercourse*. Provincial records indicate that Chum and Coho salmon spawn in the Jordan River from September to November. Recent fish index studies document the presence of sculpin, rainbow trout and Coho salmon. Falls and the dams upstream on the Jordan River are significant obstacles for fish. High levels of copper from an abandoned mine inhibit fish during low flows.

Chum and Coho salmon spawn from September to early December in Muir and Kirby Creeks. There are falls on both creeks which block upstream movement by fish. Chinook salmon and steelhead have also been observed in Muir Creek, but quick runoff and silting from past forest activities affect its fish habitat. Cutthroat trout have been observed in Goudie Creek. Sculpin, cutthroat trout, rainbow trout and steelhead have been recorded in Desolation Creek. There is little data on the other creeks in the Plan area and no other recorded sightings of fish. Because of steep terrain, many of the creeks in the Plan area have obstacles for anadromous fish.

322 Riparian Areas Regulation

Under the *Riparian Areas Protection Act* and the *Riparian Areas Regulation (RAR)*, the Ministry of Environment protects fish habitat including the riparian areas adjacent to *streams*. By 2006, local governments that did not already have appropriate bylaws in place were required by the Province to formally integrate the *RAR* into existing official community plans or zoning bylaws. In the Plan area, a DPA for riparian areas

has been designated and includes all mapped *streams*, as well as the adjacent riparian areas. Also included into this DPA are any riparian areas subject to the **RAR**.

An assessment by a *Qualified Environmental Professional (QEP)* pursuant to the **RAR** will be required if development is proposed near a *stream* that is determined to be fish-bearing. All or part of the riparian assessment area may be classed by the *QEP* as a Streamside Protection and Enhancement Area (SPEA). No or very little development will be permitted in the SPEA. Restrictions and conditions may be placed on development outside the SPEA but still within the riparian assessment area.

323 Invasive Species Management

After habitat loss, invasive species are recognized as the second greatest threat to native species and the loss of biodiversity. Their effects on biodiversity can be significant and often irreversible. In the Plan area, land tenure can affect the way in which invasive species are managed. Considerable areas of the Plan area are in Tree Farm Licence (TFL) #61 or held as PMFL. In areas where timber has been recently harvested, there are requirements for seedlings to be replanted within a specified period of time. The regrowth of these seedlings is then monitored to ensure the forest will regenerate. There is strong incentive for the forest companies to remove invasive plant species like broom and blackberries after the seedlings are planted to ensure the long-term survival of the new trees.

The management of invasive species in regional and community parks is done in accordance with applicable plans and practices. While an Invasive Species Strategy for BC was prepared in 2012, there is no province-wide protocol for reporting or controlling invasive species infestations on Crown land; however, invasive species found within public road rights-of-way and on Crown lands can be reported to the Province.

Invasive plant species can also be found on private lands. The **LGA** gives local governments the option to be involved in the management of invasive plant species and, in 2017, the CRD assumed responsibility for this function. The CRD will take on a regional coordination role for invasive species management with a focus on early detection and rapid response for priority species as well as conduct education and outreach

programs. The Capital Region Invasive Species Partnership (CRISP) maintains a regional status/priority list of invasive plant species. The Province has an online program for the sighting and removal of invasive species through its Report-a-Weed program.

324 Ecological Restoration

Through its Education and Outreach function, the CRD Community Clean-up program supports groups making visible environmental improvements to their community through organized clean-ups. It provides financial support for projects that achieve visible environmental benefits and encourage people to take environmentally responsible behaviour. The projects must be conducted within the Capital Region and include the clean-up, rehabilitation or enhancement of the natural environment of public lands/waterways such as natural areas, recreational parks and playgrounds, ditches or roadsides (excludes highways), marine shorelines and harbours; lakes, ponds, rivers, creeks, *streams* and other natural waterways.

To monitor the effectiveness of environmental management programs and stewardship initiatives, it is important to collect and maintain data in the Plan area and then, over time, determine what changes are occurring. The 2014 SEI provides baseline information essential to the monitoring process.

330 Parks and Trails

The Shirley – Jordan River Plan area is serviced by a wide range of park land and trails (see Map 2 and Table 2). French Beach Provincial Park has parking, camping, picnicking, an adventure playground and well-developed access to a cobble beach. This park was created in 1974 from land once owned by James French who pre-empted much of the land west of Sooke in 1885.

There are five community parks whose day to day management is overseen by the Juan de Fuca (JdF) Community Parks and Recreation program. Above French Beach, spectacular views of the Juan de Fuca Strait can be seen from the viewpoint in Priest Cabin Park. Fishboat Bay Park, hugging the west side of its namesake, has parking with a short trail to a beach. Sheringham Point Park is a linear greenbelt that is partly within the Agricultural Land Reserve. Kaulitz Park is an undeveloped nature park created in 1991. The Shores is another undeveloped nature park containing the lower reaches of First Creek.

CRD Regional Parks purchased land in the Jordan River area from Western Forest Products with the help of The Land Conservancy of BC in 2010. These lands are now known as Jordan River Regional Park, and include Sandcut Beach, a cobble beach beside the Jordan River estuary,



a commercial campground, and several out-buildings rented to Queesto Forestry. The CRD Board has determined that lands north of Highway #14 are surplus to regional park needs. The community has expressed interest in use of the out-buildings and in acquiring access to lands in the Jordan River inundation zone, that are now owned by BC Hydro, for recreational purposes.

Pioneer Park is a neighbourhood park, owned and operated by the Shirley Community Association. It is the site for local events and a Country Market in the summer. Although not a park, Camp Jubilee which is owned by the Girl Guides of Canada, is a 64.7 hectare *parcel* centred on Kirby Creek with outdoor camping facilities for up to 100 people. The Sheringham Point Lighthouse was designated a National Heritage Lighthouse in 2015 and is operated by the Sheringham Point Lighthouse Preservation Society.

Table 2: Parks and Protected Sites the Shirley – Jordan River Plan Area

NAME	AREA (HA.)	FEATURES
PROVINCIAL PARK		
FRENCH BEACH	59	69 campsites, picnic area, playground, trails
REGIONAL PARK		
JORDAN RIVER	187	22 campsites, Sandcut Beach trail, surfing
COMMUNITY PARK		
FISHBOAT BAY	3.13	Undeveloped nature park, trail, beach access
KAULITZ	0.68	Undeveloped nature park
PRIEST CABIN	6.88	Undeveloped nature park, viewpoint, bench
SHERINGHAM POINT	0.50	Nature park, trails, sensitive ecosystem
THE SHORES	5.81	Nature park, closed trail
NEIGHBOURHOOD PARK		
SHIRLEY PIONEER PARK	0.45	Passive park, Shirley Community Hall
HERITAGE SITE		
SHERINGHAM POINT LIGHTHOUSE		Heritage Lighthouse
TOTAL AREA:	263	

*NB. Juan de Fuca Provincial Park and the start of the Juan de Fuca Marine Trail are just outside the Plan area.

331 Recreation

The Strait of Juan de Fuca spans the length of the Plan area and is a significant geographical feature offering recreational opportunities such as offshore fishing, beachcombing and viewing. Along the rugged shoreline, there are several beaches and pocket coves. Strong offshore currents in the Strait of Juan de Fuca limit the opportunities for ocean kayaking and canoeing. Despite the strong currents, there is both windsurfing and surfing at Jordan River. The Shirley Community Hall is a venue for indoor recreational activities such as quilting, yoga, musical performances and community events.

332 Trails

A key goal of the CRD Regional Parks Strategic Plan 2012-2021 is to develop an arterial trails system connecting all of the municipalities and electoral areas in the region. One of the key linkages in this regional trail system is a connection between the Juan de Fuca Marine Trail and the Galloping Goose Trail. The Juan de Fuca Marine Trail is 47 kilometres long and its eastern trail head is just outside the Plan area inside Juan de Fuca Provincial Park. The Galloping Goose Trail, administered by CRD Regional Parks, is a 55-kilometre long, multi-use trail starting in Victoria and ending in Leechtown, an abandoned gold mine town north of Sooke. The CRD Regional Parks Strategic Plan 2012-2021 contemplates future connections between these two major trail systems through the Plan area. The proposed Regional Trail System will support the development of eco-based tourism industry and the associated commercial ventures such as accommodations and dining for tourists. It will also provide a significant connection between the Plan area and the rest of the CRD.

Also shown on Map 4 of the Regional Parks Strategic Plan are two north-south connections with the Plan area from several conceptual east-west trail alignments outside of the Plan area. One possible future north-south connection is with the Jordan River Regional Park and the other connection is with Highway #14 in the vicinity of Muir Creek.

The Kludahk Trail is approximately 50 kilometres long and runs along the San Juan Ridge, north of and parallel to the Plan area. It is managed by the Kludahk Outdoor Club through Recreation Sites and Trails BC and in cooperation with the forest industry. The Kludahk Trail runs through an environmentally sensitive area and may not be able to sustain an increase in pedestrian traffic. Jordan Ridge also runs parallel to the Plan area at a lower elevation and is also identified in the Strategic Plan.

The recommendations of the CRD Pedestrian and Cycling Master Plan (PCMP), released in 2012, are complementary to the goals and objectives of CRD Regional Parks. The PCMP identifies Highway #14 west of Sooke as a part of the Primary Inter-Connected Network and recommends upgrading the road to have separated on-street bikeways. No funding has been identified for these upgrades but some of the projects identified in the PCMP for elsewhere in the region are being implemented with assistance from Federal Gas Tax revenues for infrastructure improvements.

333 Connectivity

Connectivity and pedestrian safety are important issues to the residents of the Plan area. Trails and improvements to Highway #14 are seen by the residents of Shirley – Jordan River as a solution to both these issues. Improvements to Highway #14, including bikeways as described in the PCMP, will enhance the safety for the non-motorized users of the highway and hopefully, lessen the reliance on vehicles by residents as they could walk and bike safely between their neighbourhoods. Over time, residents would like a network of local trails developed in both the communities of Shirley and Jordan River that would connect residential areas with commercial nodes, local and regional parks and trails, and other community-based amenities. Of particular concern is the need to address a safe route for school-aged children to use when travelling independently in their community and to the school bus stops.

334 Public Access to the Water Front

While all land below the high water mark of the ocean is public, access to beaches can be hampered by the lack of publicly owned access and geographical constraints (see Map 2). Parks like French Beach Provincial Park, Jordan River Regional Park and Fishboat Bay Community Park provide access for the general public.

Access to the water front can also be gained via public road rights-of-way that are acquired at the time of *subdivision*. When water front properties are subdivided, provincial land title legislation requires the dedication of a 20-metre wide strip as highway at specified intervals to facilitate future *subdivision* and provide access to water. This requirement can be waived by the Province if there are compelling reasons. A Public Access to Water Memorandum of Agreement (MoA) between CRD and MOTI was signed in 2006 that establishes a referral process

for applications involving provision or development of access to water to the local community parks and recreation commission. Often when a high bank is involved, the right-of-way is not suitable as road and remains undeveloped. Within the Plan area, this type of right-of-way is owned and administered by the Province. The Province is not obligated to develop the rights-of-way as road or to maintain them. When properties adjacent to the rights-of-way are subdivided, a developer can be required to construct a public road. Organizations and individuals can also request permission from the Province to develop these rights-of-way.

A 2003 study of all the rights-of-way in the JdFEA identified 12 rights-of-way in the Plan area (see Table 3). Fishboat Bay Road and Flea Beach were considered to have excellent potential for development while other rights-of-way had less potential with some deemed unsafe, subject to erosion or having ecological concerns. Since the 2003 study, the Fishboat Bay and Marion Road rights-of-way have been developed into a community park.

Table 3: Status of Water Front Accesses in Shirley – Jordan River

ROAD RIGHTS-OF-WAY		OTHER PUBLIC ACCESSES
DEVELOPED	UNDEVELOPED	
Fishboat Bay Road Marion Road Flea Beach	Salmon Road Pork Chop Hill Seaside Drive #1 Seaside Drive #2 Poseidon Place Packham Road River Jordan Townsite	French Beach Sandcut Beach
3	7	2

Sources: CRD Juan de Fuca Electoral Area Foreshore Access Report, Prepared by I. Bourhill, Capital Regional District, 2003 and Juan de Fuca Community Parks Strategic Plan

The 2003 study noted the likelihood for landowners adjacent to rights-of-way to have concerns regarding loss of privacy and potential trespass if rights-of-way are developed. Resistance from adjacent landowners can also be encountered when they themselves have encroached on poorly marked rights-of-way.

Road rights-of-way are also discussed in the 2010 JdFEA Community Parks Strategic Plan (CPSP). The JdFEA Parks and Recreation Advisory Commission is willing to evaluate which rights-of-way are of high priority for improvements, where future accesses could be acquired, and to enter into agreements with the Province for licences to develop and manage these locations as community trails, with the caveat that it is not necessary or feasible to seek management of all accesses. Management of a public access will only be considered by the Advisory Commission when the values of an access complement the park and recreation objectives of the Community Parks Strategic Plan.

It should be noted that in addition to the rights-of-way described above, park land provides access to the water front. French Beach Provincial Park has a well-developed access and parking. The recently created Jordan River Regional Park will provide public access to Jordan Beach, and the trail to Sandcut Beach has already been reconstructed.

335 Park Land Acquisition

The CRD Board makes all park land acquisition decisions and holds title to all lands acquired. CRD Regional Parks is responsible for making recommendations to the Board on the acquisition of regional park land. For community park land and trails, the JdFEA Parks and Recreation Advisory Commission has the responsibility for identifying and



recommending acquisitions to the Regional Board through the Land Use Committee. Rezoning and *subdivision* applications involving lands in Shirley and Jordan River are referred to the Advisory Commission which represents the community's interests in its review of these development proposals. In accordance with Section 510 of the *LGA*, the location and type of park land of interest for potential acquisition through *subdivision* and rezoning are described in this section and in Section 430 Parks and Trails.

For future regional park land acquisitions, Regional Parks has an interest in acquiring land west of Sooke River and has noted that old growth forest on land in the Coastal Western Hemlock biogeoclimatic zone is considered a priority.

In the 2010 JdFEA CPSP, the priorities for park land acquisition are identified as Special Preservation Areas consisting of environmentally sensitive areas and ecosystems, and those lands necessary for the protection of historic and archaeological sites. Additionally, it recognizes that all neighbourhoods should be serviced by appropriate public park land. The CPSP says that the JdFEA Parks and Recreation Advisory Commission will consider the donation of lands for park as well as any Crown land that becomes available. In collaboration with Local Area Planning and the Provincial Approving Officer, the JdFEA Parks and Recreation Advisory Commission makes recommendations on the most beneficial location of any public accesses to water required by Section 75 of the *Land Titles Act* in a *subdivision* proposal.

Adjacent to Muir Creek, there are a number of sensitive ecosystems and rare species. Presently, the lower reaches and confluence of Muir Creek can only be accessed by trespassing over private land. Near the access point to the water, there are fossil beds and a cobble beach. For these reasons, Muir Creek has long been identified by local residents as a top priority for park land acquisition, but the areas of interest are far in excess of what the developer might be required to dedicate at the time of *subdivision*. Policies indicating a willingness to consider increased densities in exchange for additional park land dedication will make current and future owners of the *parcel* aware of local interests.

Legal access to Priest Cabin Park and securing access to the Matterhorn Trail from Tieulie Place are other priorities for the community, along with the acquisition of park land for non-motorized, multi-use trail development. Shirley residents are interested in developing a link between the neighbourhoods on either side of Kirby Creek as well as gaining access to the beach at the mouth of Kirby Creek. Many of the legal rights-of-way and park land have already been acquired for a trail between the hamlet of Jordan River and Juan de Fuca Provincial Park. Construction

of a trail at the southern end of Petrel Drive to the shoreline and a connection over steep terrain between Highway #14 and Waters Edge Drive are required to physically complete the connection.

Within existing park land or other public lands, trail construction in DPAs for hazardous conditions or environmental sensitivities will only be considered subject to the recommendations of a *QP* or *QEP*.

336 Streamside Enhancement and Protection Areas

Provincial legislation requires that there be an environmental assessment of any residential, commercial or industrial development proposal within a prescribed distance of a riparian area. Within this riparian assessment area, a *QEP* determines what habitat is critical for the ecological health of fish and then classes this area as a SPEA, which must be protected from development.

Some development proposals have identified SPEAs as park land not only to fulfill the need to protect the environmentally sensitive area, but also to fulfill any statutory requirements for park land dedication at the time of *subdivision*. Because of the environmentally sensitive nature of SPEAs, their use for parks and trail accesses is not recommended. For this reason, the CPSP clearly states that SPEAs that are the subject of development proposals should be protected by methods other than dedication as park land.

340 Resources

Resource extraction continues to play a significant role in the development of the Plan area with forestry and hydro-electric generation being the two most prominent activities. Most of the land use and management decisions regarding resource development, including forestry, mining, renewable energy production and agriculture, are made by the Province with limited opportunity for the involvement of local government or Plan area residents.

341 Forestry

Significant portions of the Shirley – Jordan River Plan area are affected by commercial timber harvesting. There are large tracts of forested land as well as a number of previously logged areas in various stages of regeneration.



There are no timber processing operations in the area other than a log sorting operation at Jordan River. Other commercial activities in the forest include firewood cutting and timber salvage, mushroom picking, wild-crafting and salal harvesting.

There is one Tree Farm Licence (TFL) on provincial Crown land within the Plan area. TFL #61 is held by Pacheedaht Andersen Timber Holdings Limited Partnership with the daily operations managed from a base camp in Jordan River by Queesto Community Forest Ltd./Canadian Overseas Log and Lumber Ltd. TFL #61 is the only major tenure in the Plan area and covers 20,213 hectares of Crown land with an allowable annual cut of 108,500 cubic metres. An approved Forest Stewardship Plan has been prepared

for the TFL that allows harvesting to take place anywhere within the TFL except for areas with identified constraints such as sensitive ecosystems and view corridors. Local government bylaws are not applicable on the lands in the TFL used for forestry.

Forty-one properties with an area of 1,991 hectares are designated as PMFL in the Shirley – Jordan River Plan area. Provincial legislation specifically prohibits local governments from adopting bylaws or issuing permits that directly or indirectly restrict forest management activity on PMFL. The management regime for PMFL must respect five objectives clearly stated in provincial legislation regarding water quality, fish habitat, critical wildlife habitat, soil conservation and reforestation. When owners exit the program, the lands become subject to all local government bylaws.

Owners of private property not enrolled in the PMFL program can harvest wood for commercial sale provided that they have obtained a timber mark and a transportation permit from the Province. In addition to provincial government legislation, forestry activity on these properties is subject to local government bylaws. Due to the impact that forestry can have on the environment, potable water sources and transportation corridors, residents of the Plan area are interested in establishing a consultative process with the forestry companies and finding a forum to engage in a dialogue with the Province regarding how resources are managed and local concerns are addressed.

342 Mining and Aggregate Extraction

The soils and geology of the Shirley – Jordan River Plan area have good potential for gravel extraction. At present, there are five gravel pit operations in the Plan area according to Provincial data. Provincial legislation exempts gravel extraction and mining from local government bylaws.

There has been placer mining throughout the Plan area since the time of a minor gold rush at Leechtown between 1864 and 1865. The abandoned Sunro Gold and Copper Mine upstream from Jordan River has been the only sub-surface mining operation. Copper was first extracted from this mine by Cominco from 1919 to 1920. There was very little activity at the mine until 1961 when Cowichan Copper took over operations. The mine was then active until 1977 when the access tunnel caved in. Seepage from abandoned mine shafts and tailings continue to affect water quality in the lower reaches of the Jordan River making it unsuitable for fish habitat.

343 Renewable Energy

Constructed from 1909 to 1911, the Jordan River hydro-electric project was for a time the main hydro-electric source for Vancouver Island. The original powerhouse, which still remains above the community of Jordan River, operated until 1972. It was replaced by a 170 megawatt powerhouse that can contribute up to 35% of Vancouver Island's hydro-electric generation. Three dams and two reservoirs, which are part of the system, are outside the Shirley – Jordan River Plan area. The Bear Creek and Diversion Dams impound the Bear Creek Headpond and Diversion Headpond, which serve as the primary storage for the system. Elliot Reservoir, blocked by Elliot Dam, is the storage for the powerhouse. A 5.3 kilometres underground tunnel and a 1.6 kilometres surface penstock funnel water from the Elliot Headpond to the Jordan River powerhouse.

Areas of Vancouver Island are recognized as being well-suited to wind farming. Proximity to available electrical transmission lines and expected power demand are an important consideration in siting wind farms; so, while there is a higher capacity for wind farms on the north end of the island, the connection costs are lower on the southern end. Height of land is also preferred for on-shore locations. A 2008 call from BC Hydro has sparked interest from Independent Power Producers. In the Plan area, the feasibility of wind farms is actively being investigated.

344 Agriculture

Within the Shirley – Jordan River Plan area, there are 83 hectares of land in the ALR. According to the 2009 Agricultural Inventory of the Plan area, some of this ALR land is not available for agricultural use, including six hectares which have been built upon. Of the estimated 61 hectares remaining for agricultural use, only 9 hectares have been cultivated and 9.5 hectares are covered by grass forage and pasture. Of the 24 *parcels* in or partially in the ALR, two are used for commercial agriculture with one *parcel* used for keeping livestock and the other as pasture. There is one small commercial cattle operation in Shirley completely outside the ALR. There are currently no commercial agricultural operations in Jordan River.

Other small-scale agricultural activities include: harvesting mushrooms, berry picking, keeping of chickens, residential gardens, and harvesting of seaweed. During the summer, a country market is held weekly at Shirley Pioneer Park. There is interest in seeing this market expand and having a similar type event in Jordan River.

The CRD Regional Food & Agriculture Strategy, completed in 2016, identifies the CRD's role in food and agriculture along with recommendations, actions and resourcing requirements. The Regional Food and Agriculture Task Force was appointed by the CRD Board in 2016 to examine options for assisting agriculture in the region. Development of a land banking solution was identified as a 2015-2018 CRD Board Priority and, in 2018, a Regional Food Land Access Feasibility Study and Business Case will be conducted.

The JdF Agricultural Advisory Planning Commission makes recommendations on land use planning matters and agricultural issues referred to it.



350 Transportation

The Ministry of Transportation and Infrastructure (MoTI) is responsible for the operation and maintenance of roads within the Plan area. Highway #14, also known as West Coast Road, is part of the Circle Route and is the main transportation corridor through Shirley and Jordan River (see Map 2). No new major roads are planned for the Shirley – Jordan River area at the time of preparation of this Plan. Highway maintenance and repairs are provided by Main Road South Island, a private company contracted by the MoTI.

351 Safety and Maintenance Concerns

Heavy industrial vehicles use Highway #14 to carry lumber and aggregate into Victoria and to bring heavy equipment and materials to the west. Highway #14 crosses a number of creeks in the Plan area. The highway curves and twists down the steep ravine banks. Linear cracks along parts of Highway #14, especially in the ravines of Muir Creek and Kirby Creek, suggest there are areas of slope instability. There is a significant increase in traffic along the highway during the summer months as tourists visit the region. In 2018, the Province announced construction of a new pull-out for vehicles in the Muir Creek area. In the spring, heavy undergrowth can spread onto the road right-of-way obscuring sight lines and reducing the area of road shoulder available for walking and cycling. Residential driveways with direct access to Highway #14 can pose a traffic hazard. In Shirley, residents living north of Highway #14 must cross the highway to reach the community hall and restaurant. In Jordan River, residents in the hamlet must cross the highway to reach the water front and the new Regional Park. During the public consultation process, a number of suggestions were made for safety improvements to Highway #14, which have been identified as broad objectives for Traffic.

352 Transit

The nearest public bus stop is outside the Plan area at the intersection of Kemp Lake Road and Highway #14. The nearest park and ride is in the District of Sooke where commuters can board Route #61 Sooke/Downtown. This route is well-serviced and provides good connections to other routes in the Greater Victoria area. Accessible transit is not available in the Plan area. Given the population of the Plan area, it is unlikely that BC Transit would extend its bus service to Shirley and Jordan River.

Throughout the school year, School District #62 Sooke provides daily bus service to students in the Plan area. The residents of Shirley and Jordan River would like some form of community bus, and there is interest in exploring opportunities with the School District for members of the public to also use the school bus system.

353 Alternative Transportation Options

Alternative options for transportation might address some of the transportation issues facing this rural area. Cycling is an effective form of transportation for shorter journeys although there are safety concerns about cycling along Highway #14. A common option for reducing the number of cars on the road is a formal carpool arrangement between friends and co-workers.

“Car Stops” are a series of clearly identifiable spots at strategic locations beside a road where vehicles can safely pull over to pick up individuals waiting for rides. Drivers usually carry some visible form of identification on their car while riders hold out distinctive coloured cards indicating where they would like to travel to. Residents can also set up internet sites or use social media to arrange a ride. Bowen Island LIFT is an example of a car stop program in a rural community.

Any efforts to develop an organized approach to carpooling and car-sharing will likely need to be community driven. Local volunteers could solicit public opinion on what options might work best in Shirley and Jordan River and then establish a website or media page to promote and host the program.

360 Services and Emergency Planning

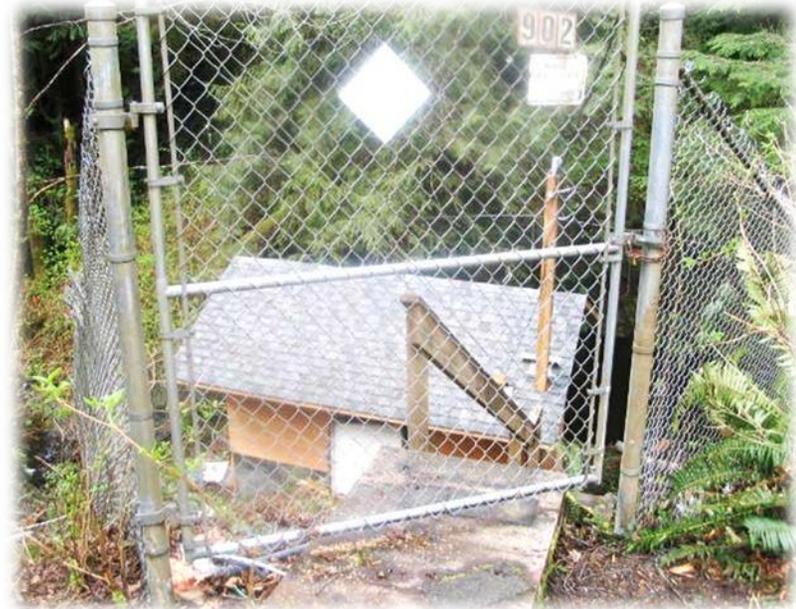
This section addresses domestic water supply, sewage treatment, telecommunications and electricity and emergency services in the Plan area. Hazardous conditions and emergency preparedness are also discussed.

361 Domestic Water Supply

Most of the residents in the Plan area obtain their potable water supply from wells or creeks. A water licence from the Province is required for points of diversion and property owners must maintain their own systems. Some of the wells and surface water sources suffer from seasonal dryness and potable water must be hauled in to fill cisterns and wells. The importance of protecting the quality and quantity of domestic water sources is recognized by the local residents. The importance of water in the Plan area is discussed in greater detail in Section 310.

Potable water is supplied by the Sheringham Water Works Ltd., a locally owned utility service in operation since the 1970s, to service the 126-lot *subdivision* known as Sheringham Estates. Water is drawn from the Goudie Creek watershed at a pump house at the top of Woodhaven Road.

Water conservation measures are encouraged and restrictions are placed on lawn watering during the summer. Boil water advisories have been issued on occasion to users of this water system. The advisories are primarily due to decaying leaves in the creek. No new CRD managed and operated water systems are planned or requested for Shirley or Jordan River.



Interest is growing in using rainwater capture to supply domestic water. At the present time, CRD and Island Health discourage rainwater capture systems as a potable water supply for the purposes of *subdivision*, although it can be used for gray water. However, in the case of new home construction, CRD Building Inspection accepts a rainwater capture system to provide potable water.

362 Sewage Treatment

In Shirley and Jordan River, sewage is treated by on-site systems. Individual homeowners are completely responsible for the operation and maintenance of their on-site wastewater treatment system. If an on-site system is poorly maintained, untreated effluent can flow into *watercourses*, aquifers or into domestic water supplies. Island Health is responsible in situations where there is a suspected failure of a septic treatment system. There are no plans for CRD sewer systems in either Shirley or Jordan River.

363 Telecommunications

Land-based telephone service is available throughout the Plan area, although cell coverage is limited and largely dependent on cell towers located across the Strait of Juan de Fuca in Washington State. Cell phone coverage issues and poor internet access in many parts of the Plan area give rise to safety concerns. For example, outdoor recreationists are increasingly relying on cell phones for safety. There is a need for broader cellular coverage throughout the Plan area that can serve as an affordable but dependable communication system during an emergency.

High-speed internet is available in Shirley, but not in the remainder of the Plan area until the existing telecommunications infrastructure is upgraded. Satellite internet service is available, but is expensive and can be affected by weather conditions. It is difficult for many residents and businesses in the Plan area to receive or transmit large files. The lack of good quality internet also poses problems for students doing online courses or educational research.

The federal government requires telecommunications carriers to conduct public consultation when locating any permanent antenna systems greater than fifteen metres in height. If the community does not have a specific policy in place, then the consultation process outlined by

Industry Canada must be followed. At this point in time, the CRD does not have a consultation policy for antenna systems. Even if the public objects to a proposed location, the federal government can still give its approval and local zoning bylaws cannot override this approval.

364 Police, Ambulance and Fire Services

Policing services for Shirley and Jordan River are provided by the Sooke Detachment of the RCMP. Its 15 member detachment responded to 113 calls for service in Shirley and 77 calls for service in Jordan River in 2013. There is an ambulance station in Sooke which serves the communities of Shirley and Jordan River. Victoria General Hospital is approximately 50 kilometres away in the Town of View Royal.



The Shirley Volunteer Fire Department was created as a service by the CRD in 1991 and is funded by property taxes. The Electoral Area Services Committee oversees and makes recommendations to the CRD Board regarding fire protection in the Electoral Areas. The Shirley Fire Protection and Emergency Response Service Commission is the advisory commission involved in the daily administration of this service. The fire chief reports directly to a CRD staff person. With approximately 14 volunteers, the Fire Department responded to 41 calls for service in 2013, of which 4 were fires.

The fire hall, immediately adjacent to the Shirley Community Hall, was built in 1989 and houses three vehicles. An addition to the fire hall, including a drive-through vehicle bay, was completed in 2016, but the Fire Department is interested in developing a long term plan to replace the existing fire hall. It is possible for the CRD to start a reserve fund and enact a bylaw to collect Development Cost Charges (DCCs) towards the anticipated cost of replacing the existing fire hall. DCCs are paid when a new lot is created or when a building permit is issued depending on the type of development.

Jordan River is not in a fire protection service area. If there is a wildfire in the Plan area or a structural fire is threatening to spread to Crown lands, then the BC Forest Service and the Provincial Emergency Program may become involved.

365 Search and Rescue

The JdF Search and Rescue Association was founded in 1983 and has over 30 members. The Association works with the RCMP and the Fire Departments in missing persons' cases and rescue missions. The Sooke station of the Royal Canadian Marine Search and Rescue has a roster of approximately 30 volunteers and covers the area from Race Rocks to Nitnat Lake, the largest search and rescue area on the west coast. It handles approximately 30 calls a year providing assistance to mariners and injured hikers on popular coastal trails.

366 Use of Sheringham Point Road for Emergency Access

When the Sheringham Point Lighthouse was built in 1912, a dirt road was constructed to it. Over time, Sheringham Point Road was developed and paved but it was not a through road. In 2003, an application was made for an 18-lot bareland strata *subdivision* immediately adjacent to the lighthouse. Residents living on Sheringham Point Road and Seaside Road are concerned about an increase in traffic if the proposed strata road creates a physical connection between Sheringham Point and Seaside Roads.

From the perspective of emergency access, there was strong interest in connecting Sheringham Point and Seaside Roads. There is only one access point from Highway #14 to Sheringham Estates off Seaside Road. If this access point is blocked, then emergency vehicles cannot reach the *subdivision*, nor can its residents leave by car. This same safety concern also applies to the residences along Sheringham Point Road, which also only has one access point.

Because of these safety concerns, a physical connection between Seaside and Sheringham Point Roads was built as part of the *subdivision*. Easements were registered to allow emergency access over the strata road and to the lighthouse. Gates installed at the western and eastern ends of the strata *subdivision* were intended to limit access and are controlled by the strata corporation. Keeping the gates closed to prevent the use of the strata road connection by the general public has been an ongoing issue. Residents of the Plan area support use of this connection for emergency purposes only and not for public use.

367 Natural Hazards

There are several natural hazards in the Shirley – Jordan River Plan area which should be considered in the context of emergency planning. The west coast of BC and Vancouver Island are in an active earthquake zone. Tsunami modelling indicates that there could be up to three metre waves for the lands facing the Strait of Juan de Fuca. Along the coastline and in ravines and mountainous areas, there are steep slopes that could be subject to erosion and landslip. Flooding in low-lying coastal and riparian areas also pose hazards in the Plan area. With high tides and storm surges, Highway #14 and buildings in the Jordan River town site may be flooded or debris may be washed up onto the road. BC Hydro has indicated concern regarding the integrity of the Diversion Dam in the event of a major earthquake and the potential for downstream flooding (see Section 408). With large tracts of forested lands, interspersed with residential development, the potential for wildland-rural intermix fires is also of concern.

In the Plan area, there are designated DPAs for steep slopes and shoreline areas to alert property owners and purchasers of potential risks to development. To safely carry out a development in these areas, the services and advice of a *QP* will typically be required in order to determine the extent of the hazard and how development could proceed. *Subdivision* proposals are routinely screened for potential hazards and may be refused unless the hazard can be mitigated.

368 Emergency Preparedness

The CRD has developed a Corporate Emergency Plan for Regional District emergency preparedness. An Emergency Coordinating Committee and Emergency Management Committee help to support the CRD Emergency Operation Centres and programs in the electoral areas. The JdF Emergency Program provides comprehensive support, planning and management of emergency response for Shirley and Jordan River. This program provides assistance to residents who are evacuated during an emergency. In cases where residents are left without power, water or access to amenities during storms, natural disasters or other incidents, provisions will be provided for food, shelter and clothing needs. The program implements a public alert notification system and, in 2017, tsunami warning sirens were installed at Jordan River.

Shirley and Jordan River are served by the Shirley Unit of the JdF Emergency Response Team. In case of emergency, the Shirley Fire Hall and Community Hall can be used as a reception centre, but the facility is too small for use as an emergency shelter, meaning that residents in the

Plan area should be prepared to shelter in place. If residents need to be evacuated, they can be sent to emergency reception centres via Highway #14 to either Port Renfrew, Otter Point or Sooke, provided that the bridges are still useable. Certain types of emergencies could compromise one or more of the bridges along Highway #14, isolating pockets of the Plan area from vehicle access. Relocation of bridges to higher ground or structural upgrades to older bridges might be the only way to ensure continued use of Highway #14 in case of flooding or earthquakes.

369 Other Services

CRD Bylaw Enforcement staff enforces the unsightly premises, animal and noise suppression bylaws for Shirley and Jordan River. The RCMP responds to noise complaints after office hours. To ensure that new construction meets the minimum standards for health and safety established by the BC Building Code, CRD Building Inspection for Shirley and Jordan River operates out of the JdF Local Area Services building in Otter Point. Planning for Shirley – Jordan River is also administered by Local Area Planning from the same office. The Juan de Fuca Community Recreation Program sponsors recreation programs at the Shirley Community Hall including dance, yoga and karate. Sooke & Electoral Area Parks and Recreation Commission (SEAPARC) provides recreational opportunities for the public through the planning, development and operation of recreation facilities and programs for the JdFEA. However, residents are also interested in increasing the range of offerings available in Shirley to avoid the need to travel outside of the community by car for these types of programs.

370 Community Health

Community health has a much broader context than just primary health care services. Ongoing care programs that prevent and treat disease and mental illness are part of the broader picture when talking about community health, particularly when volunteer resources, counselling services and public health responsibilities are considered. Activities that engage residents, respect community heritage, and character are examples of elements that can influence the health of local citizenry, but are often forgotten about when discussing community wellness. Trails, bikeways, parks, community facilities and other gathering places are examples of the connection between the built environment and the physical and mental well-being of community members.

371 Community Health Services

Sooke Region Communities Health Network (SRCHN) is a partnership of community members, health and social service providers working towards, advocating for, and supporting healthy communities from Becher Bay to Port Renfrew including Shirley and Jordan River. SRCHN is housed along with many other health and social service providers in the Sooke Child, Youth & Family Centre in Sooke.

The Sooke Region Resource Inventory is an online resource for finding services, programs and events that was launched in 2010. It is operated by SRCHN in partnership with and funded by the District of Sooke and Island Health.

There are many services hosted in the town centre of Sooke that can be accessed by the residents of Shirley and Jordan River. There is a Meals on Wheels program and seniors' lunches are offered two days a week. The Community Food Bank is open once a week, three times a month, and there are community meals offered at the Baptist Church. The Good Food Box program provides seasonal food.

Health care programs in Sooke include a pre-natal program, urgent health care clinics, health care for youth aged 13 to 25 and a young parents group. Medical equipment can be rented for a small fee and volunteers will provide transportation to medical appointments. Counselling services are available for alcoholism and narcotic addiction.

Sooke Hospice Society offers care to clients in their homes. The Sooke Transition House Society provides emergency shelter for women and their children seeking relief from family violence. M'akola Group of Societies in partnership with the Society of St. Vincent de Paul's, the CRD

and the District of Sooke recently opened the Hope Centre which provides 25 units of affordable housing for aboriginal and non-aboriginal singles without homes, and in particular, youth with few local resources or supports. Ayre Manor in the Sooke town centre provides a continuum of services for seniors. The facility is supported by Island Health, BC Housing, and the District of Sooke in partnership with Sooke Elderly Citizens' Housing Society.

Residents of the Plan area would like to see some community health and social programs delivered locally through outreach programs and mobile clinics. A suitable location might be the Shirley Community Hall, but if at some point in the future a new fire hall is built, there is interest in converting the existing fire hall into a facility that can host these types of programs.

372 Heritage

First Nations once were the only inhabitants of the area around Shirley and Jordan River. There are four known archaeological sites in the Plan area. Whether recorded or not, the *Heritage Conservation Act* protects archaeological resources on both private and Crown land. A permit is required from the Province before a heritage site can be altered.

There are likely to be unidentified heritage sites within the Plan area that may be encountered during development. It is recommended that before development occurs, the developer engage a Professional Archaeologist to determine if archaeological studies of the proposed development site are required. The Province can provide further information concerning archaeological information for the area.

Originally called Rio Jordan by the early Spanish explorers, the name was later anglicized to Jordan River. Logging in the Jordan River watershed has occurred since the 1800s. Railway tracks were extended to Jordan River in 1906 for the purposes of transporting the harvested timber. The first Jordan River Powerhouse was built in 1911 and was replaced by the current Powerhouse in 1971. There is interest in the community in preserving the original powerhouse as a historical site.

Otter Point Road reached Jordan River in 1912 creating an overland connection with the rest of Vancouver Island. At that time, the population of Jordan River was larger than that of Sooke. A rich copper mine adjacent to the Jordan River was active from 1910 to 1920 and then again in the 1960s and 1970s.

During World War II, Jordan River was the site of a large military camp and an early warning radar system in case of a Japanese invasion. Highway #14 was gazetted in 1953. With the closure of the mine, decrease in fisheries, and logging operations moving closer to Port Renfrew, the population has decreased significantly over time.

Shirley was named in 1894 after a town near Southampton, England. Forestry was, and continues to be, the dominant industry in the area. Milligan's Logging Company logged and had camps in the Shirley area from 1918 to 1936. Fishing traps were installed along the coast as far west as Kirby Creek in the early 1900s.

The Sheringham Point Lighthouse was built in 1912 by the federal government. A lighthouse keeper's residence was also constructed at that time, but has since been removed. The lighthouse was designated as a heritage lighthouse under the *Heritage Lighthouse Protection Act* in 2015. The land and lighthouse were transferred to the Sheringham Point Lighthouse Preservation Society in that same year and is being developed to accommodate access by the public.

The Shirley Community Hall was built in 1937. In the same year, the Shirley Women's Institute obtained an oak seedling from England, which was one of many distributed to commemorate the coronation of King George VI. These seedlings were grown from acorns taken from Great Windsor Park in London. This coronation oak is still growing at the entrance to the Community Hall (see Map 2).

The Sooke Region Museum is an important source of local history. It has also been active in posting informational signage to commemorate sites of historic interest and heritage buildings. See Table 4 for a listing of historical buildings in the Plan area.

Table 4: Historic Buildings in Shirley and Jordan River

LOCATION	BACKGROUND
KIRBY ROAD, JORDAN RIVER	<i>The Austin Kirby House</i> - Built in 1908, it is believed to be the oldest house in Jordan River. The first office of the Michigan Pacific Lumber Company, was later (1909) bought by the Vancouver Island Power Company. Austin Kirby, a driver for Sunlock Mines, bought it in 1918. Although renovated, the house still retains features of the original home.
JORDAN RIVER	<i>Jordan River Powerhouse</i> - For nearly half a century, this plant was the main hydro-electric operation for Victoria and the lower Island area. Construction by Vancouver Island Power Company, a subsidiary of BC Electric, began in 1909 with power first reaching Victoria in 1911. Diversion Dam, located about seven miles upstream from the river mouth, is one of the largest dams in the Province and was heralded as a major engineering achievement when built in 1912. In 1962, the BC Hydro and Power Authority took over the Jordan River hydro-electric system and a new powerhouse and other infrastructure were built (Sooke Region Museum 1985).
KIRBY ROAD, JORDAN RIVER	<i>V.I Power Co. Guest house</i> - Built around 1912, this house is situated on the hill above the old power station and housed visitors to the plant's operations.
KIRBY ROAD	<i>1st Jordan River School</i> - Built in 1912 by the Vancouver Island Power Company, this building sits on the hill above the power plant. It was used as a school until 1918, and afterwards used as a residence.
JORDAN RIVER	<i>2nd Jordan River School</i> - Before classes were moved to this site in 1918, the building was used as a hospital for both copper miners and loggers. In 1948, the school was transferred nearby and this building was moved east as the home of the school bus driver, later serving as a teacherage.
JORDAN RIVER	<i>Superintendent's house</i> - Built in 1914 by the Michigan Pacific Lumber Company, this house has been the property of a variety of forestry companies since. In 1971, a mudslide hit the back porch and the building was later moved fifty feet from its original wood post foundation to a concrete one in addition to other renovations.
SUNNY BRAE ROAD	<i>Cross Point Farm</i> - Built in 1903, the house has undergone some renovations and remains the property of Cross family descendants.
SHERINGHAM POINT ROAD, SHIRLEY	<i>Sheringham Point Lighthouse</i> - Installed in 1912, this lighthouse was the scene of an accident soon after it was installed. "The master of an inbound ship, being unfamiliar with this new light, mistook it for the light at Race Rocks, and, believing he was approaching Esquimalt Harbour, turned his ship to port, and sailed the <i>Country Linlithgow</i> right onto Gordons Beach" (Sooke Region Museum 1985).
WEST COAST ROAD	<i>Mountainview</i> - In 1912, work began on this house with much of the lumber purchased from the Malahat Farm. Completed in 1914, the exterior has retained many of the original features; however, the interior has been significantly altered.
SHIRLEY COMMUNITY HALL	The site hosting the Shirley Community Association's Pioneer Park was donated in 1915 by Hugh Campbell and was the site of the Shirley schoolhouse from 1915-1946. The Shirley Community Hall was built in 1937 and provides a venue for community events. All additions to the hall, including the fire hall were carefully planned to complement the existing hall and maintain its historic appearance.

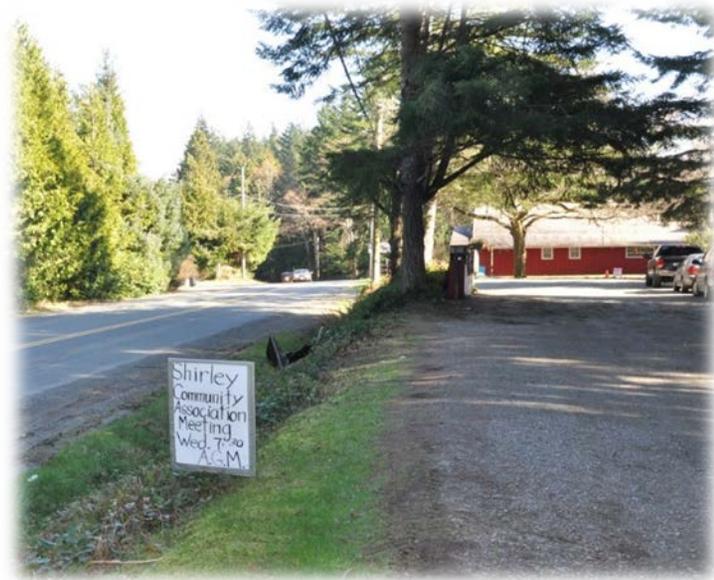
373 Arts and Culture

Arts and culture are part of the social infrastructure in any community and the residents of Shirley and Jordan River participate in events held around the region. In particular, several artists and craftspeople participate in the weekly Shirley community market held at the Shirley Community Hall throughout the summer season. Also, the Shirley Quilters and Crafters meet weekly at the Shirley Community Hall. The Shirley Community Hall, with a stage, kitchen facilities and a capacity of up to 70 people, offers a venue for local musical events and weddings. The Shirley Community Association, a non-profit society, owns and maintains the Pioneer Park and the Shirley Community Hall.

The Sooke Community Arts Council encourages participation and excellence in all of the arts. The Council supports the development of opportunities for the performance and exhibition of arts, acts as a clearing house for information and brings the artistic needs of the community to the attention of government. It sponsors a number of annual events including the Family Arts Fair, Beach Art, Art in the Park and showings of members' works.

The Edward Milne Community School Society, a founding member of the Sooke Community Arts Council, is responsible for the Sooke Community Theatre, a venue for local performing artists. Key community presenters at this theatre are Sooke Harbour Players and the Sooke Community Choir.

Sooke Harbour Players was formed in 1982 as an amateur theatre company and produces an average of two plays a year including drama, humour and musical theatre. Formed in 1989, the Sooke Community Choir is made up of 40 members and performs a variety of music. The Sooke Philharmonic Orchestra, with more than 80 members, was founded in 1997. It now includes the Chamber Players and the Sooke Philharmonic Chorus, and features workshops, eight concerts a year plus an open air pops concert in the summer.



374 Amenities and Funding Opportunities

At the time of a rezoning, there is provision in the *LGA* for local government to receive amenities as a condition of approval. Community expectations about the types of amenities that are of interest should be stated as clearly as possible in the OCP. In the case of Shirley and Jordan River, many of the desired amenities take the form of park land dedication including the dedication of land for trails, and are discussed in an earlier section of this Plan. A meeting place in Jordan River is also a desired amenity, as is a building which can be used to deliver medical and social programs targeting youth and seniors on an outreach basis.

The cost of implementing community projects poses challenges for all communities, but especially for smaller communities with limited tax bases. To secure funding for a project, an organization often needs to be the responsible entity as most funding agencies will not provide monies to individuals.

Government-sponsored programs are the most popular source of funding for projects. Increasingly, government funding is contingent upon matching funding from the community. Oftentimes, the matching funds can take the form of volunteer labour and donated goods and services. Other funding sources include corporations, foundations, private donations and community fundraising efforts. The availability of other community resources to invest in a project, such as public lands already identified or strong support from elected officials, are factors that can increase the chances of a funding request being approved. In Shirley, government subsidies support the local delivery of recreation and fitness programs which would not otherwise be possible.

380 Development and Local Economy

Jordan River’s origins are rooted in mining, forestry and power production. The community has historically been impacted by dramatic fluctuations in population, typically seen with the boom-bust cycle of resource-based economies. Physical evidence of the original settlement can be found throughout the hamlet in the form of abandoned forestry cabins, the old powerhouse and the small commercial buildings intermixed with houses, although BC Hydro has recently demolished many of the older structures. To the west of the original town site, which is often referred to as the hamlet, there are two newer *subdivisions* finalized in 2007: the 32-lot Wildwood Terrace *subdivision* and the 63-lot Shores development now called Strait View.

Shirley has also had a close association with resource extraction, but has grown more gradually than Jordan River until recently. Over time, the community has developed around the Shirley Community Hall along Sheringham Point and Invermuir Roads. Sheringham Estates, a 126-lot *subdivision*, was constructed in the early 1970s. The 38-lot *subdivision* at Cedar Coast Drive was created in 1994 and, in 1999, thirteen bareland strata lots at Fishboat Bay Road were subdivided. Lighthouse Point, an 18-lot bareland strata *subdivision* immediately adjacent to Sheringham Estates, was developed in 2006. Table 5 shows the age of housing stock in the Plan area.

Table 5: Approximate Age of Housing Stock

TIME FRAME	PRE-1960	1961 – 1980	1981 – 1990	1991 - 2000	2001 - 2010	2011-2017
NUMBER OF NEW HOUSES	15	55	15	50	66	51

Source: National Housing Survey, 2011 and CRD Building Permits

*Number of new houses does not include secondary suites or detached accessory suites.

381 Population

According to the 2011 census, the population of the Plan area was 415, a decrease of 14% from 2006 (see Table 6). Over this same time period, there was 3% decrease in the population of the JdFEA. BC Statistics has estimated that the population of the CRD will increase 0.8% annually from 2012 to 2016 and then by 0.7% from 2017 until 2020. The CRD rates of change were used to project population growth for Shirley – Jordan River as there is a lack of historical data specific to the Plan area.

The median age of Shirley and Jordan River residents is 46.4 years compared to 44.8 for the CRD and 41.1 for BC, indicating a slightly older than average population. The average family size in the Plan area is 1.7 persons which is much smaller than both that of the CRD (2.7 people) and the provincial average of 2.8.

Table 6: Population Projections

YEAR	POPULATION	RATE OF CHANGE (%) ¹
2001	490	See notes
2006	475	- 3.1%
2011	415	- 12.6%
2014 ESTIMATED	425	+ 2.4%
2019 ESTIMATED	441	+ 3.9%
2024 ESTIMATED	457	+ 3.5%

¹ Simple percentage change although the population change was calculated exponentially based at a rate of +0.8% from 2012 to 2016 and then +0.7% from 2017 to 2024.

382 Housing Supply and Future Demand

Based on the average family size of 1.7 persons, there is a need for approximately 10 new housing units to meet the five year demand for housing until 2019 and a total of approximately 19 units to meet the ten year demand until 2024 (see Table 7). While both the five and ten year demands for new housing can be met through the current rate of construction and inventory of *parcels*, all of the new *parcels* will be created outside of the Settlement Land Use Designation Area in the previous OCP unless the boundaries are revised.

Table 7: Number of Dwelling Units Constructed, Moved or Demolished, 2005 to 2017

YEAR	NEW SINGLE-FAMILY DWELLING	NEW DUPLEX	MOVED IN SINGLE-FAMILY	MANUFACTURED HOME MOVED IN	DEMO, REMOVAL & CONVERSION TO ACCESSORY	DETACHED ACCESSORY SUITE	SECONDARY SUITE	ADDITIONAL HOUSING UNITS*	ESTIMATED TOTAL NUMBER OF UNITS
2005	8	2	-	3	-			13	203
2006	8	-	-	-	-1			7	210
2007	8	-	1	1	-1			9	219
2008	19	-	1	-	-1			19	238
2009	3	-	-	-	-			3	241
2010	6	-	-	-	-1			5	246
2011	3	-	-	-	-			3	249
2012	2	-	-	-	-			2	251
2013	6	-	-	-	-			6	257
2014	1							1	258
2015	15				-1	2		14	272
2016	11		2	3				16	288
2017	12		3	1	-7	1		9	297

*Number of new units less the number of demolitions. **A duplex counts as two dwelling units.

***Detached accessory suites and secondary suites are not included in the calculation of housing units by year or the cumulative total # of dwelling units

383 Affordable Housing

The predominant type of housing in the Plan area is single-family dwelling units. As of May 2011, there were 249 houses in Shirley and Jordan River. Suites are permitted in most rural residential and rural zones. Suites and mobile homes are the basis of affordable housing in the Plan area and will likely continue to be so. Certain zones that permit multiple dwelling units on a single lot also offer slightly more affordable housing.

The provincial *Community Care and Assisted Living Act* supersedes local zoning bylaws by allowing small daycares and group homes in any residential zone. Group homes offer special needs housing for a range of clients. No large-scale special needs housing developments are anticipated within the Plan area as this type of housing is centrally located in the District of Sooke.

384 Multiple Dwelling Unit Zoning

In the Plan area, lands zoned *Rural A* are a significant source of development potential. For the purposes of *subdivision*, the minimum lot size for the *Rural A zone* is four hectares. However, the *Rural A zone* allows for four single-family dwelling units plus one detached suite on a four hectare *parcel*. Map 5 identifies *parcels* zoned *Rural A* at the time of adoption of this OCP.

On properties zoned *Rural A*, multiple dwelling units can be built on one lot. When *Rural A zoned* properties are developed, the houses are often strata-titled in a form of tenure commonly called a “building strata”. Neither the CRD, nor the Provincial *subdivision* Approving Officer, are involved in registering a building strata and Section 510 (park dedication) of the *LGA* does not apply. This type of tenure has benefits, but can also create problems. Unlike a fee-simple *subdivision* or a bare land strata *subdivision*, where the property owner(s) own an individual lot, in building a building strata, only the house itself up to the centre of the walls is privately owned. The remainder of the *parcel* is “common property” and its ownership is shared amongst the members for the strata. Common property may be designated as “limited common property”, but there can also be exclusive use of common property that is not designated as limited common property. Shared ownership of the common property and services sited on those lands can lead to conflict amongst the owners and a desire to dissolve the strata.

Despite the potential for disagreement arising from shared ownership, there is a desire to retain the *Rural A zone* as it addresses circumstances where multiple dwelling units on one lot are desired such as an extended family wanting to live on the same property. There is, however, strong interest in having policies supportive of rezoning these *Rural A zoned* properties, both developed and undeveloped, to another zone that would permit only one dwelling unit per lot and eliminate building strata ownership. A fee-simple or bare land strata *subdivision* would also be necessary and could include park or road dedication.

To facilitate rezoning applications for the purpose of providing an alternative to building stratas, a policy supporting a minimum lot size based on a ratio of one *parcel* in the proposed plan of *subdivision* per each one hectare of land in the parent *parcel* prior to the subtraction of any area for road and park dedication is necessary. Since the *Rural A zone* allows four houses on a four hectare lot, land dedication for park and road may be required. For this reason, the average lot size may be less than one hectare.

For developed properties where owners are interested in dissolving the strata in favour of a conventional *subdivision*, policies should anticipate unique situations where unusual lot sizes and shapes may be required, but be contingent upon no increase in overall dwelling unit density.

385 Local Economy

Logging and silviculture are important economic activities in Shirley and Jordan River. Harvested trees are de-limbed and cut on-site then taken to a log sort on the west side of the Jordan River for scaling and sorting. Logging trucks transport the raw timber for sale on the open market or to a speciality sawmill in Maple Ridge. While the long term presence of industrial-based activities in Jordan River is acknowledged, there is interest in restoring the current log sort site back to a salt marsh if the industrial use is discontinued.

Shirley Community Hall, Fire Hall, Pioneer Park and a nearby restaurant are the commercial and civic nucleus of this community. Residents are interested in the expansion of the weekly country market held at Pioneer Park as it offers a venue for local residents to sell their produce, home-cooking and crafts. Establishment of small businesses in the existing commercial area of Shirley is supported, provided that they serve local needs and do not jeopardize the viability of existing businesses. There is strong opposition to the introduction of commercial activities such as motels, gas stations, drive-through restaurants and strip malls, especially as they might jeopardize the rural character of the Plan area or have a negative impact on the environment.

The hamlet of Jordan River currently has one small restaurant business serving local and tourist needs. The Commercial Land Use Designation applies to lands adjacent to the Jordan River

Tourism-related attractions and activities can be found throughout the Plan area. Small-scale resorts, restaurants and bed and breakfasts catering to tourists provide employment opportunities for local residents. Jordan River is the closest community to the eastern end of the Juan de Fuca Marine Trail and the China Beach Campground in Juan de Fuca Provincial Park. Surfing and windsurfing are popular sports off Jordan Beach.

Plan area residents are interested in seeing further development of opportunities related to outdoor recreation and tourism that are respectful of the environment and have a small physical imprint. Dispersal of recreational businesses throughout the community, rather than being concentrated in one area, is the preferred pattern for this type of land use. Large-scale tourism uses like recreational vehicle parks and destination resorts are not supported.



Approximately 19% of the labour force is self-employed as artisans, home based business owners and in other cottage industries. Home based businesses are an important contributor to the local economy and are supported throughout the Plan area, provided that they respect the rural residential character of the communities. In addition to home based businesses, examples of preferred commercial uses in the Plan area are small retail stores, eco-tourism, recreational equipment rentals and artist studios.

Some residents commute daily to work in Sooke or elsewhere in the region. Some work globally for extended periods of time. The primary mode of transportation for commuters is single-occupancy vehicles (93%).

According to the 2011 census, the top employment generator in the Plan area is the accommodation and food service industry (21%), followed by the construction (19%) and health service (17%) industries. There is little unemployment in the Plan area, with a 96% of the labour force working at some point in 2010, although some workers may only have seasonal employment or be under-employed. Over 70% of the local population over the age of 15 has a post-secondary education, indicative of a well-educated workforce.

386 New Land Use Designations

This OCP establishes new land use designations within the Plan area, as shown on Schedule B, that more accurately represent the range of current uses and the desired development potential. The previous OCP had two land use designations for settlement: Settlement Containment Area (SCA), which supported *parcels* in the one hectare range, and Settlement Area (SA), which supported *parcels* greater than two hectares. None of the lots in the SCA were large enough to be subdivided under the existing zoning and only one additional *parcel* was possible through rezoning in accordance with the OCP policies. Significant portions of the Plan area were designated as SA in the previous OCP and up to 392 new lots could have been created under the existing zoning. If rezoned to a lot size in the range of greater than two hectares, up to 1,438 new lots could have been created in the SA. Table 8 outlines the new estimated development potential based on the policies and land use designations in this Plan.

The Settlement Containment Area designation in the previous OCP has been replaced in this OCP by Settlement. The boundaries are identical between this OCP and the former OCP except for the addition to the Settlement land use designation of a small community park owned by the CRD. The Settlement designation remains an average density of one *parcel* per one hectare.

The Settlement Area designation in the previous OCP has been replaced in this OCP by Pacific Acreage, Commercial, Coastal Upland and Renewable Resource designations.

Those lands already zoned rural residential or commercial, or that have an existing *parcel* size in the 2 hectare range, outside the Settlement designation are included in the Pacific Acreage designation. The Pacific Acreage designation supports an average density of one *parcel* per two hectares within a plan of *subdivision*. Policies in this designation would support the creation of 163 additional *parcels*.

The Commercial Land Use Designation applies to lands in Jordan River where residential and overnight habitation uses are not permitted due to the risk of flooding. The prescribed minimum lot size (120 ha) would prevent further subdivision of these lands.

This OCP supports the continued use of land in the PMFL for forest management purposes. Such properties are now designated as Coastal Upland with a density of one *parcel* per 4 hectares. By designating lands enrolled in the PMFL program as Coastal Upland, their development potential has been reduced from 1,007 additional lots that could have been possible under the previous OCP policies to 416 additional *parcels* in this Plan.

Policies in this OCP strongly support continued use of Crown lands in TFL #61 for forestry. To reinforce use of these lands for forestry, avoid rural sprawl and mitigate potential impacts on the potable water supply, these *parcels* are designated as Renewable Resource with a density of one *parcel* per 120 hectares. The Renewable Resource designation reduces the number of additional *parcels* from 268 in the former OCP to 1 additional *parcel* in this Plan.

A considerable amount of the development potential in the former OCP would have occurred on lands at elevations higher than existing residential neighbourhoods, with potential impacts on water quantity and quality. These lands are primarily used for forestry by virtue of being either Crown land in TFL #61 or privately owned lands in the PMFL program. Large tracts of these lands are zoned in the Juan de Fuca Land Use Bylaw as Resource Land with a minimum lot size of 120 hectares or as Forestry with a minimum lot size of 4 hectares.

The previous OCP did not offer any guidance for PMFL *parcels* other than encouraging their continued use for forestry. By default, *subdivision* under the existing zoning may have appeared as the only other type of development preferred by the community. To avoid the appearance of only supporting large-lot residential *subdivisions* on PMFL if the *parcels* exit the program, there are policies in this OCP supporting low-impact tourism activities such as guiding lodges and wilderness camps on lands designated Coastal Upland.

The land use designations in this OCP reduce the overall development potential from 1,439 additional *parcels* to 583 additional *parcels*.

Table 8: Estimated Development Potential Under Policies in Part Four

LAND USE DESIGNATIONS (LUD)	NUMBER OF PARCELS**	AREA (HA)	TOTAL POTENTIAL PARCELS CURRENT ZONING	ADDITIONAL PARCELS	TOTAL POTENTIAL PARCELS PREVIOUS LUD	ADDITIONAL PARCELS	TOTAL POTENTIAL PARCELS LUD	ADDITIONAL PARCELS
AGRICULTURE	6	77	6	0	6	0	6	0
COASTAL UPLAND	49	2,133	306	257	1,095	1,002	465	414
COMMERCIAL	12	17	12	0	17	5	12	0
PARK	9	174	n/a	n/a	n/a	n/a	n/a	n/a
PACIFIC ACREAGE	237	648	359	122	357	163	400	163
RENEWABLE RESOURCE	11	567	26	15	279	268	12	1
SETTLEMENT	136	66	136	0	137	1	139	3
TOTAL	461	3,698	844	392	1,891	1,439	1,034	583

* 18 split designated *parcels* are accounted for in the land use designation calculations.

387 Muir Creek

Muir Creek, the administrative boundary for community planning purposes, is of special interest to both the Shirley – Jordan River and Otter Point communities. Both communities value the long term protection of the sensitive ecosystems adjacent to Muir Creek and would like to obtain public access to the confluence of Muir Creek and Orveas Bay. One 46 hectare *parcel* (District Lot 23, Malahat Land District) straddles Muir Creek. The approximately 21 hectares of District Lot 23 (DL 23) on the west side of Muir Creek are in the Shirley – Jordan River Plan area, while the remaining 25 hectares to the east of Muir Creek are in the Otter Point Plan area. For the eastern portion of DL 23, the Otter Point OCP has policies that allow an increase the density of development on upland areas in exchange for a park land amenity along the creek. In order to acquire as much of the western portion of DL 23 for park land as possible, it is important to include an incentive policy similar to the one in the Otter Point OCP that allows an increase in density subject to the contribution of a park land amenity. Because the current owner of DL 23 has other holdings in the Plan area, it is also possible to include a policy that supports the transfer of density to another *parcel* provided that all of the western portion of DL 23 is dedicated as park land.

390 Climate Change Adaptation and Greenhouse Gas Reduction

GHG emissions are generated within a community by transportation, energy use, and the quantity and composition of waste and disposal methods. The provincial government has prepared a Community Energy and Emissions Inventory that provides baseline community-wide energy and emissions information. This information is available for the JdFEA as a whole, but not for individual communities. In 2010, on-road transportation was the largest contributor to GHG emissions at 48% in the JdFEA, and residential heating was the second largest contributor at 37%. The remaining 15% is attributable to solid waste. It is reasonable to extrapolate from these statistics that on-road transportation and residential heating are the largest two contributors of GHGs in the Plan area.

391 Role as a Carbon Sink

With its extensive forest cover, park land, agricultural areas and large treed residential lots, Shirley and Jordan River play an important role in carbon sequestration for the CRD. This regional role will be continued with OCP policies supportive of parks, maintenance of agricultural and forest lands, and the conservation and enhancement of sensitive ecosystems. Residents of the Plan area recognize that trees and natural vegetation contribute to the community's rural nature and are supportive of their retention on private and public lands. Although parts of the Plan area are actively logged, younger and faster growing forests still contribute to annual sequestration rates.

392 Reducing the Number of Vehicle Trips

One of the key ways the residents of Shirley and Jordan River can contribute towards reducing GHGs is through reducing the number of vehicle trips. Home based businesses reduce the need to commute. The use of transit, carpooling and alternative means of transportation, such as cycling and walking, all reduce dependency on cars. Delivery of medical and community outreach programs at a venue in Shirley or Jordan River would see the service providers making one or two round trips to the Plan area instead of multiple trips outside the community by residents travelling elsewhere to access the services. Increased recreational and social opportunities for youth within the Plan area would reduce the need for parents to take their children to and from activities in Sooke. Support for neighbourhood commercial uses and farm gate sales can reduce the amount of travel necessary to purchase food and other goods. Installation of Electric Vehicle infrastructure is supported.

393 Energy Efficiency in Buildings

At the present time, the fire hall and several old forestry buildings in the Jordan River Regional Park are the only buildings owned by the CRD. The Shirley Community Hall is operated by the Shirley Community Association which has been taking energy saving measures such as new lighting fixtures in the building.

New development in the Plan area will primarily be single-family residential. Siting and designing homes to be more energy efficient can help reduce the community's carbon footprint. It is estimated that a new home built to EnerGuide 80 standards will consume approximately 30% less energy than a house built to minimum building standards. Older, inefficient homes can become more energy efficient with simple retrofits for which government and private funding is available. Homeowners can be encouraged to purchase low-energy appliances and light bulbs. Renewable energy such as geexchange and solar are feasible on the larger lots found throughout this community and can be used to reduce GHGs produced by other types of home heating such as wood stoves. Upgrading of older wood stoves to low-emission appliances including CSA or EPA-certified clean-burning wood stoves is encouraged.

394 Waste Reduction

The CRD provides a recycling pick-up program in Shirley and Jordan River. At the regional level, there are a number of programs and initiatives to reduce the amount of waste through enhanced waste diversion of recyclable and compostable materials. Composting in the Plan area can be problematic as it can attract bears and other wildlife.

Solid waste is either picked up by private contractors or taken by residents to waste transfer stations. Personal initiatives can be taken to reduce the amount of solid waste by selective shopping, increased recycling and reusing materials.

395 Climate Change Adaptation

The most likely impacts of climate change on Shirley and Jordan River will be coastal flooding and erosion from sea level rise, and wind damage from increased storm activity. There are some lower lying areas more likely to be impacted by sea level rise and increased storm activity in particular, the estuaries of Jordan River, Kirby Creek and Muir Creek.

Local governments are responsible for making land use decisions so that developments are built in a manner that limits flood damage and ensures public safety. The Province recommends that local governments discourage residential, commercial and industrial development in areas at high risk of flooding, storm activity and sea level rise.

With drier summers anticipated in the future, there will be an increased risk of wildfire. While it is appreciated that land clearing can reduce the fuel load for wildfires, the environmental and aesthetic importance of trees and vegetation must also be recognized. It is largely left to the discretion of the individual property owner to determine if they wish to implement recommendations found in provincial publications such as “Fire Smart”.



PART FOUR – GOALS, POLICIES AND OBJECTIVES

401 Introduction and Land Use Designations

- ◆ **Goals** represent the long term vision for the Shirley – Jordan River Plan area and are a general statement of what each section seeks to achieve. Goals are based on community values and shape the objectives and policies for each section.
- ◆ **Broad Objectives** are suggestions and recommendations for the senior level of government having jurisdiction over matters outside the scope of the CRD.
- ◆ **Objectives** are measurable and tangible expressions of the Plan’s goals and serve as the mechanism to translate goals into policies.
- ◆ **Policies** provide guidance for subsequent decisions by the CRD Board in order to accomplish the goals and objectives of the Plan.

In addition to the objectives and policies which apply to all areas of the Shirley – Jordan River Plan area, the following land use designations have been established with the intent of guiding future development in specific areas of the Shirley – Jordan River Plan area (see Table 9). The specific areas to which these designations apply are shown on Schedule B.

401.1 Restricted Development Land Use Designation

The intent of the Restricted Development Land Use Designation shown on Schedule I is to highlight the concerns raised by the 2014 Probabilistic Seismic Hazard Analysis prepared for BC Hydro regarding the potential risk to human life and property damage from rapid or catastrophic flooding arising from dam failure stemming from an extreme seismic event.

Additional habitation uses and tourist accommodation uses within in this area are not supported, and, except for the campground, the CRD does not encourage continuing uses of lands in this area that involve habitation or other sleeping accommodations. Provided that there are no additional habitation uses, residential uses, tourism accommodation uses or other sleeping accommodations, other uses in accordance with the land use designations applicable to these lands as shown on Schedule B may be supported provided that it is possible to configure structures and buildings to consider the risk and provided that there are no habitation or sleeping accommodations associated with the use.

Development and building permits for additional construction may require certification from an engineer that the land is safe for the intended use.

Table 9: Land Use Designations

LAND USE DESIGNATION	NUMBER OF PARCELS	APPROXIMATE LAND AREA	
		HECTARES	% OF LAND BASE
AGRICULTURE	6	77	2%
COASTAL UPLAND	50	2,149	58%
COMMERCIAL	12	17	0.5%
PACIFIC ACREAGE	237	648	17.5%
PARK	9	174	5%
RENEWABLE RESOURCE	11	567	15%
SETTLEMENT	136	66	2%
SPLIT DESIGNATION	18		0%
SUB-TOTAL FOR LAND AREA	461	3,698	100%
MARINE	Lease only	583	
TOTAL FOR PLAN AREA	461	4,281	

402 Agriculture Land Use Designation

The intent of the Agriculture land use designation is to protect farming from other types of development. All lands in the ALR are designated Agriculture in this Plan. Lands outside the ALR that are being farmed can also be designated as Agriculture.

403 Coastal Upland Land Use Designation

The intent of the Coastal Upland land use designation is to support the continued use of these lands for forestry. Lands in this designation consist primarily of *parcels* enrolled in the PMFL program or zoned for forestry uses. If lands are removed from the PMFL program, then land uses such as low-impact recreation and low-impact tourism are supported. Community parks, single-family residential, and agriculture are also supported in this designation.

404 Commercial Land Use Designation

The intent of the Commercial Land Use Designation is to support small-scale neighbourhood commercial and light industrial uses in the Jordan River inundation area. Civic, institutional, tourism, recreation, silviculture and community park uses are also supported.

405 Pacific Acreage Land Use Designation

The intent of the Pacific Acreage land use designation is to support rural residential uses. Suites and duplexes are acceptable forms of development to increase the affordability of housing and offer rental accommodation. Agriculture, home based businesses, small-scale neighbourhood commercial activities, small-scale tourism activities, community parks and civic buildings are also supported. Tourism commercial uses such as small destination resorts are supported in this designation. Lands in this designation generally consist of *parcels* zoned *Rural A* in the Juan de Fuca Land Use Bylaw not included in the Settlement land use designation and rural residential land on the west side of Jordan River. Disperse *parcels* zoned for tourism commercial uses are also included in this land use designation.

406 Park Land Use Designation

The intent of the Park land use designation is to support only that type of development which is required for the operation and maintenance of a public park. All CRD Regional Parks and provincial park land is in this designation.

407 Marine Land Use Designation

The intent of the Marine land use designation is to support development which is compatible with the upland uses and sensitive ecology of coastal areas. Although the Province owns the shoreline and seabed adjacent to the Shirley – Jordan River Plan area, the CRD has the ability to regulate the use of land, including the shoreline area and the surface of water. Any type of boathouse, wharf, pier, float or any other man-made structure located on Crown land including the surface of the water will require approval from the Province.

408 Renewable Resource Land Use Designation

The intent of the Renewable Resource land use designation is to support forestry and resource use on large *parcels* of land. All lands in TFL #61 and owned by the Province are in this designation, as well as a *parcel*/historically used as an industrial log sort. Land owned by BC Hydro used for the generation of hydro-electric power is also in this designation. Community parks, single-family residential, and agriculture are supported in this designation.

409 Settlement Land Use Designation

The intent of the Settlement land use designation is to support rural residential uses. Suites and duplexes are acceptable forms of development to increase the affordability of housing and offer rental accommodation. Agriculture, home based businesses, small-scale neighbourhood commercial activities and small-scale tourism activities; civic and institutional uses; and community parks are also supported. Lands in this designation generally consist of single-family residential *subdivisions* in the Shirley area.

410 Water

411 Goals for Water

- A. A stewardship approach to water management that supports watershed-based planning including groundwater aquifers and results in the preparation of a formal plan.
- B. Local input into decision-making regarding resource-based activities that may affect *watercourses* and groundwater in the Plan area.
- C. A sustainable and safe potable water supply.

412 Broad Objectives for Water

Support and work with the Province to:

- A. Protect surface and groundwater resources in the Plan area from contaminants and over-consumption through monitoring and enforcement.
- B. Monitor groundwater and surface water quantity and quality to support both drinking water supplies and ecosystem health.
- C. Conduct water budget data for *stream* flow and proper functioning condition.
- D. Update the San Juan River Allocation Plan and expand the study to the entire Plan area.
- E. Accurately map *watercourses*, watersheds, aquifers and well capture zones to improve water stewardship and aid in water stewardship initiatives.
- F. Require *watercourses* to be re-routed through their original channels, if any temporary *watercourse* alteration or diversion takes place.
- G. Avoid the unnecessary removal of gravel and soil from *watercourse* beds and ensure that there is no modification of *watercourse* channels and banks without careful consideration of potential adverse environmental effects.
- H. Not support the application of synthetic pesticides and fertilizers in the Plan area.
- I. Require remediation of contaminated areas to a level that minimizes risk to humans and wildlife.

- J. Establish a local advisory board on water issues as provided for in the *Water Sustainability Act* or create a stakeholder group for consultation purposes.

413 Objectives for Water

- A. Ensure an adequate long term supply of potable water.
- B. Manage water flows in order to optimize groundwater recharge and seasonal flows.
- C. Minimize flood damage while maintaining the natural integrity of *watercourses*.
- D. Protect watersheds, groundwater and water features from contamination and depletion.
- E. Promote water conservation and stewardship measures.
- F. Consider water in all development and land use decisions.
- G. Support the provision of a safe and reliable water supply.

414 Policies for Water

- A. Land uses or activities that could negatively impact water quality and quantity are not supported.
- B. In consideration of a development proposal, the protection of aquifers and water resources from contamination and depletion will be ensured.
- C. A watershed management plan should be prepared and implemented as the collection and mapping of data on *watercourses*, watersheds, aquifers and well capture zones is assembled.
- D. If, as the result of data collection and improved mapping, an area subject to groundwater shortages is identified, a DPA for water conservation will be established for that area.
- E. Any development will be designed to protect waterbodies, *watercourses* and their tributaries by not allowing sediments or other effluents into the water system and the Juan de Fuca Strait.
- F. The impact of development on the absorption of water into soil will be minimized by retaining vegetation, planting new vegetation and incorporating permeable surfaces wherever possible.

- G. To mitigate peak storm flows, reduce erosion and maximize groundwater recharge, techniques such as drainage retention basins and reduced impervious surfaces should be incorporated into new development.
- H. Industrial or commercial uses proposed for areas with aquifers at high risk of contamination will provide a hydrological assessment.
- I. Standards requiring the testing of future wells over a longer time period and in times of seasonal dryness should be applied.
- J. Development will be designed to minimize the number of *watercourse* crossings.
- K. On-site collection of rainwater is supported, with the exception of providing a domestic potable water supply for the purpose of *subdivision*.
- L. All new buildings and renovations are encouraged to use water efficient fixtures.
- M. Recognize and support the provision of water service to 126 *parcels* within the existing Sheringham Water Works Ltd. service area.
- N. Support improvements to ensure adequate water capacity to handle fire-fighting efforts and still maintain adequate volume for domestic purposes.
- O. Support the acquisition of non-potable water sources for fire-fighting purposes.

420 Environment

421 Goals for Environment

- A. Protect the natural flora, fauna and landscape of Shirley – Jordan River through appropriate regulations and guidelines.
- B. Maintain and enhance ecological integrity through well-planned development, conservation efforts and public support.

422 Broad Objectives for Environment

- A. The Province is encouraged to collect and assemble data for the purposes of environmental monitoring.
- B. Support initiatives for the protection of rare and endangered species and habitat, such as those identified under the *Wildlife Act* and *Species at Risk Act*.

423 Objectives for Environment

- A. Encourage and support the protection and enhancement of sensitive terrestrial, marine and aquatic ecosystems for the benefit of present and future generations.
- B. Buffer and protect environmentally sensitive areas from new development and surrounding land uses.
- C. Encourage and support the restoration of environmentally sensitive sites disturbed by new development and, when appropriate, the enhancement of degraded sites.

424 Policies for Environment

(Also see policies in Section 410 Water and Section 490 Climate Change Adaptation and Greenhouse Gas Reduction.)

GENERAL

- A. Development will be planned and implemented in a manner that will not adversely affect or disturb environmentally sensitive areas.
- B. Protection of sensitive ecosystems may take the form of regulation, buffering, park acquisition or conservation covenant.

- C. Opportunities for the restoration and enhancement of sensitive ecosystems will be supported.
- D. Stewardship of ecologically significant areas on private lands is encouraged through support for conservation covenants.
- E. Existing mapping of sensitive ecosystems will be updated with more detailed and current mapping as it becomes available.
- F. The storage of contaminants (pesticides, fertilizers, fuel, paint, solvents, etc.), the disposal and incineration of waste, uncontained storage of manure and compost, and uses such as gas stations, auto salvage and repair are not supported in the Plan area.

TERRESTRIAL AND HABITAT

- G. Important terrestrial habitats and corridors for habitat connectivity will be protected through the application of a DPA.
- H. The retention of the natural topography and existing vegetation and trees may be required.
- I. The enhancement and restoration of degraded or disturbed sites of ecological significance using native plant species may be required.
- J. The planting of native species over non-native species is encouraged.
- K. The introduction of invasive species is to be avoided and initiatives for the removal of invasive species are supported.

MARINE AND FORESHORE

- L. Within the Marine land use designation, public recreational use should be consistent with the suitability of the shore type for the proposed use.
- M. Within the Marine land use designation, land uses that disturb or pollute the marine and related terrestrial habitats are not supported.
- N. Ecologically sensitive shoreline and upland areas will be protected through the application of a DPA over the shoreline and immediately adjacent upland areas within the Plan area.
- O. Armouring or hardening of the shoreline by retaining walls, cement blocks or other permanent structures is discouraged.
- P. Interruptions across the foreshore (groynes, breakwaters) that disrupt long-shore sediment transport are discouraged.
- Q. Natural features in the foreshore will be preserved and protected from development.
- R. The sale or rental of any docking space, related commercial facilities and services for boats or float planes in conjunction with upland residential properties is not supported.
- S. Log booming grounds are not supported except at Jordan River.

T. Commercial marinas are not supported except at Jordan River.

RIPARIAN AND WETLANDS

- U. Fish and aquatic habitat will be protected through the application of a DPA over riparian areas within the Plan area and implementation of the *Riparian Areas Regulation*.
- V. Disturbances to riparian areas and wetlands will be avoided except for habitat restoration projects with the necessary approvals.
- W. Disturbances in SPEAs are not supported except in accordance with the *Riparian Areas Regulation, Water Sustainability Act* and with an approved development permit.

430 Parks and Trails

431 Goals for Parks and Trails

- A. Build a healthy park system that offers broad educational and recreational opportunities and that protects sensitive ecosystems, wildlife habitat and natural features.
- B. Provide a safe and well-used network of trails connecting parks, neighbourhoods and services.
- C. Provide safe access to the water front for the general public to enjoy low-impact recreational activities such as beach combing.
- D. Retain undeveloped water front accesses on public roads as undeveloped green space.

432 Broad Objectives for Parks and Trails

- A. Support government programs and funding that allow the CRD and community organizations to develop and improve parks and trails in Shirley and Jordan River.
- B. Collaborate with community organizations and other levels of government, where possible, in the development of parks and trails in the Plan area.
- C. Encourage consultation by the MOTI with JdFEA Parks and Recreation Advisory Commission and CRD Planning staff in the administration of Section 75 of the *Land Titles Act* through implementation of the 2006 Public Accesses to Water Memorandum of Agreement between MoTI and CRD.

433 Objectives for Parks and Trails

- A. Support initiatives in parks for public awareness and education.
- B. Encourage the participation by residents, interested organizations and societies in the restoration and enhancement of habitat in parks and the development of trails.
- C. Carefully consider trail development in environmentally sensitive and hazardous areas, and to minimize wildlife encounters.

- D. Plan for the connectivity of parks, open space and trails to enhance biodiversity.
- E. Develop a trail system that encourages the use of alternative transportation and promotes community health and well-being.
- F. Develop linkages between Shirley and Jordan River and the regional trail network.
- G. Recognize the primary purpose of a SPEA is to support the ecological function of fish habitat.
- H. Accept cash-in-lieu at the time of *subdivision* instead of park land dedication only when dedication would result in the acquisition of inappropriately small parks or lands not suitable for park.
- I. Support the acquisition of park land in accordance with the goals and objectives of the both the Regional Parks Strategic Plan and the Juan de Fuca CPSP.
- J. Collaborate with adjacent jurisdictions and appropriate authorities on matters related to parks and trails.
- K. Provide a number of access points to the water front to allow low impact recreational activities and access to beaches.
- L. Retain all existing water accesses.

434 Policies for Parks and Trails

GENERAL

- A. Interpretative and educational programs and activities for the public in the parks are supported.
- B. Habitat restoration of community parks is supported through short-term projects or stewardship agreements.
- C. Partnerships to construct trails that include local volunteers are supported.

LOCATION AND TYPE OF FUTURE PARKS INCLUDING TRAILS

- D. SPEAs that are part of a development proposal will be protected by methods other than park dedication.
- E. The provision of trails accesses in SPEAs as a condition of development is not supported.
- F. While trails in a SPEA are not supported, public trail accesses may be sited in a DPA designated for environmental sensitivities or hazardous conditions subject to a determination by a *QEP* that the trail will not have a detrimental impact on an environmentally sensitive area and a report by a *QP* regarding the nature and risk of the hazard.

- G. The preferred methods for acquiring park land and trails are: as a condition of a rezoning, as an amenity contribution, as dedication at time of *subdivision*, as a bequest or donation, or the purchase of land.
- H. Environmentally sensitive areas and sensitive habitats, as part of the broader ecosystem, may be acquired as natural park land.
- I. Acquisition of park land to protect or create wildlife corridors is supported.
- J. Acquisition of park land to buffer and provide continuity to environmentally sensitive ecosystems and areas will be considered.
- K. Wherever possible, acquisition of park land will take into consideration opportunities to protect historical features, archaeological features as Special Preservation Areas.
- L. Other than park land for Special Preservation Areas, emphasis will be given to acquiring lands that can afford a range of appropriate and unstructured physical activities and recreational experiences, in particular, activities for youth such as biking and outdoor sports.
- M. Acquire lands adjacent to Muir Creek to protect its sensitive ecosystems, fossil beds and gain public access to the water front.
- N. Expand the trail network throughout the Shirley – Jordan River Plan area for non-motorized use and improve connections between regional parks and trails with the emphasis on securing:
 - i. Legal access to Priest Cabin Park;
 - ii. A connection between Tieulie Place and the Matterhorn Trail;
 - iii. Trails with a focus on allowing youth to walk or cycle to school bus stops;
 - iv. A connection between the Invermuir neighbourhood to the Shirley Community Hall with access to the beach at the mouth of Kirby Creek;
 - v. A connection between the eastern terminus of the Juan de Fuca Marine Trail, the Jordan River hamlet and Sandcut Creek;
 - vi. A connection between the Galloping Goose and the Juan de Fuca Marine Trail; and
 - vii. Connections with any new east-west corridors along the San Juan Ridge to the communities of Jordan River and Shirley.
 - viii. A connection through the land owned by BC Hydro in Jordan River.
- O. In addition to using the road right-of-way for the development of multi-use trails, the acquisition of new park land for this purpose is supported when there are constraints such as steep terrain within the road right-of-way.

WATER FRONT ACCESS

- P. All existing water front accesses will be retained regardless of whether or not they are developed or will not be developed.
- Q. Only appropriately selected accesses will be considered for development for public use.
- R. Respect the privacy of adjacent land owners and potential parking issues for the neighbourhood when considering the development of water front accesses.



440 Resources

441 Goals for Resources

- A. Increased use of land capable of agriculture for agricultural purposes.
- B. Farmers have easy access to markets and local residents have easy access to locally produced food.
- C. Environmentally sound and economically viable farming is carried out in the community.
- D. Interface land conflicts are kept to a minimum through public support and policy.
- E. Responsible stewardship and sustainable management of forest lands.
- F. Protection of the water supply for human consumption and environmental protection.
- G. Improved mapping of *watercourses* to facilitate good stewardship and protection of the environment.
- H. The use of Crown forest lands by the public for recreational enjoyment, education and wild-crafting.
- I. All resource extraction operations adhere to recognized resource management best management practices in order to facilitate the rehabilitation and reclamation of the land after the resources are extracted.

442 Broad Objectives for Resources

- A. All lands in the ALR in the Plan area have been designated by this Plan as Agriculture to protect those lands for current and future agricultural activities.
- B. For land located within the ALR, this bylaw is binding only insofar as it is not contrary to the ***ALC Act*** and the regulations and orders of the ALC.
- C. Forestry management activity related to the production and harvesting of timber on provincial Crown land under the ***Forest Act*** is not restricted by the provisions of this Plan provided that the land continues to be used for that purpose.

- D. Owners and operators of forested lands are encouraged to manage the forest under the principles of an Ecosystem-Based Management Plan (EBMP) and any outdoor recreation, education, or wild-crafting potential that exists within the designated areas should be included in the applicable EBMP.
- E. To minimize the impact of resource extraction operations and activities on neighbouring land uses and drinking water sources.
- F. To support site rehabilitation and reclamation of mined landscapes for environmental and aesthetic reasons.
- G. To support the identification and mitigation of environmental impacts from former, existing and proposed resource extraction activities.
- H. To request that landowners within the Shirley – Jordan River Plan area are notified of resource extraction projects and to facilitate dialogue between resource extraction proponents and local residents when projects involving resource extraction are proposed in the vicinity of residential development or drinking water sources.
- I. To participate in any referrals or review processes for resource extraction activities.
- J. To encourage the screening of gravel operations from roads, settlement or recreation areas preferably through the retention of existing vegetation or existing physical buffers.

443 Objectives for Resources

- A. Protect the capability and long term potential of lands designated Agriculture for agricultural use.
- B. Support and encourage food production, processing and storage at both the commercial and individual level.
- C. Improve market accessibility for local food producers and provide opportunities for residents to purchase locally grown food.
- D. Encourage sustainable and environmentally sound farming practices, which protect the quality of surface water, groundwater and soil.
- E. Support diversification of the local agricultural base and efforts to increase local food production.
- F. Minimize conflicts between farm and non-farm uses.
- G. Participate in the Province’s Community Action on Energy and Emissions Program.

444 Policies for Resources

AGRICULTURE

- A. All lands in the ALR have been designated on Schedule B of this Plan as Agriculture to protect these lands for current and future agricultural activities.
- B. Lands outside the ALR suitable for agricultural use and zoned for agricultural use may also be designated on Schedule B as Agriculture.
- C. *Subdivision* of any lands designated Agriculture will only be supported in accordance with the ***ALC Act***.
- D. *Subdivision* for a relative, as provided for in the ***LGA***, of any lands designated Agriculture is not supported.
- E. The ***ALC Act*** and its regulations will be taken into account in the review of any land use or building application on lands in the ALR.
- F. On lands designated Agriculture, the siting of buildings on less productive lands and the clustering of buildings is recommended to maximize the area available for agriculture.
- G. To make farming more affordable, site specific zoning to allow multiple residences on a *parcel* designated Agriculture will be considered subject to appropriate controls being in place to ensure long-term farm use and approval of the ALC, if the land is in the ALR.
- H. Potential conflicts between farm use on ALR lands and nearby non-farm uses will be lessened through the application of a DPA on those lands adjoining or reasonably adjacent to lands in the ALR.
- I. Development of lands adjacent to land designated Agriculture may be supported provided the development will have minimal impact on the agricultural capability and activities on those lands designated Agriculture.
- J. Reduce conflicts between wildlife and agriculture through a comprehensive consideration of wildlife issues, raising public awareness of the “Wild Safe BC” and “Bear Smart” programs and supporting animal proof waste management.
- K. Normal farm practices as defined by the ***Farm Practices Protection (Right to Farm) Act*** are recognized and supported.
- L. Participation in the BC Environmental Farm Plan Program is encouraged for agricultural and farming practices.
- M. Community and home gardens are supported in all land use designations.
- N. Water conservation in agriculture is encouraged.

- O. The on-site sale of farm products produced on the same *parcel* is supported by allowing small produce stands near the lot line and road subject to road safety and parking.
- P. To protect and enhance soil, careful consideration will be given to how soil removal or fill placement may affect agricultural capability.

FORESTRY AND MINING

- Q. The continued use of lands in Tree Farm Licence #61 and *parcels* enrolled in the PMFL program for forestry is supported.
- R. Rezoning applications for resource processing and related processing facilities related to forestry and mining will take into consideration the potential impacts on neighbouring properties and have adequate setbacks and screening requirements.
- S. Portable sawmills are supported on a part-time or temporary basis provided that there are no nuisance issues.

RENEWABLE ENERGY

- T. For new and existing residential development, the use of renewable energy supply sources, such as geo-exchange, photovoltaic, solar hot water, bio-fuel, and heat pumps, is supported.
- U. Encourage energy efficiency in buildings through support for the installation of thermal windows, insulation with high R values, mechanical equipment, energy efficient appliances and building design.
- V. Encourage low-cost, energy-saving upgrades to the Shirley Community Hall through public and private initiatives while respecting the building's heritage values.
- W. Research for the development of alternative energy sources, such as meteorological testing for wind power, is supported in the Renewable Resource and Coastal Upland designations.

450 Transportation

451 Goals for Transportation

- A. Improved safety along Highway #14.
- B. Reduce the number of car trips to and from the Plan area.

452 Broad Objectives for Transportation

Encourage the MOTI to:

- A. Make improvements to the efficiency and safety of Highway #14.
- B. Make improvements and upgrades to bridge crossings and areas of steep slopes in particular, the Muir and Kirby Creek ravines.
- C. Install a flashing light at the access point used by the Shirley Fire Department.
- D. Install street lights at intersections.
- E. Consider a lower speed limit through Jordan River.
- F. Implement traffic calming measures in the vicinity of Shirley Community Hall and Jordan River Regional Park.
- G. Provide opportunities for bicycle and pedestrian routes on Highway #14 and in particular, between French Beach Provincial Park and Camp Jubilee, between Jordan River hamlet and the newly created Jordan River Regional Park, and to become part of the future multi-use regional trail network.
- H. Install movement-triggered lit-up signs similar to those installed at Loss Creek on Muir Creek and Kirby Creek hills.
- I. Consider the development of pull-outs along Highway #14.
- J. Consult with School District #62 Sooke on the provision of pull-off areas and turn-around points to meet future school transportation needs.
- K. Carefully consider sight lines when issuing residential driveway permits.
- L. Remove roadside vegetation in the spring.

453 Objectives for Transportation

- A. Develop a network of off-street trails to provide safer passage for pedestrians and cyclists than what is currently afforded by Highway #14.
- B. Reduce dependency on motor vehicles through support for public transit, alternative transportation methods and carpooling.

454 Policies for Transportation

- A. As part of a rezoning proposal, the routes and facilities for alternative transit options such as walking and cycling will be taken into consideration.
- B. As part of rezoning and *subdivision* applications, consider increased connectivity between neighbourhoods for walking and cycling.
- C. Support the development, implementation and promotion of carpooling and ride share programs.
- D. Support partnerships with BC Transit and School District #62 Sooke for shared transportation options.



460 Services and Emergency Planning

461 Goals for Services and Emergency Planning

- A. In case of an emergency or natural disaster, the residents of Shirley – Jordan River are well-prepared and able to recover, the necessary resources are available and the emergency responders well-trained.
- B. Community health is improved through increased social and recreational opportunities for families and youth, volunteer programs to assist seniors and the local delivery of medical and community outreach programs.
- C. A community meeting place in Jordan River is identified and developed.
- D. Development of a long-term plan for a new fire hall in Shirley and conversion of the existing fire hall for other community uses.

462 Broad Objectives for Services and Emergency Planning

- A. Collaboration among the Province, the CRD and the Juan de Fuca Emergency programs for joint response to emergencies and disasters.
- B. Seek provincial and federal assistance for emergency planning and equipment.
- C. The Province is encouraged to consider upgrades to Highway #14 to ensure its continued use in the event of emergencies.
- D. Improvement of cell coverage is supported.
- E. Support the implementation of an alarm system for Diversion Dam.

463 Objectives for Services and Emergency Planning

- A. Work towards protecting area residents from loss of property and personal injury.
- B. Inform community members about known hazardous conditions within the Plan area and to provide information to enable the community to obtain advice regarding the appropriate risk reduction measures that community members can take.
- C. Work toward preparing the community to respond to and recover from a major disaster or emergency.
- D. Support improvements to police, fire, ambulance and emergency services to meet community needs.

- E. Foster community health and well-being through the identification and development of a meeting place in Jordan River.
- F. Support the delivery of community health services targeting youth, young parents and other groups through mobile outreach programs.
- G. Initiate a program to provide volunteer assistance for seniors living in Shirley – Jordan River.

464 Policies for Services and Emergency Planning

- A. Protect against the loss of life and minimize property damage associated with flood events and sea level rise by establishing a horizontal and a vertical setback from the sea and *watercourses* as identified in the Provincial Flood Hazard Area Land Use Management Guidelines.
- B. The risk to people and property from hazardous conditions will be reduced through the application of a DPA over steep slope areas and over areas subject to coastal flooding.
- C. Additional habitation uses, residential uses, tourism accommodation uses or other sleeping accommodations are not supported in the Restricted Development Land Use Designation as shown on Schedule I.
- D. Encourage public preparedness for possible disasters such as wildfires and earthquakes through education.
- E. Encourage residents to be personally prepared in the event of a disaster as they may need to shelter in place.
- F. Develop a strategy for the evacuation of the residents during a serious emergency in case roads are impassable.
- G. Support ham radio operators and recognize the important role they can play in an emergency.
- H. Require a public consultation process for the siting of any permanent antenna system with towers 15 metres or greater in height or regardless of height, proposed by telecommunications carriers, broadcasting undertaking or third party tower owners.
- I. Encourage a secure garbage collection system to minimize wildlife conflicts.
- J. Commercial composting is not supported in any land use designation except as provided for in the *ALC Regulations* or to dispose of waste generated within the Plan area.
- K. Identify a building or site in Jordan River that can be used for local meetings and activities and then develop a strategy on how to make it useable and sustainable for this purpose.
- L. Investigate the establishment of a local service area for fire protection in the Jordan River area.

M. Develop a long term plan for upgrading the Shirley fire hall.

470 Community Health

471 Goals for Community Health

- A. Preservation of the community's heritage, historic buildings and sites, and cultural landscape.
- B. Active participation by community members in a wide range of local arts and culture opportunities.

472 Broad Objectives for Community Health

- A. There are four recorded archaeological sites in the Plan area. Archaeological resources, regardless of whether they are recorded or not, are protected under the *Heritage Conservation Act*, and must not be altered or damaged without a permit from the Province.
- B. Prior to the submission of a development application, including building permits, it is the responsibility of the proponent to contact the Archaeological Branch for information regarding archaeological sites within the proposed development area.
- C. It is the responsibility of the proponent to have any studies or permits required by the Province in place prior to development.

473 Objectives for Community Health

- A. Protect, maintain and increase the awareness and appreciation of Shirley – Jordan River's heritage and historical features.
- B. Support and encourage the growth and appreciation of arts and culture and increase local opportunities for participation.
- C. Support local delivery of community health programs.

474 Policies for Community Health

- A. Encourage initiatives by private owners and government to preserve and enhance the heritage characteristics of their buildings and sites.
- B. Support local efforts to preserve and promote historically significant sites and the heritage of Shirley and Jordan River.

- C. Support community initiatives to provide and improve local arts and cultural opportunities in Shirley and Jordan River and encourage community events.
- D. Support the local delivery of community health programs including medical services, social programs, recreational opportunities and fitness programs.
- E. Work with Sooke Region Volunteer Centre, SEAPARC, JdF Parks and Recreation, and other appropriate agencies to work towards the delivery of recreational and social activities for residents in Shirley and Jordan River.
- F. Improve home care services and initiate a volunteer program focused on seniors living independently on rural properties.

480 Development and Local Economy

481 Goals for Development and Local Economy

- A. Shirley and Jordan River are rural communities comprised primarily of single-family residential development on larger-sized *parcels*, home based businesses, agriculture and limited neighbourhood commercial activities.
- B. Affordable housing and rental accommodation options are available.
- C. Policies supportive of the rezoning of properties from multiple-dwelling zoning to single-family residential.

482 Broad Objectives for Development and Local Economy

- A. The community supports small daycares and small group homes licensed under the *Community Care and Facilities Act*.
- B. The community recognizes and supports large daycares and assisted living facilities being sited in Sooke and other centres.

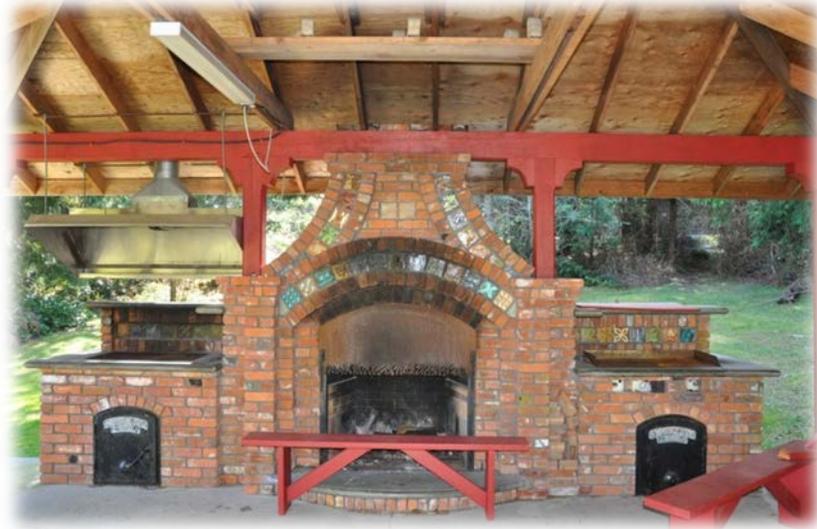
483 Objectives for Development and Local Economy

- A. Maintain the rural nature of Shirley and Jordan River through low density development occurring at a gradual pace.
- B. Support a range of economic activities at a scale appropriate to the size of the community and its rural nature.
- C. Provide affordable housing and rental accommodation options appropriate for a rural community.
- D. Support the economic health of the Region recognizing the role of the District of Sooke as the regional centre for commercial, educational and business activities.
- E. Recognize that Shirley and Jordan River are predominantly rural areas where resource-based activities such as forest management and timber harvesting occur.

484 Policies for Development and Local Economy

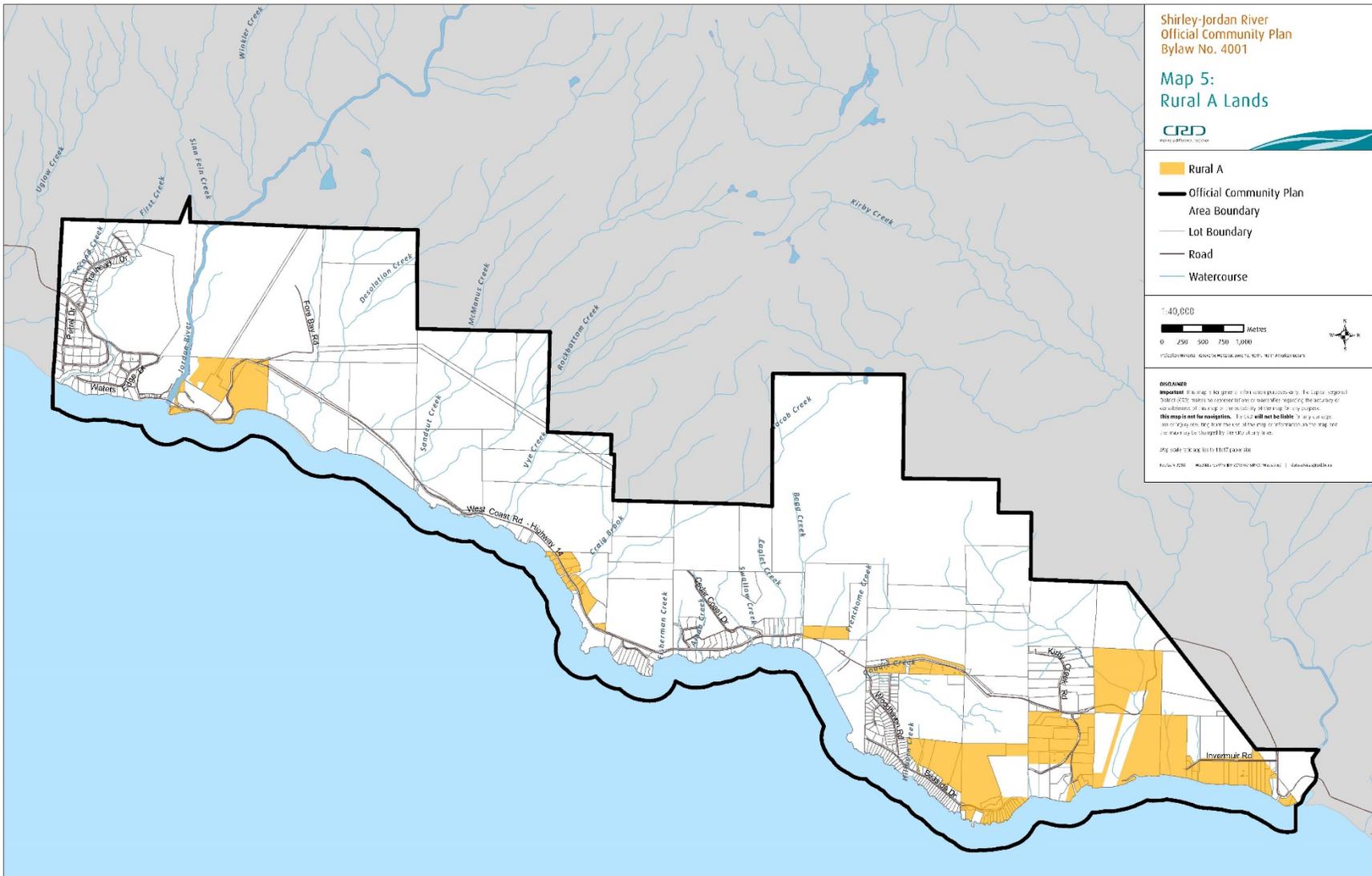
- A. Growth will be gradual and of a low density to maintain the rural character of the Plan area.

- B. Suites are supported.
- C. Two-family dwelling units are supported.
- D. Mobile homes and modular housing units are supported as principal dwelling units.
- E. Mobile home parks and recreational vehicle parks are not supported in the Plan area.
- F. Home based businesses are supported provided the type and scale of the business complements the rural residential character of the community and has no appreciable negative impact on adjacent properties, water supply and the natural environment.
- G. Except as noted below, on lands designated Settlement on Schedule B, an average density of one *parcel* per one hectare within a plan of *subdivision*, with one single-family dwelling or one-two-unit dwelling per *parcel*, is supported provided that no new *parcels* are created with an area of less than 0.5 hectares.
- H. Except as noted below, on lands designated Pacific Acreage on Schedule B, an average density of one *parcel* per two hectares within a plan of *subdivision*, with one single-family dwelling or one-two-unit dwelling per *parcel*, is supported provided that no new *parcels* are created with an area of less than one hectare.
- I. Small-scale tourism developments such as bed and breakfasts, eco-tourism, low-impact adventure tourism, are supported on lands designated Settlement and Pacific Acreage provided that they are scattered throughout the community.
- J. For lands designated Settlement and Pacific Acreage, rezoning applications for co-housing developments will be supported subject to neighbourhood support, low-density and minor traffic impact.
- K. For lands designated Settlement and Pacific Acreage, there is support for small-scale commercial uses serving local needs but highway-commercial uses such as gas stations, drive-through restaurants, motels and strip malls are not supported.
- L. Industrial uses are not supported on lands designated Settlement or Pacific Acreage.



- M. On lands designated Pacific Acreage, tourism-commercial uses such as small destination resorts are supported.
- N. For lands designated as Commercial on Schedule B, a density of one *parcel*/per 120 hectares and no dwelling units is supported.
- O. On lands designated as Commercial on Schedule B, commercial, retail, restaurant, civic and light industrial and silviculture uses are supported.
- P. For lands designated as Coastal Upland on Schedule B, a density of one *parcel*/per 4 hectares and one dwelling per *parcel* is supported.
- Q. On lands designated Coastal Upland, low impact tourism uses such as wilderness lodges and guiding camps are supported on lands removed from the PMFL program.
- R. For lands designated Renewable Resource on Schedule B, a density of one *parcel*/per 120 hectares and one dwelling per *parcel* is supported.
- S. On lands designated Coastal Upland or Renewable Resource, only those industrial uses associated with forestry and mining are acceptable.
- T. Rezoning of land to the *Rural A zone* is not supported, but those lands zoned *Rural A* as of the date of adoption of this Plan, which are shown on Map 5, may continue to be zoned *Rural A* if a new zoning bylaw is adopted.
- U. Notwithstanding other policies in this Plan concerning density and as an alternative to building strata development on *Rural A zoned* lands, there is support for rezoning applications to permit *subdivision of parcels* zoned *Rural A* as of the date of adoption of this Plan that are outside of the Restricted Development Land Use Designation, based on a ratio of one *parcel* in the proposed plan of *subdivision* per each one hectare of land in the parent *parcel* prior to the subtraction of any area for road and park dedication.
- V. Notwithstanding other policies in this Plan concerning density, *parcels* with multiple dwelling units constructed or building stratas registered prior to adoption of this Plan may be considered for rezoning to permit *subdivision* to create the equivalent number of *parcels* which may not meet the average *parcel* size; however, park and road dedication may be required.
- W. Use of Camp Jubilee (Section 88, Renfrew Land District PID: 009-592-113) as an outdoor recreational facility for organized camping is supported, subject to necessary approvals from the Agricultural Land Commission.

- X. Density bonusing or density transfer to lands within the Plan area may be considered if community amenities, such as the conservation of natural features, the provision of trails or funding dedicated towards a new fire hall or towards a building for the delivery of social and medical outreach services, are provided.
- Y. Density bonusing or density transfer to lands within the Plan area may be considered if a proposal provides dedication of portions of District Lot 23, Malahat Land District as park land.
- Z. Where a proposal dedicates all or significant portions of District Lot 23, Malahat District as park land, a density bonus will be considered as will the transfer of that density bonus and the existing density of District Lot 23 to another *parcel* in the Plan area.



490 Climate Change Adaptation and Greenhouse Gas Reduction

491 Goals for Climate Change Adaptation and Greenhouse Gas Reduction

- A. Adaptive measures are in place that address climate change and ameliorate the potential damaging impacts of sea level rise and increased storm activity.
- B. GHG emissions in the Plan area are reduced through a decrease in the number of car trips, improved energy efficiency through site and building design, and increased use of alternative energy sources.

492 Broad Objectives for Climate Change Adaptation and Greenhouse Gas Reduction

- A. To encourage senior government to establish programs, identify funding, and develop incentives to address climate change and reduce GHG emissions specific to rural areas.

493 Objectives for Climate Change Adaptation and Greenhouse Gas Reduction

- A. Discourage residential and commercial uses from locating in areas at high risk of flooding, erosion and exposure to high winds.
- B. Preserve and enhance Shirley and Jordan River's significant environmental resources including trees and other plants that shield the community from storms, store carbon and reduce GHGs.
- C. Maintain forest and agricultural lands.
- D. Encourage innovative and site-sensitive housing and *subdivision* designs that conserve water, reduce runoff, minimize the removal of vegetation and demonstrate a sensitive response to the site and its context.
- E. Encourage development and retrofits that use energy-efficient design and incorporate alternative forms of energy including geexchange and solar thermal energy sources.
- F. Reduce the number of car trips to and from the Plan area by:
 - i. supporting for carpooling and ride-sharing;

- ii. creating a network of pedestrian and cycling trails to encourage alternative modes of transportation;
- iii. allowing home based businesses;
- iv. creating recreational and social opportunities in Shirley and Jordan River for families and youth; and
- v. supporting neighbourhood commercial uses and farm gate sales.

494 Policies for Climate Change Adaption and Greenhouse Gas Reduction

Policies that support the goals and objectives for climate change adaptation and GHG reduction can be found throughout Part Four of this Plan. Additionally, the zoning and building bylaws should be reviewed to ensure these bylaws do not contain barriers which prevent the implementation of green building design.



PART FIVE – DEVELOPMENT PERMIT AREAS

501 Development Permits

A development permit is a planning tool for sites, buildings and structures that warrant special protection or development control. These permits must be approved by the CRD Board or its delegates and may require some sort of security to ensure that the conditions in the permit have been achieved. A development permit cannot vary use, density or flood plain specifications.

The guiding principle for the use of development permits is found within Section 488 of the *Local Government Act (LGA)*. Development permit areas can be designated for purposes such as, but not limited to the following:

- ◆ Protection of the natural environment, its ecosystems and biological diversity;
- ◆ Protection of development from hazardous conditions;
- ◆ Protection of farming;
- ◆ Establishment of objectives for the form and character of commercial, industrial or multi-family residential development;
- ◆ Establishment of objectives to promote energy conservation;
- ◆ Establishment of objectives to promote water conservation; and
- ◆ Establishment of objectives to promote the reduction of GHG emissions.

With respect to areas designated as DPAs, the OCP must:

- ◆ Describe the conditions or objectives that justify the designation; and
- ◆ Specify guidelines respecting the manner by which the special conditions or objectives will be addressed.

502 General Policies for Development Permit Areas and Development Permits

Without limiting the authority of the CRD under the *LGA* or this OCP, the following principles apply to development permits:

- A. In accordance with the *LGA*, a development permit must be obtained prior to *subdivision*, construction, alteration of land, soil deposit or removal or any other development or activity that would impact on any of the elements protected by a development permit area.
- B. A development permit is not required where it can be demonstrated that the proposed development is located on that part of a *parcel* outside the designated DPA. This determination is based a report or other certification acceptable to the CRD by a *QEP*, a *QP* or other appropriately registered professional that the proposed development is not within the designated DPA.
- C. Any development, construction or alteration of land within an area designated as a DPA is subject to the requirements of the relevant development permit guidelines and policies contained in this Plan.
- D. Where land lies within more than one DPA, only a single development permit is required; however, the application is subject to the requirements of all applicable DPAs.
- E. Development permits may specify areas of land that may be subject to natural hazards as areas that will remain free of development except in accordance with any conditions contained in the permit.
- F. Development permits designated for the protection of development from hazardous conditions may prohibit the installation of septic tanks, drainage and deposit fields and irrigation and water systems in areas that contain unstable soil or water that is subject to degradation.
- G. If the nature of the proposed project in a DPA changes after a report by a *QEP* or a *QP* has been prepared, the CRD may require the applicant to have the *QEP* or *QP* update the assessment at the applicant's expense and the development permit conditions may be revised.
- H. Any information requested by the CRD will be provided at the applicant's expense.
- I. Security in a form acceptable to the CRD may be required as the condition of issuance of a development permit.

503 General Exemptions from a Development Permit

No development permit will be required in any DPA for the following:

- A. Internal alterations to a building.
- B. Structures not greater in area than 10 m² (107 ft²) and are accessory to an existing residence, provided that no part of the structure is to be within a Riparian DPA. This may include, but is not limited to gazebos, garden sheds; tool sheds; and decks.
- C. Trails, ramps, stairways, and at-grade patios not greater in area than 80 m² (861 ft²), providing they are not located in a Riparian DPA.
- D. Placement of impermanent items such as tables, benches and garden ornaments, provided there is no site clearing.
- E. Emergency actions required to prevent, control or reduce an immediate threat to human life, the natural environment or public or private property from forest fire, flood, erosion or other natural or human caused disaster.
- F. Emergency works to repair or replace public utilities or infrastructure.
- G. Clearing of an obstruction from a bridge, culvert or *watercourse*.
- H. In-*stream* habitat development or restoration that complies with provincial and federal legislation and requirements.
- I. Boundary adjustments when no new *parcels* are created, each *parcel* has a building envelope outside the DPA and the adjusted boundary is not located in a Riparian DPA.
- J. Normal farm practices as defined in the ***Farm Practices Protection (Right to Farm) Act*** and farm uses as defined in the ***Agricultural Land Reserve Use, Subdivision and Procedure Regulation***.
- K. Forest management activities as defined in the ***PMFL Regulation*** on land classified as managed forest land under the ***PMFL Act***.
- L. Public works, services and maintenance activities carried out by, or on behalf of, the CRD, generally in accordance with the development permit guidelines. This exemption does not apply to public trails to be developed within a Riparian DPA.

510 Steep Slope Development Permit Area

511 Designation of the Steep Slope Development Permit Area

That part of the Shirley – Jordan River Plan area indicated as Steep Slope DPA on Schedule C is designated as a development permit area pursuant to Section 488(1)(b) of the *Local Government Act (LGA)*. The Steep Slope DPA includes all those areas having slopes exceeding 30% or 16.7 degrees over a minimum 10 metre run.

512 Justification for the Steep Slope Development Permit Area

Section 488(1)(b) of the *LGA* authorizes local government to designate development permit areas where the protection of development from hazardous conditions is desired and can be justified.

The topography of steep slopes, as well as the slope gradient and thin soil cover, renders the area highly susceptible to erosion, high wind throw hazard and slope failure. Land clearing, removal of vegetation, road construction, changes to slope geometry, construction of buildings or roads, placement of fill or other site disturbance in steep slope areas could lead to erosion and slope destabilization. Changes in the hydrology of a steep slope area can lead to erosion and subsequent slope failure. Vegetation on steep slopes can prevent or reduce slope failure. Root networks bind soil particles together increasing soil shear strength and cohesion. Tree roots anchor soil strata and buttress slopes. The foliage on trees and plants intercept rainfall through absorptive and evaporative processes that reduce surface water runoff and erosion. Soil saturation is reduced through the extraction of moisture by evapotranspiration. Fractured slopes and rockfall can be caused by natural processes but also by development. Careful control of development or other alteration of these slopes is needed to reduce the risk to life and property and potential risks to down-slope properties.

513 Objectives for the Steep Slope Development Permit Area

To regulate development on steep slopes in a manner that:

- i. Protects the integrity of the slopes; and

- ii. Reduces the risk of injury to persons or damage to property.

514 Specific Exemptions for the Steep Slope Development Permit Area

In the Steep Slope DPA, no development permit will be required for the following:

- A. External alterations, including adding a second storey, that are entirely within the building footprint.
- B. The proposed development is located outside the Steep Slope DPA, as verified by a *QP* report or other certification demonstrating to the CRD that the proposed development is not located on land with slopes exceeding 30% or having a slope greater than 16.7 degrees over a minimum 10 metre run.
- C. Recognizing that the Building Inspector has the necessary authority to require a geotechnical report to ensure land is safe for the intended use, a development permit is not required for a building constructed under a valid building permit in the Steep Slope DPA provided that no other part of the land in the Steep Slope DPA will be altered for other purposes, such as the construction of driveways or septic systems.
- D. Pruning of trees that does not adversely affect the health of the tree.
- E. Removal of hazardous trees that threaten the immediate safety of life and buildings.
- F. Removal of trees by hand-held tools providing the tree root ball remains intact and in situ with no soil disturbance.

515 Guidelines for the Steep Slope Development Permit Area

Development permits for development in the Steep Slope DPA will be considered in accordance with the following guidelines:

- A. Development and alteration of land will be planned to avoid intrusion into and minimize the impact on the Steep Slope DPA.
- B. The removal of vegetation and impact to tree root zones will be minimized.
- C. The placement of fill, disturbance to the soil, undercutting and blasting will be minimized.
- D. Development should minimize alterations to steep slopes and the development should be designed to reflect the site rather than altering the site to reflect the development.
- E. Changes in hydrology will be minimized.
- F. Runoff from the development will not destabilize or cause damage to the subject *parcel*/or neighbouring *parcels*.
- G. Development will be designed to avoid erosion and sedimentation.
- H. Erosion control measures and temporary fencing may be required during and after construction.
- I. The planting of native vegetation in both disturbed and undisturbed areas may be required to reduce the risk of erosion and improve slope stability.
- J. Heavy machinery cannot be used in circumstances where or when it might cause erosion or destabilize the slope.
- K. The clustering of buildings and structures on less steep areas is encouraged and setbacks may be varied to accommodate this.
- L. Variances to allow the siting of buildings and structures outside the Steep Slope DPA will be considered.
- M. Over-steep driveways and sharp switchbacks are discouraged and will be minimized.
- N. Shared driveways may be required where they will minimize the disturbance to steep slopes.
- O. Large, single-plane retaining walls are discouraged and landscaping should follow the natural contours of the land.
- P. As a condition of the issuance of a development permit, compliance with any or all conditions recommended in a report by a *QP* will be considered by the CRD and may be included in development permit.

520 Shoreline Protection Development Permit Area

521 Designation of the Shoreline Protection Development Permit Area

That part of the Shirley – Jordan River Plan area indicated as Shoreline Protection DPA on Schedule D is designated as a development permit area pursuant to Sections 488(1)(a) and 488(1)(b) of the *Local Government Act (LGA)*. The Shoreline Protection DPA established under this section includes all land lying 15 metres upland of the natural boundary of the ocean.

522 Justification for the Shoreline Protection Development Permit Area

Section 488(1)(a) of the *LGA* authorizes local government to designate DPAs where the protection of the natural environment, its ecosystems and biological diversity is desired and can be justified. Section 488(1)(b) authorizes local government to designate DPAs where the protection of development from hazardous conditions is desired and can be justified.

The marine shoreline and adjacent uplands are ecologically fragile areas and subject to the complex biophysical forces shaping coastlines. Activities on the uplands such as land clearing and adding impermeable surfaces can have harmful impacts on site drainage, bank stability, bird nesting and roosting habitat, shading of intertidal areas and reduction of important organic inputs to foreshore areas. Hard-surfaced retaining walls along the shoreline can result in loss of habitat and upland connectivity and may increase wave action and erosion on adjacent properties. An uninterrupted shoreline allows for the natural transport of sand and cobble materials along beaches.

Anticipated sea level rise and more frequent severe storm events could increase coastal flooding and erosion. Keeping permanent structures out of high-risk areas for coastal flooding and erosion is a cost-effective and practical approach to reducing this potential threat to life and property. Innovative shore protection measures can maintain and restore habitat values while protecting upland property from wave action and erosion. Development in the Shoreline Protection DPA will be carefully designed and executed to reduce the risk to property and life and maintain the integrity of the ecology unique to coastal areas.

523 Objectives for the Shoreline Protection Development Permit Area

To regulate development in a manner that:

- i. Protects coastal properties from damage and hazardous conditions that can arise from erosion and flooding;
- ii. Protects and enhances the ecological health of marine waters, the shoreline and adjacent uplands; and
- iii. Preserves the integrity and connectivity of coastal processes.

524 Specific Exemptions for the Shoreline Protection DPA

In the Shoreline Protection DPA, no development permit will be required for the following:

- A. External alterations, including adding an additional storey, that are entirely within the building footprint.
- B. Tree pruning that does not adversely affect the health of the tree.
- C. Gardening and yard maintenance activities within an existing landscaped area such as lawn mowing, weeding and minor soil disturbances that do not alter the general contours of the land.
- D. Removal of non-native, invasive species provided that the area is not also in the Steep Slope DPA, in which case the specific exemptions for the Steep Slope DPA take precedence over this exemption.
- E. Removal of hazardous trees that threaten the immediate safety of life and buildings.

525 Guidelines for the Shoreline Protection Development Permit Area

Development permits for development in the Shoreline Protection DPA will be considered in accordance with the following guidelines:

- A. Development or alteration of land will be planned to avoid intrusion into and minimize the impact on the Shoreline Protection DPA.
- B. Alteration of natural shorelines will be avoided.
- C. Erosion and sedimentation will be avoided.
- D. The removal of vegetation and impact to tree root zones will be minimized.
- E. Changes in natural shoreline processes will be minimized.
- F. The use of fill, disturbance to the soil and blasting will be minimized.
- G. Non-structural and soft armouring are the preferred type of works for shore protection and where this approach is not possible, riprap and stone revetment is preferred over single-plane seawalls, subject to approval from federal and provincial agencies.
- H. A *QP* must design any shore protection devices or works.
- I. Proposed development that may have the potential to adversely affect fish habitat will require the review and approval by appropriate federal and provincial agencies prior to the issuance of a development permit.
- J. Setbacks for buildings and structures will consider the current risk from storms and flooding as well as minimum elevation guidelines established by the CRD or other public authority with respect to the potential risk from erosion and coastal flooding associated with climate change and sea level rise.
- K. Variances to allow the siting of buildings and structures outside the Shoreline Protection DPA will be considered.
- L. Compliance with the conditions or recommendations in a report by a *QP* will be considered by the CRD and may be included in a development permit.
- M. The planting of native vegetation may be required to reduce the risk of erosion, restore the natural ecology, revegetate disturbed areas, improve water quality and ensure the stability of slopes and banks.
- N. Erosion control measures and fencing may be required during and after construction.
- O. Machinery working in this environmentally sensitive area may be required to use biofuels instead of fossil fuels.

- P. To avoid disturbance of the upland and foreshore areas for a purpose referred to in Section 491(1)(e) of the **LGA**, heavy machinery may need to be barged to the site.
- Q. Construction may be restricted to certain times of the year to avoid stormy seasons, unusually high or low tides and sensitive life-cycle times for wildlife such as nesting or migrating.
- R. Where possible, vegetation and natural resources such as anchored logs and riparian plantings on protected shorelines, will be incorporated into shore protection works.

530 Riparian Development Permit Area

531 Designation of the Riparian Development Permit Area

That part of the Shirley – Jordan River Plan area indicated as Riparian DPA on Schedule D is designated as a development permit area pursuant to Sections 488(1)(a) and 488(1)(i) of the *Local Government Act (LGA)*. The Riparian DPA established under this section also includes all lands entirely or partially within a riparian assessment area as defined by the *Riparian Areas Regulations (RAR)*, which includes: (a) for a *stream*, the 30 metre strip on both sides of the *stream*, measured from the high water mark, (b) for a ravine less than 60 metres wide, a strip on both sides of the *stream* measured from the high water mark to a point that is 30 metres beyond the top of the ravine bank, and (c) for a ravine 60 metres wide or greater, a strip on both sides of the *stream* measured from the high water mark to a point that is 10 metres beyond the top of the ravine bank.

532 Justification for the Riparian Development Permit Area

Section 488(1)(a) of the *LGA* authorizes local government to designate DPAs where the protection of the natural environment, its ecosystems and biological diversity is desired and can be justified. Section 488(1)(i) of the *LGA* authorizes local government to designate DPAs where the promotion of water conservation is desired and can be justified.

The Province of BC has enacted the *RAR*, under the *Riparian Areas Protection Act*, which applies to the exercise of local government powers by the CRD under Part 14 of the *LGA*. The *RAR* is intended to protect the features, functions and conditions that support fish life processes. With respect to development proposals related wholly or partially to riparian assessment areas within the Plan area, the CRD must not approve or allow development to proceed in those riparian assessment areas unless it receives notification that the Province has received a copy of an assessment report, prepared in accordance with the *RAR* by a *Qualified Environmental Professional (QEP)*. In addition, when exercising its powers with respect to development, the CRD must protect its riparian areas in accordance with the *RAR*.

Wells are relied upon in parts of Shirley and Jordan River for potable water. It is important to maintain the quality and quantity of surface water and aquifers, both below ground and in surface recharge areas. Through the protection of riparian ecosystems, the Riparian DPA is also intended to address maintenance of the natural hydraulic regime for environmental and water conservation purposes.

533 Objectives for the Riparian Development Permit Area

To plan and regulate development in a manner that:

- i. Preserves and protects fish habitat and riparian areas;
- ii. Protects, restores and enhances fish habitat and riparian areas in a relatively natural state while supporting adjacent land uses;
- iii. Meets the requirements of the *RAR*; and
- iv. Protects water quality and quantity.

534 Specific Exemptions for the Riparian Development Permit Area

In the Riparian DPA, no development permit will be required for the following:

- A. Development where a *QEP* submits a report or provides certification acceptable to the CRD that the proposed development is located outside a riparian assessment area and the Riparian DPA. In the case of a *subdivision*, the entire plan of *subdivision* must be outside a riparian assessment area and the Riparian DPA.
- B. External alterations, including adding an additional storey, that are entirely within the existing building footprint, provided that established driveways are used and there is no clearing of land.
- C. Gardening and yard maintenance activities, such as lawn mowing, pruning and minor soil disturbances that do not alter the general contours of the land, within an existing landscaped area.
- D. Removal of trees that threaten the immediate safety of life and buildings, provided that such trees are deemed hazardous by a *QEP*.
- E. Removal of non-native, invasive species subject to the prior provision and acceptance by the CRD of report by a *QEP*.
- F. *Watercourses* that have been determined to be non-fish bearing by a *QEP*.

- G. Public trails may be developed in the Riparian DPA, but not within a SPEA.
- H. Public trails may only be developed in the Riparian DPA if a *QEP* has determined that the trail will not have a detrimental impact on the riparian assessment area, including the SPEA.



535 Guidelines for the Riparian Development Permit Area

Development permits for development in the Riparian DPA will be considered in accordance with the following guidelines:

- A. Development or alteration of land will be planned to avoid intrusion into and minimize the impact on the Riparian DPA.
- B. Modification of channels, banks or shores must not result in harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes within the Riparian DPA.
- C. The removal of gravel and soil from streambeds is prohibited unless approved by the provincial or federal government.
- D. Proposed plans of *subdivision* will avoid *stream* crossings where possible and demonstrate the presence of building areas outside of the SPEA.
- E. *Stream* crossings will be avoided, but where this is not possible, bridges are preferred rather than culverts, and any works will be sited to minimize disturbance to banks, channels, shores and vegetative cover, and must be approved by the provincial government.
- F. Culverts may be designed to encourage in-*stream* storage of water to allow the unrestricted movement of fish in both directions.
- G. Construction at a certain time of year and using methods that minimize the impacts on rare and sensitive species may be required.
- H. To minimize encroachments into the Riparian DPA, variances for the height and location of buildings and structures may be considered.
- I. As a condition of the issuance of a development permit, compliance with any or all conditions recommended in a report by a *QEP*, prepared in accordance with the *RAR*, will be considered by the CRD and may be included in a development permit.
- J. Development permits may include requirements for environmental monitoring and when required, these monitoring reports must be prepared by a *QEP*.
- K. All of the measures specified by a *QEP* necessary to maintain the integrity of a SPEA will be considered by the CRD for inclusion as a condition in a development permit.
- L. Development permits will not be issued until the CRD has been notified by the Riparian Areas Regulation Notification System (RARNS) that the Province has received a riparian areas assessment report.
- M. Where a *QEP* has required the planting of native vegetation to reduce the risk of erosion, restore the natural state of the site, improve water quality, or stabilize slopes and banks, a landscaping plan of the re-vegetation may be required.

- N. In situations where a SPEA would reduce the density of development permitted by the zoning bylaw, a *QEP* is required to provide recommendations on how the permitted density of development could be accommodated with the least possible impact on fish habit.
- O. An applicant may be required to provide an explanatory plan of a SPEA.
- P. For all or part of land within a SPEA that has been identified by a *QEP*, property owners may wish to consider dedicating the land back to the Crown, gifting the land to a nature conservation organization or registering a conservation covenant.
- Q. All new developments or modifications to existing developments including site works, gardening, landscaping and other related residential activities should be designed and implemented to maintain the quantity and quality of water and to avoid the entry of pollutants or nutrient rich water flowing into *streams* and wetlands.
- R. Development will be designed to avoid any increase in the volume and peak flow of runoff and a drainage plan may be required in support of this guideline.
- S. Plantings of native vegetation may be required to reduce the risk of erosion, restore the natural state of the site, improve water quality, or stabilize slopes and banks.
- T. Where necessary or desirable, a buffer zone to remain free of development may be specified and protection measures for retention and management of vegetation in these areas may be established.
- U. To avoid encroachment, fencing may be required prior to, during or after construction.

540 Sensitive Ecosystem Development Permit Area

541 Designation of the Sensitive Ecosystem Development Permit Area

That part of the Shirley – Jordan River area indicated as Sensitive Ecosystem DPA on Schedule E is designated as a development permit area pursuant to Sections 488(1)(a) and 488(1)(i) of the *Local Government Act (LGA)*. The Sensitive Ecosystem DPA established under this section includes those sensitive ecosystems and other important ecosystems identified as Intertidal, Estuarine, Freshwater, Older Forest, Mature Forest, Fringe Forest, Woodland, Herbaceous, Sparsely Vegetated, Wetlands, and Riparian in the Sensitive Ecosystem Inventory (SEI) prepared by Madrone Environmental in 2014. The Sensitive Ecosystem DPA includes the strip of land 30 metres from the natural boundary on either side of all *watercourses*. This DPA also includes a 100 metre buffer around an eagle’s nest, as recommended in the Sensitive Ecosystem Inventory.

542 Justification for the Sensitive Ecosystem Development Permit Area

Section 488(1)(a) of the *LGA* authorizes local government to designate DPAs where the protection of the natural environment, its ecosystems and biological diversity is desired and can be justified. Section 488(1)(i) of the *LGA* authorizes local government to designate DPAs where the promotion of water conservation is desired and can be justified.

The ten sensitive ecosystems identified in the 2014 Sensitive Ecosystem Inventory (SEI) for the Shirley/Jordan River area, prepared by Madrone Environmental Services Ltd., are home to a variety of rare and endangered plants, animals and plant communities. In addition to their value to the environment, there is growing understanding that these areas are an important part of a healthy economy and add to the social well-being of a community. Because of the sensitivity of these ecosystems and their gradual erosion by human activities, it is important to protect them from clearing, tree-cutting, fragmentation, the construction of buildings or roads, or other site disturbances having the potential to degrade their ecological value.

Riparian ecosystems support a disproportionately high number of species for the area they occupy and are very diverse in terms of plant composition and structure. They support a high number of habitat niches, which provide critical habitats for numerous mammal, bird, reptile,

amphibian, fish and vertebrate species. A number of wildlife species are dependent upon freshwater ecosystems for all of their life cycle, while others utilize this type of habitat at critical life stages. Wetlands result from the close proximity of water and soil. Along with supporting animal and plant species, wetlands also function as drainage, storage and recharge areas for down-slope groundwater regions important to the community's water supply. They serve as temporary storm water retention and transmission areas and are crucial to the natural environment. Estuarine habitats, such as the one at the mouth of Muir Creek, support unique communities of plants and animals. A range of species live within the intertidal zone.

Older forests are biologically rich and support a rich community of wildlife, plant and invertebrate species with many species dependent upon specific habitat features only found in older forests. Fungi, lichens and the red-listed warty jumping slug are examples of species dependent upon old growth forest features. Fringe forest is a new SEI classification created specifically for this project due to the presence of Sitka spruce within 200 metres of the coastline. All of the shoreline units in this biogeoclimatic zone are blue-listed when mature. Woodland ecosystems, distinct in ecology and biological diversity, are one of the most threatened ecosystems on Vancouver Island. Herbaceous ecosystems are easily disturbed as are sparsely vegetated ecosystems. Some plant species, including several rare species are only known to occur in these two ecosystems. Mature forests were mapped in the SEI to identify important elements of biodiversity or recruitment sites for ecosystems at risk or important wildlife habitat requiring recovery or restoration and have been included in the Sensitive Ecosystem DPA.

Wildlife trees play an important role in forest ecosystems by contributing and maintaining habitat and biological diversity. A number of trees containing an eagle's nest were identified and mapped by the SEI. Although wildlife trees are protected under the *Wildlife Act*, their buffers are not. As recommended both in the SEI and the 2014 Develop with Care manual by the Ministry of Environment, a buffer of 100 metres has been included around one verified eagle's nest as part of the Sensitive Ecosystem DPA.

Wells are relied upon in parts of Shirley and Jordan River for potable water. It is important to maintain the quality and quantity of surface water and aquifers, both below ground and in surface recharge areas. Through the protection of riparian ecosystems, the Sensitive Ecosystem DPA is also intended to address maintenance of the natural hydraulic regime for environmental and water conservation purposes.

543 Objectives for the Sensitive Ecosystem Development Permit Area

To regulate development in a manner that:

- i. Protects, enhances and restores the biodiversity and ecological values and functions of environmentally sensitive areas;
- ii. Fosters compatibility between development, existing land uses and environmentally sensitive areas;
- iii. Maintains connectivity between sensitive ecosystems; and
- iv. Protects water quality and quantity.

544 Specific Exemptions for the Sensitive Ecosystem Development Permit Area

In the Sensitive Ecosystem DPA, no development permit will be required for the following:

- A. Gardening and yard maintenance activities, such as lawn mowing, pruning and minor soil disturbances that do not alter the general contours of the land, within an existing landscaped area.
- B. Removal of hazardous trees that threaten the immediate safety of life and buildings.
- C. Removal of non-native, invasive species.
- D. External alterations that are entirely within the existing building footprint including adding an additional storey, provided that established driveways are used and there is no clearing of land.
- E. Development where a *QP* submits a report or provides certification acceptable to the CRD that the proposed development is located outside of any sensitive ecosystem.
- F. Where the sensitive ecosystem has been identified by a *QP* and is protected by a registered restrictive covenant that includes a reference plan showing the location of the sensitive ecosystem on that *parcel*.
- G. Development in a riparian assessment area that is subject to the **RAR** and the Riparian DPA.

545 Guidelines for the Sensitive Ecosystem Development Permit Area

Development permits for development in the Sensitive Ecosystem DPA will be considered in accordance with the following guidelines:

- A. Development or alteration of land will be planned to avoid intrusion into and minimize the impact on the Sensitive Ecosystem DPA.
- B. The removal of gravel and soil from *watercourses* is prohibited unless otherwise approved by the provincial or federal government.
- C. Proposed plans of *subdivision* will avoid *watercourse* crossings where possible.
- D. *Watercourse* crossings will be avoided, but where this is not possible, bridges are preferred rather than culverts, and any works will be sited to minimize disturbance to banks, channels, shores and vegetative cover, and must be approved by the provincial government.
- E. Changes in the land surface, which could affect the health of vegetation or the biodiversity of any plant communities and disturbance of mature vegetation and understorey, will be minimized.
- F. Disturbance to existing vegetation not directly affected by the footprint of buildings, ancillary uses and driveways will be minimized.
- G. Planting of non-native vegetation or invasive species in designated sensitive ecosystem development permit areas is not supported.
- H. The CRD may consider variances to siting or size regulations where the variance could result in the enhanced protection of an environmentally sensitive area.
- I. As a condition of the issuance of a development permit, compliance with any or all conditions recommended in a report by a *QP* will be considered by the CRD and may be included in the development permit.
- J. Those areas where existing vegetation is disturbed will be rehabilitated with appropriate landscaping and habitat compensation measures in a manner recommended in a report by a *QP*.
- K. Development and associated drainage will be designed and constructed so that there is no increase or decrease in the amount of surface water or groundwater available to the sensitive ecosystem.
- L. Culverts may be designed to encourage storage of water within the *watercourse*.
- M. Where necessary, provision will be made and works undertaken to maintain the quality of water reaching the sensitive ecosystem.

- N. All new developments or modifications to existing developments including site works, gardening, landscaping and other related residential activities should be designed and implemented to maintain the quantity and quality of water and to avoid the entry of pollutants or nutrient rich water flowing into *watercourses*, lakes, ponds and wetlands.
- O. Development will be designed to avoid any increase in the volume and peak flow of runoff and a drainage plan may be required in support of this guideline.
- P. Plantings of native vegetation may be required to reduce the risk of erosion, restore the natural state of the site, improve water quality, or stabilize slopes and banks.
- Q. The planting of non-native vegetation or alien invasive species, as defined in the provincial *Spheres of Concurrent Jurisdiction – Environment and Wildlife Regulation 144/2004*, is not supported.
- R. Construction at a certain time of year and using methods that minimize the impacts on rare and sensitive species may be required.
- S. Where possible, large tracts of wildlife habitat or continuous habitat corridors will be preserved, in order to facilitate movement of wildlife.
- T. A buffer zone may be specified where land alteration or structures will be limited to those compatible with the characteristics of the sensitive ecosystem or those that can be mitigated in a manner recommended by a *QP*.
- U. In order to ensure unnecessary encroachment does not occur into the sensitive ecosystem at the time of construction, permanent or temporary fencing measures may be required.
- V. Development may be restricted during sensitive life-cycle times.

550 Commercial and Industrial Development Permit Area

551 Designation of the Commercial and Industrial Development Permit Area

That part of the Shirley – Jordan River Plan area indicated as Commercial and Industrial DPA on Schedule F is designated as a development permit area pursuant to Sections 488(1)(f), 488(1)(h), 488(1)(i) and 488(1)(j) of the *Local Government Act (LGA)*. The Commercial and Industrial DPA established under this section includes all land zoned commercial or tourist-commercial and land where industrial forestry uses have historically occurred.

552 Justification for the Commercial and Industrial Development Permit Area

Section 488(1)(f) of the *LGA* authorizes local government to designate DPAs to develop objectives for the form and character of commercial, industrial or multi-family residential development. Section 488(1)(h) of the *LGA* authorizes local government to designate DPAs for the promotion of energy conservation. Section 488(1)(i) of the *LGA* authorizes local government to designate DPAs for the promotion of water conservation. Section 488(1)(j) of the *LGA* authorizes local government to designate DPAs for the promotion of GHG emission reduction.

The residents of Shirley and Jordan River value the rural ambience of their community and feel that it is characterized, in part, by the disperse nature of commercial development, the integration of commercial development with the natural surroundings, unique elements such as signage or building forms not typically seen in urban settings, dark skies at night, and building forms that blend well with the immediate topography. Commercial areas in Shirley and Jordan River merit designation as DPAs for the form and character due to the rural nature of the community.

Industrial uses, especially those associated with forestry and mining, have occurred for many years in the Plan area. It is important that this type of use blends well with neighbouring rural residential uses by retaining the existing topography and natural vegetation around the site's perimeter to act as landscaping. Locating industrial uses on the site so they are not visible and set well back from rural residential development greatly assists in protecting the rural character. Bright lighting is incongruent with the rural character of the Plan area and will be shielded from the night sky and directed away from surrounding properties.

Parts of Shirley and Jordan River are reliant on well water as their potable water supply. It is important that rainfall is protected from contamination, water is conserved and development does not interfere with the natural processes of surface water runoff and groundwater recharge.

All communities in BC must contribute to the reduction of GHG emissions and Shirley and Jordan River are interested in implementing measures appropriate for small, rural communities. Energy conservation and the use of alternative energy sources can contribute indirectly to the reduction of GHG emissions by decreasing the reliance on hydro-electricity.

553 Objectives for the Commercial and Industrial Development Permit Area

To regulate development in a manner that:

- i. Encourages building designs, themes and forms that are complementary to and respectful of the natural setting and the rural character of the area;
- ii. Protects and maintains the quality and quantity of water; and
- iii. Conserves energy and contributes to the reduction of GHG emissions at the community level.

554 Specific Exemptions for the Commercial and Industrial Development Permit Area

In the Commercial and Industrial DPA, no development permit will be required for the following:

- A. Changes that do not affect the form and character of the development, such as the replacement of existing awnings and features.

555 Guidelines for the Commercial and Industrial Development Permit Area

Development permits for development in the Commercial and Industrial DPA will be considered in accordance with the following guidelines:

SITE DESIGN

- A. Buildings, parking and associated structures will be situated so as to leave as much space as possible for landscaping, retention of existing vegetation and open natural space on the site.
- B. Orient buildings to maximize opportunities for passive solar heating and cooling, natural lighting and minimizing wind exposure.
- C. Provide natural filtration of rainwater into the site through techniques such as rain gardens, rainwater collection systems, bio-swales or rock pits and permeable paving for hard surfaces such as driveways.
- D. Where applicable, site accessory buildings, parking and storage away from the shoreline to reduce the visual impact of the development from the water.

BUILDING DESIGN

- E. Design buildings in a form that follows the natural topography of the site.
- F. Incorporate natural materials, such as heavy timbers, exposed wood and stone, into the exterior design of buildings.
- G. Balconies, walkways, corridors and exterior doors should be protected from the weather.
- H. Colours should be earth-toned to blend with the natural surroundings or reflective of the unique nature of rural communities.
- I. Roof-top equipment should be kept to a minimum and integrated into the overall building design, but when this is not possible, the equipment will be screened.
- J. Building design should incorporate alternative energy sources and energy conservation measures such as natural ventilation and cooling systems.
- K. Consider the use of green roof systems to reduce stormwater runoff, reduce energy costs and improve visual appearance.
- L. Where possible, use building products and design that demonstrate green technology in keeping with current LEED guidelines.

LIGHTING

- M. Outdoor lighting should be of a low intensity, pedestrian oriented and directed down and away from surrounding residential areas.
- N. Illumination levels should be appropriate for the function while avoiding light pollution. Examples of preferred lighting types include downcast gooseneck lights, pot lights and LED lights.
- O. Outdoor lighting should be shielded from the night sky and directed away from neighbouring properties not zoned for industrial or resource use.

STORAGE, PARKING AND SCREENING

- P. Outdoor storage will be minimized, enclosed in an accessory building or fenced compound or sited at the rear of buildings.
- Q. Outdoor storage and loading/unloading facilities will be screened from neighbouring properties through the retention of existing vegetation and the planting of vegetation.
- R. Parking areas will be screened to the greatest extent possible with existing and new landscaping.
- S. Large parking areas will be interspersed with landscaped areas, natural areas and trees.

LANDSCAPING

- T. The natural vegetation should be retained as landscaping in areas where there are no buildings, structures, parking areas or other constructed features or integrated into parking areas.
- U. For new landscaping, native trees and plants suited to the climate and soil are preferred.
- V. Limit the use of potable water for landscape irrigation through measures such as using captured water and drip irrigation.
- W. Natural vegetation and existing topography around the perimeter of the site will be retained where possible.

SIGNAGE

X. Low profile, small signs that are non-illuminating, and complement the character of the development are preferred.



560 Farmland Protection Development Permit Area

561 Designation of the Farmland Protection Development Permit Area

That part of the Shirley – Jordan River Plan area indicated as Farmland Protection DPA on Schedule G is designated as a development permit area pursuant to Section 488(1)(c) of the *Local Government Act (LGA)*. The Farmland Protection DPA established under this section includes all land within 15 metres of land in the ALR as shown on Schedule G.

562 Justification for the Farmland Protection Development Permit Area

Section 488(1)(c) of the *LGA* authorizes local government to designate DPAs for the protection of farming.

Farming provides food security and is part of the local economy. The *Farm Practices Protection (Right to Farm) Act* gives farmers the right to farm provided that they employ normal farm practices. Normal farm practices can produce odour, light and noise which neighbours may not appreciate. To avoid interface conflicts along the ALR boundary, a buffer strip can be used to create a physical separation between the agricultural and adjoining neighbourhoods. The buffer is an area where fencing and other barriers such as vegetation can be used to separate land uses. The Farmland Protection DPA is intended to act as a buffer strip to mitigate conflicts between uses and protect the use of farmland. It is also important that roads do not end at the edge of the ALR boundary in order to avoid pressure to extend the road into the ALR for future development.

563 Objectives for the Farmland Protection Development Permit Area DPA

To regulate development in a manner that:

- i. Reduces conflicts between farm and non-farm uses through physical separation and the installation of barriers;
- ii. Minimizes the impact on nearby and adjacent farm uses; and
- iii. Avoids road endings adjacent to the ALR.

564 Specific Exemptions for the Farmland Protection DPA

- A. In the Farmland Protection DPA, a development permit is only required for a *subdivision*.
- B. In the Farmland Protection DPA, no development permit is not required for a *subdivision* for agricultural purposes.

565 Guidelines for the Farmland Protection Development Permit Area

Development permits for development in the Farmland Protection DPA will be considered in accordance with the following guidelines:

- A. A buffer zone consisting of setbacks, vegetative screening, fencing or berms between lands in the ALR and non-farm uses may be required.
- B. Drainage will be designed and constructed so that there is no increase or decrease in the amount of surface water or groundwater available to the agricultural lands.
- C. *Subdivision* design will minimize potential conflicts between farm and non-farm uses.
- D. *Subdivision* design should avoid road endings or road frontage adjacent to land in the ALR unless required for farm vehicle access.
- E. As a condition of the issuance of a development permit, compliance with any or all conditions recommended in a report by a *QP* will be considered by the CRD and may be included in the development permit.

PART SIX – DEVELOPMENT APPROVAL INFORMATION AREA

610 Development Approval Information Area

In order to assess the impact of a particular development proposal, more detailed information and studies may be necessary. Provincial legislation requires local government to specify the certain areas or special conditions when detailed information and studies may be requested and, by bylaw, describe the procedures for providing the information and the scope of information that can be requested.

611 Designation

That part of the Shirley – Jordan River Plan area indicated as a Development Approval Information Area (DAIA) on Schedule H is designated as a development approval information area pursuant to Section 485(1) of the *Local Government Act (LGA)*. The DAIA shown on Schedule H includes all *parcels* of land. In addition to the *parcels* designated on Schedule H, the following areas are also designated as a development approval information area pursuant to Section 485(1) of the *LGA*:

- A. All lands designated as being in the Shoreline Protection DPA on Schedule D;
- B. All lands designated as being in the Riparian DPA on Schedule D;
- C. All land designated as being in the Sensitive Ecosystem DPA on Schedule E;
- D. All lands defined by the *RAR* as a Riparian Assessment Area which includes (a) for a *stream*, the 30 metre strip on both sides of the *stream*, measured from the high water mark, (b) for a ravine less than 60 metres wide, a strip on both sides of the *stream* measured from the high water mark to a point that is 30 metres beyond the top of the ravine bank, and (c) for a ravine 60 metres wide or greater, a strip on both sides of the *stream* measured from the high water mark to a point that is 10 metres beyond the top of the ravine bank; and
- E. All lands designated as being in the Farmland Protection DPA on Schedule G.

612 Purpose

The purpose of this designation is to enable the CRD to obtain information in connection with an application for an amendment to a zoning bylaw, a development permit or a temporary use permit that could affect one or more of the following:

- A. The natural environment of the area affected;
- B. Traffic patterns and flows, in the case of a zoning amendment or a development permit that may create 10 or more *parcels*;
- C. The provision of community services, including but not limited to schools, fire protection, policing and similar services; and
- D. Local infrastructure, including water service, sewage treatment and disposal, and other services and utilities.

The CRD has, by separate bylaw, established the procedures and policies on the process for requiring development approval information and the substance of the information that may be required.

613 Special Conditions and Objectives

Section 485(1) of the *LGA* authorizes local government to: (a) specify circumstances in which development approval information may be required; (b) designate areas for which development approval information may be required; and (c) designate areas for which, in specified circumstances, development approval may be required provided that the special conditions or objectives that justify the designation are described.

The natural environment of the Shirley – Jordan River area supports an ecosystem of great diversity, including rare species of flora and fauna, and human habitation. Given the topography and the rich biodiversity of Shirley – Jordan River, the Plan area has numerous environmentally sensitive features that require a thorough analysis to be completed prior to development taking place. This also includes an analysis of any liquid waste disposal to ensure that it has no adverse effect on human health or the natural environment.

Any development with the potential to deplete the groundwater or otherwise interfere with the wetlands in one region also has the potential to diminish the quantity and quality of available groundwater in other groundwater regions. In particular, the extent to which a new well is likely to interfere with an existing well cannot be reliably inferred, except from actual interference testing of the affected wells. The ability

of local aquifers and *watercourses* to provide potable water may be affected by new development in the Plan area. There is the need for more complete information on how development might affect the local hydrology and impact the potable water supply of other properties.

Highway #14 is the only major road in the Plan area. A large-scale development could generate sufficient traffic to exceed the carrying capacity of these roads and compromise the safety of drivers, pedestrians and cyclists using these roads. Information is required to assess the potential impact that increased traffic flow from new development may have upon these key access routes.

New development may affect the provision of police protection in Shirley and Jordan River. It may also affect the ability to provide fire-fighting service in Shirley and may instigate the need for fire-fighting capabilities in Jordan River. School District #62 Sooke may have concerns regarding the impact that additional students might have on the capacity of school facilities and bussing services. For these reasons,



information is required on the possible impact that development may have upon the provision of fire and police protection, potable water sources and the services provided by School District #62 Sooke. Community services can also be affected by increased population.

There may be some unmapped *streams* or *watercourses* in the Plan area. Regardless of whether a *stream* or *watercourse* has been mapped, the adjacent riparian areas are still subject to the **RAR** if the *stream* contains fish habitat. Provincial legislation requires that a *QEP* submit a report on how development might affect the natural environment within the riparian assessment area. Riparian development permits may be approved subject to the conditions outlined by a *QEP* in a report submitted to the provincial government in accordance with the **RAR**. For these reasons, riparian assessment areas are designated as part of the development approval information area.

PART SEVEN – TEMPORARY USE PERMITS

710 Temporary Use Permits

Section 493 of the *Local Government Act (LGA)* enables local government to issue temporary use permits (TUPs) to allow specific land uses to occur for a short period of time. The permit can allow uses not permitted by a zoning bylaw, specify conditions under which the temporary use may be carried on and allow and regulate the construction of buildings or structures where this temporary use will occur.

711 Designation of Temporary Use Permit Areas

Land within all of the Land Use Designations in this Plan is designated under Section 492 of the *LGA* as an area in which TUPs may be issued.

712 General Conditions

- A. TUPs may be issued by the CRD throughout the Shirley – Jordan River Plan area subject to the policies of this Plan.
- B. No public health, public safety or negative environmental impacts can result from the proposed activity.
- C. In evaluating a TUP application, the CRD will consider the following:
 - i. Whether the use is clearly temporary or seasonal in nature;
 - ii. Whether the use is compatible with adjacent uses;
 - iii. The impact of the proposed use on the natural environment;
 - iv. The intensity of the proposed use; and
 - v. The opportunity to conduct the proposed use on other land in the Plan area.
- D. In issuing a TUP, the CRD may specify conditions including, but not limited to:
 - i. The buildings to be used;
 - ii. Siting;
 - iii. Environmental protection, remediation and mitigation measures to address any impact to the natural environment;
 - iv. Hours of operation;

- v. Parking and traffic management;
- vi. On-site storage, buffers and screening;
- vii. External lighting;
- viii. Nuisance, dust and noise abatement;
- ix. Waste management; and
- x. A post-use site restoration plan and implementation strategy.

E. An applicant may be required to indemnify the CRD and post security to ensure compliance with the conditions of a permit.

713 Expiry of a Temporary Use Permit

Despite an expiry date specified in a TUP, a TUP may/will expire if the CRD determines that the person to whom the permit was issued has breached a condition specified in the TUP.

APPENDIX A – DEFINITIONS

In this bylaw, the following definitions apply:

PARCEL means any lot, block, parcel or other area in which real property is held or into which real property is subdivided, and includes a strata lot created under the *Bare Land Strata Regulations* pursuant to the *Strata Property Act*, but specifically excludes a building strata created pursuant to Section 241 of the *Strata Property Act*;

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) means an applied scientist or technologist, acting alone or together with another qualified environmental professional, if:

- (a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association, and
- (b) the individual's area of expertise in the assessment methods is recognized by the CRD as expertise that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal, and
- (c) the individual is acting within that individual's area of expertise;

QUALIFIED PROFESSIONAL (QP) means:

- (a) A professional engineer,
- (b) A professional geoscientist with experience or training in geotechnical study and geohazard assessments,
- (c) A registered professional biologist, or
- (d) A professional agrologist

acting alone or together with another Qualified Professional, if:

- (a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association,
- (b) the individual's area of expertise in the assessment methods is recognized by the CRD as expertise that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal, and

(c) the individual is acting within that individual's area of expertise;

RURAL A ZONE means the Rural A zone as established by *Bylaw No. 2040, Juan de Fuca, Land Use Bylaw, 1992*;

STREAM includes any of the following that provides fish habitat:

(a) a *watercourse*, whether it usually contains water or not;

(b) a pond, lake, river, creek or brook;

(c) a ditch, spring or wetland that is connected by surface flow to something referred to in paragraph (a) or (b);

SUBDIVISION means the division of land into two or more *parcels*, whether by plan, descriptive words, or otherwise, and includes a plan consolidating two or more *parcels* into the same or a lesser number of *parcels* but excludes a building strata;

WATERCOURSE means a permanent or non-permanent (containing water at least six months of the year) source of water supply that is natural or man-made, including a pond, lake, river, creek, brook, ditch, spring or wetland that is integral to a *stream*, with well-defined banks and a bed of 0.6 m or more below the surrounding land serving to give direction to or containing a current of water but does not apply to a man-made pond that does not connect to a *stream*.

APPENDIX B – LIST OF SOURCES

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<http://www2.gov.bc.ca/gov/topic.page?id=9CD252EC63C84868AC2325F70E21683C&title=CommunityEnergyEmissionsInventoryCEEI#toc>

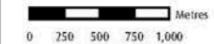
Schedule B:
Land Use Designations



- AL Agricultural
- CU Coastal Upland
- CO Commercial
- M Marine
- P Park
- PA Pacific Acreage
- RE Renewable Resource
- S Settlement

- Official Community Plan Area Boundary
- Lot Boundary
- Road

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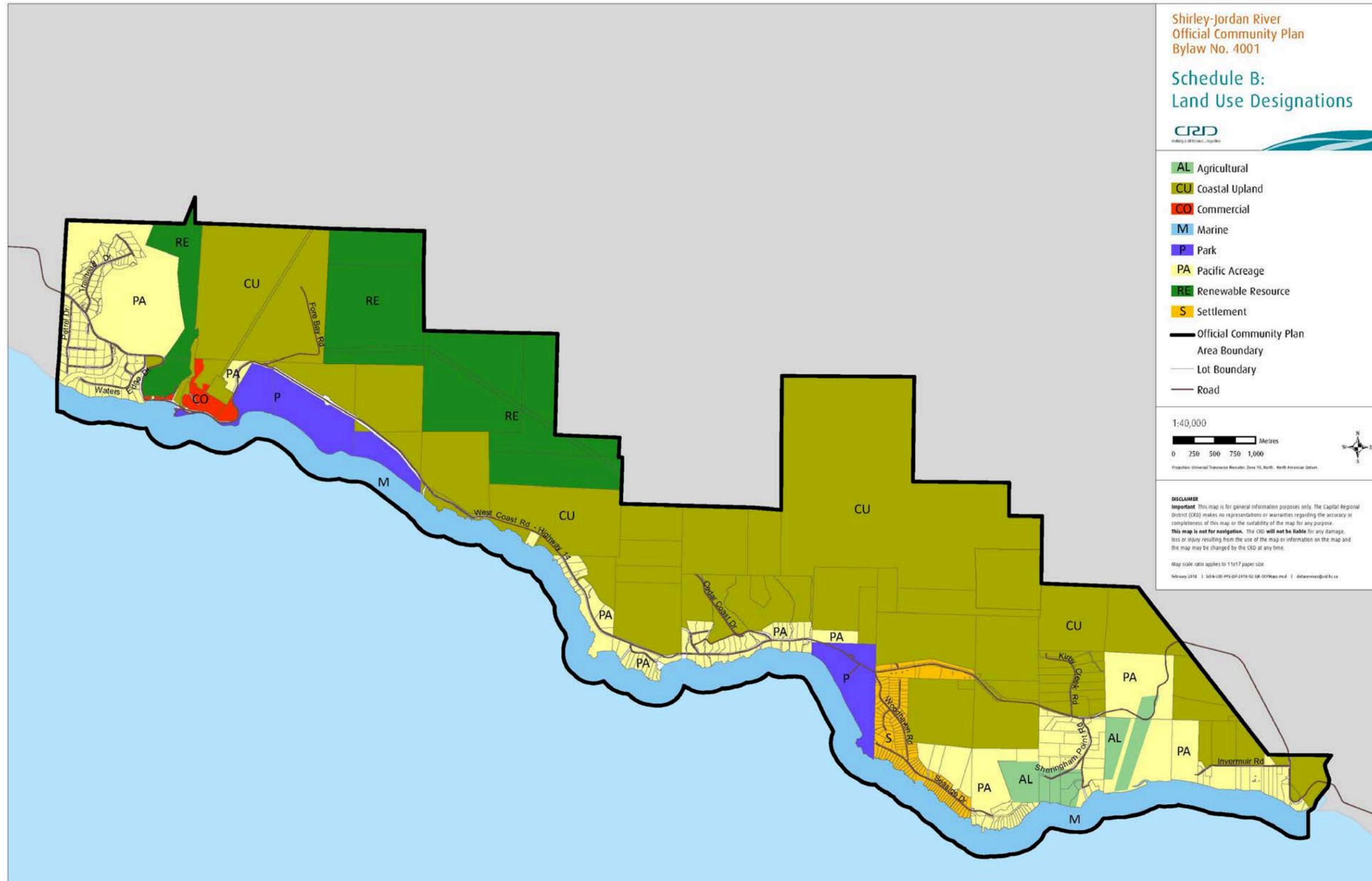


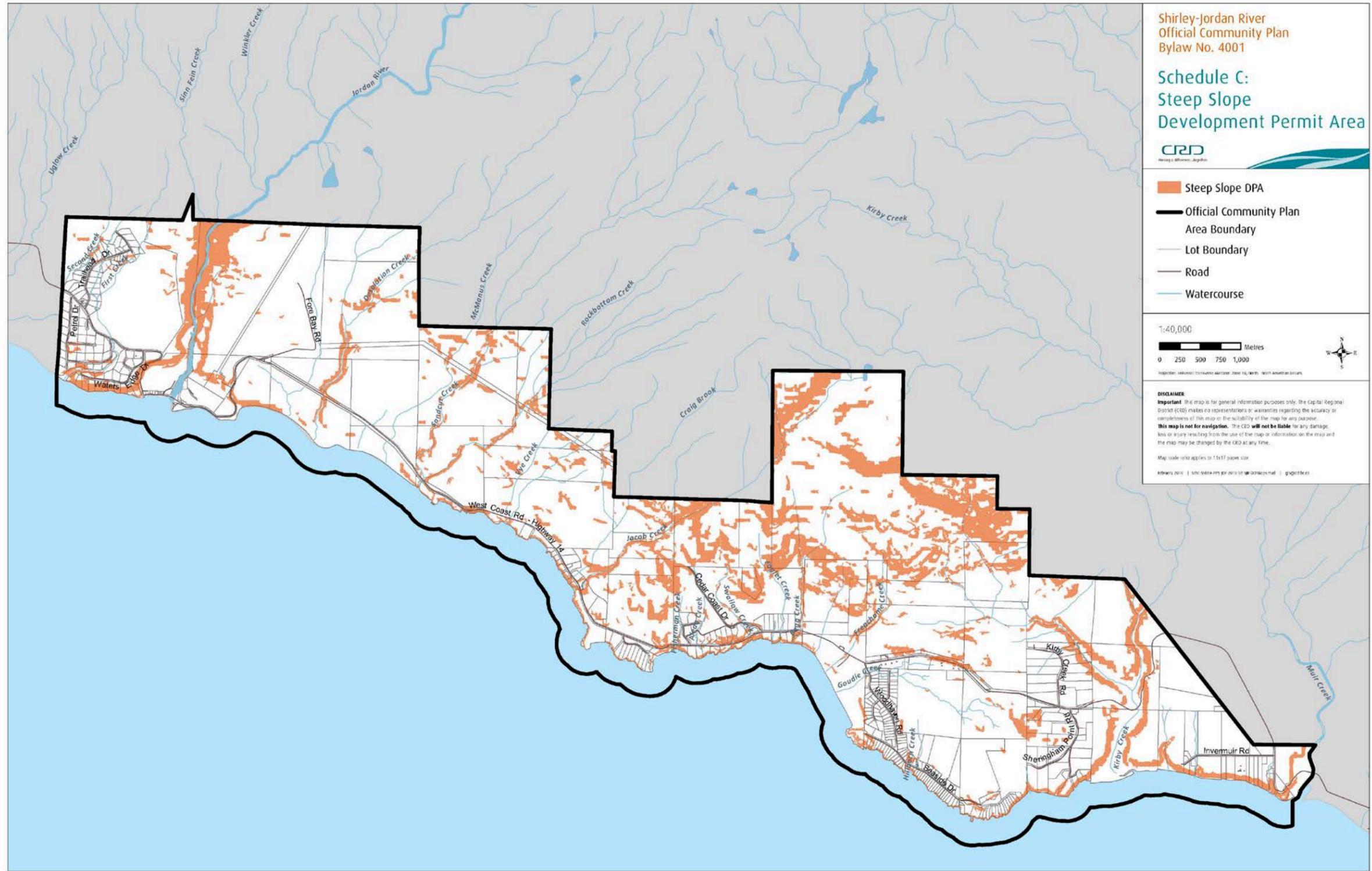
Projection: Universal Transverse Mercator, Zone 18, North, North American Datum

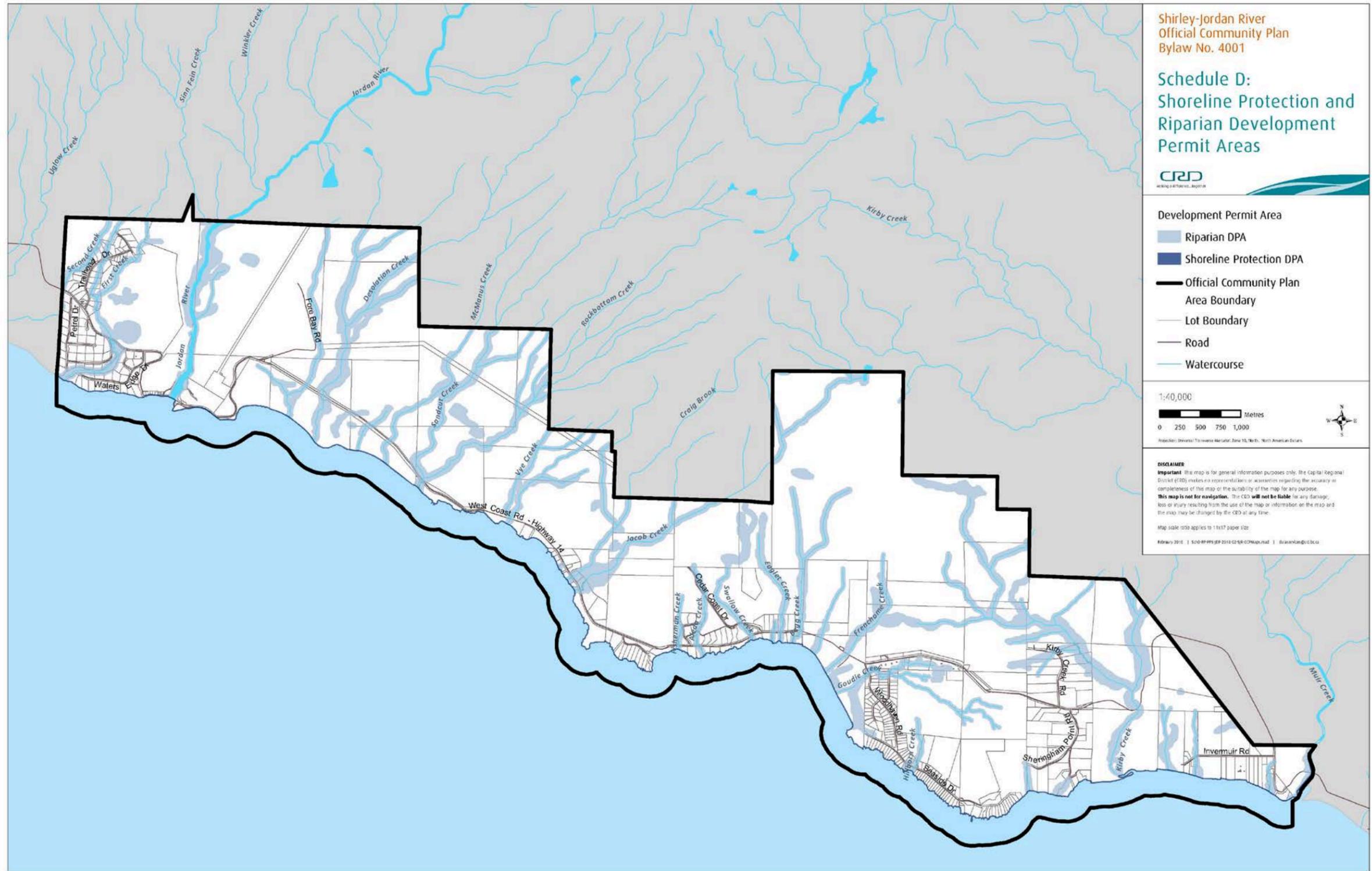
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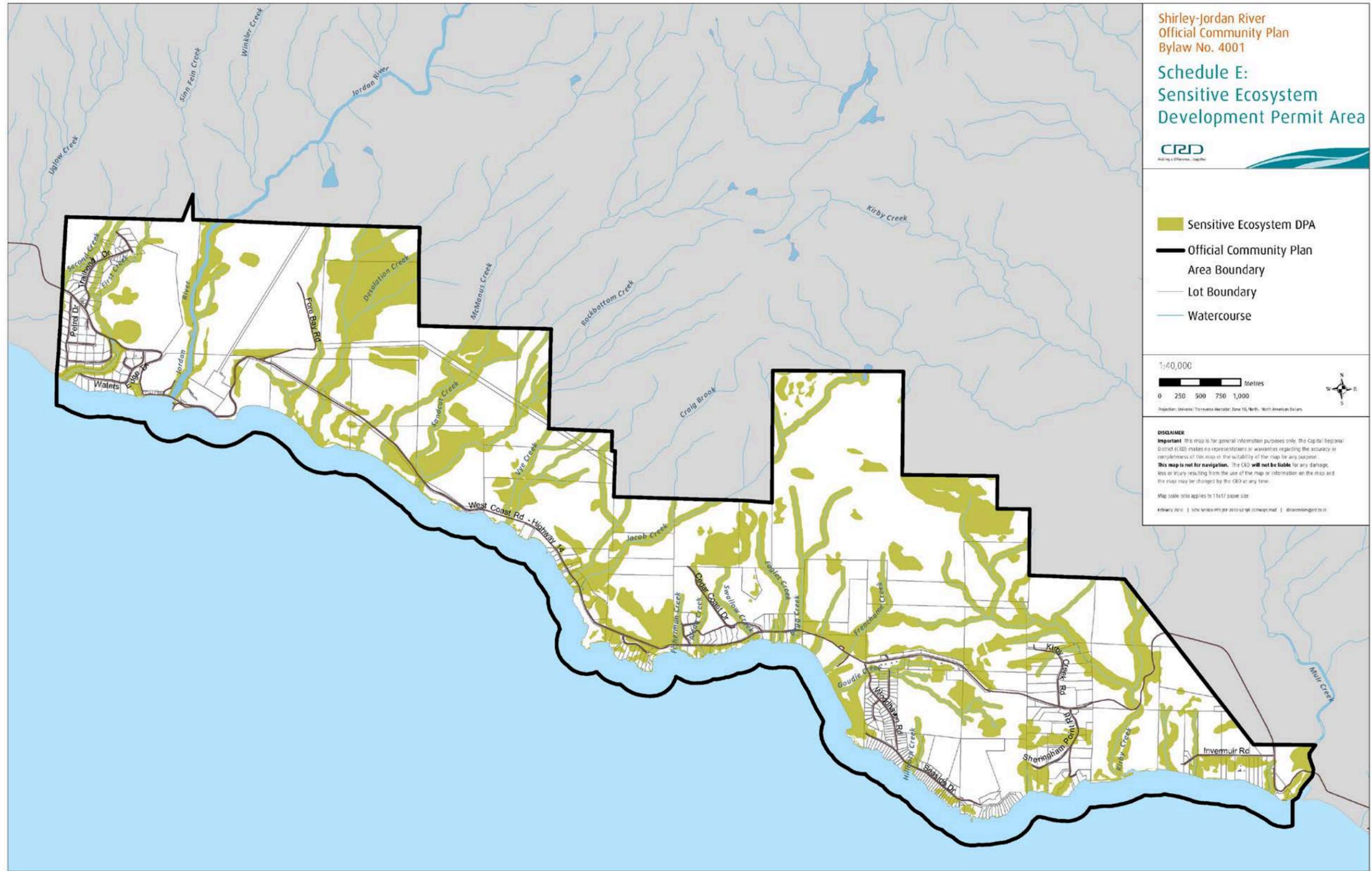
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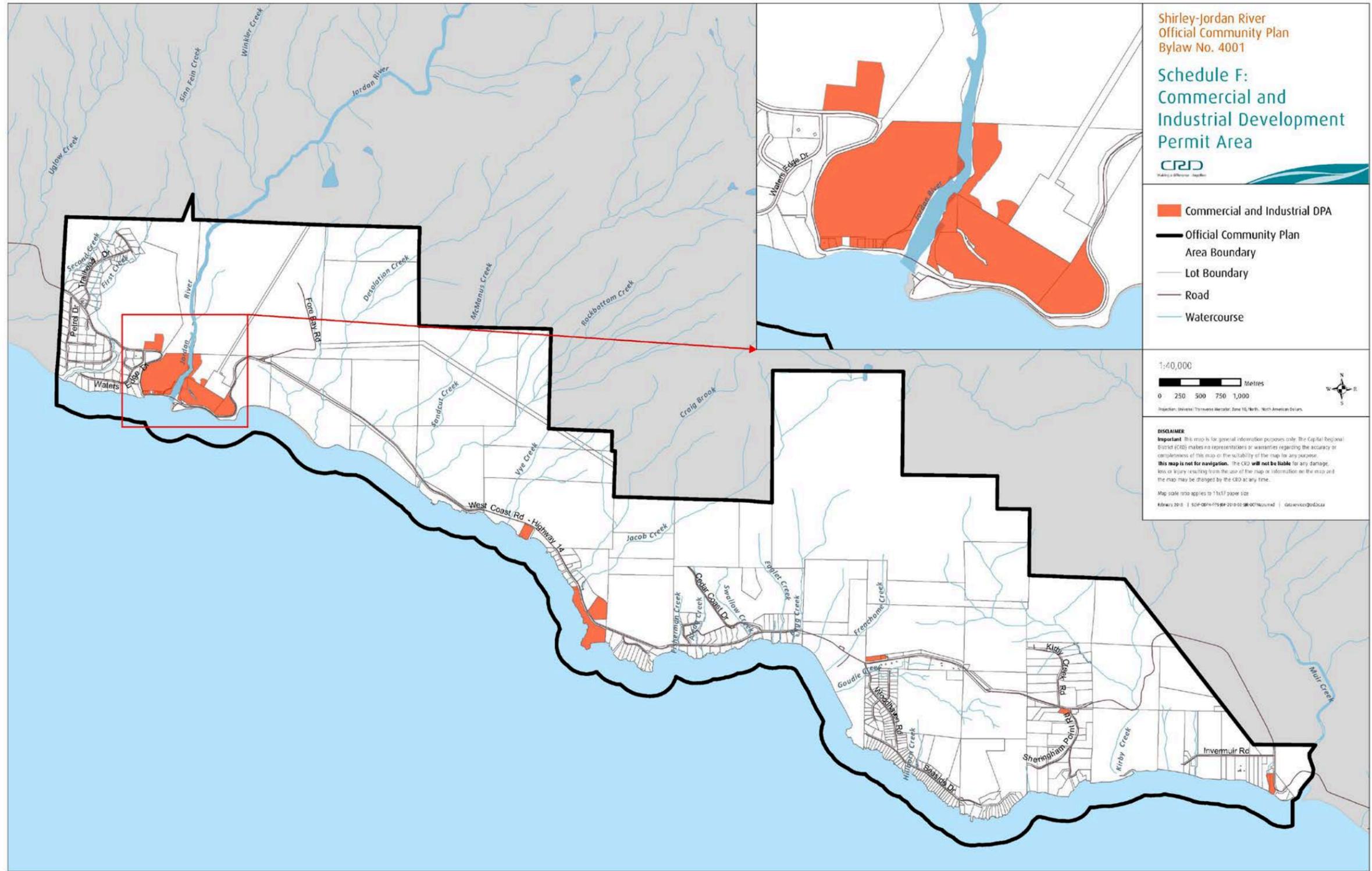
February 2018 | 5418-100-PP5 (01/2018-02-08-00)Map.mxd | data-services@crd.ca

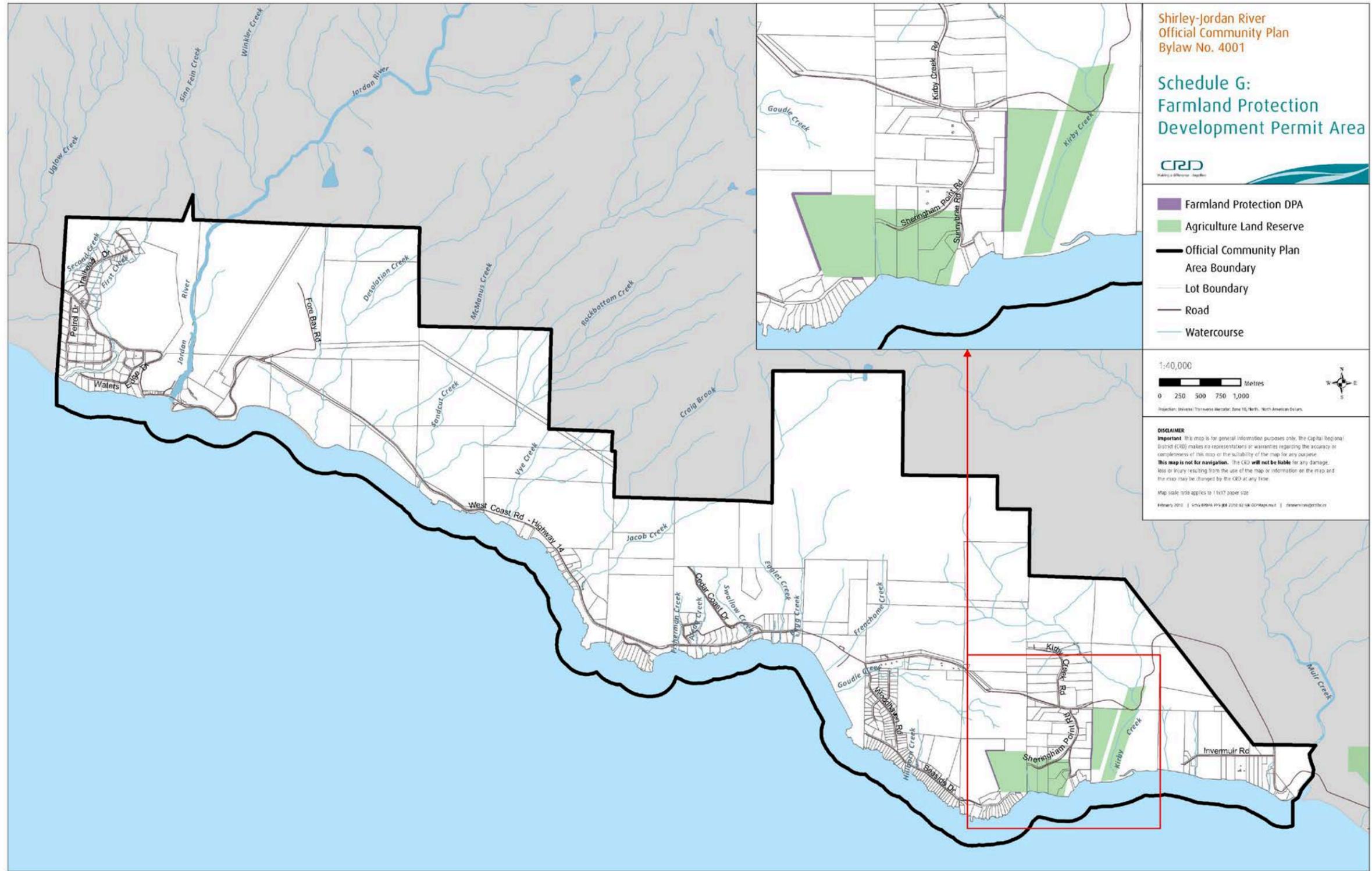


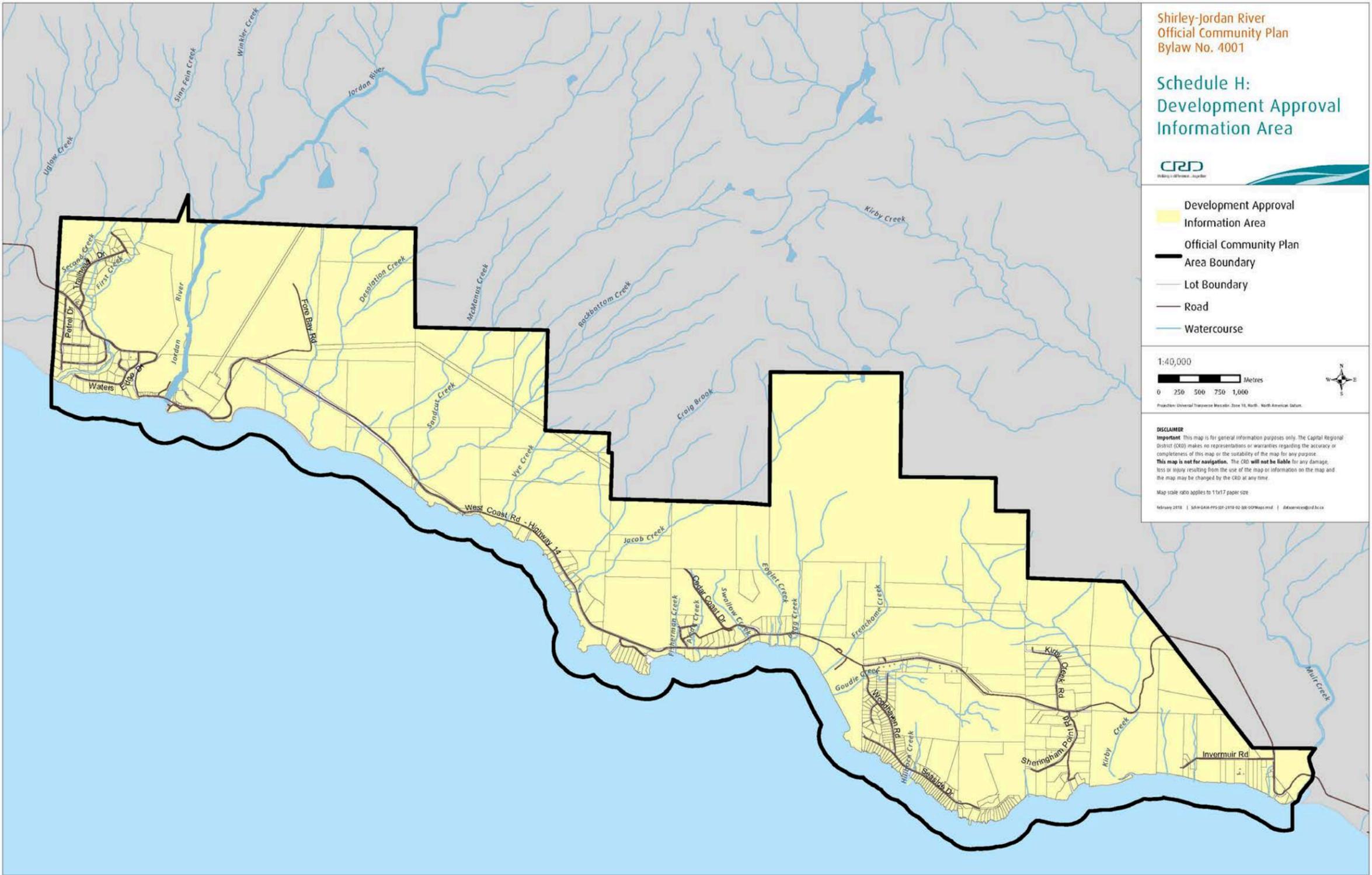


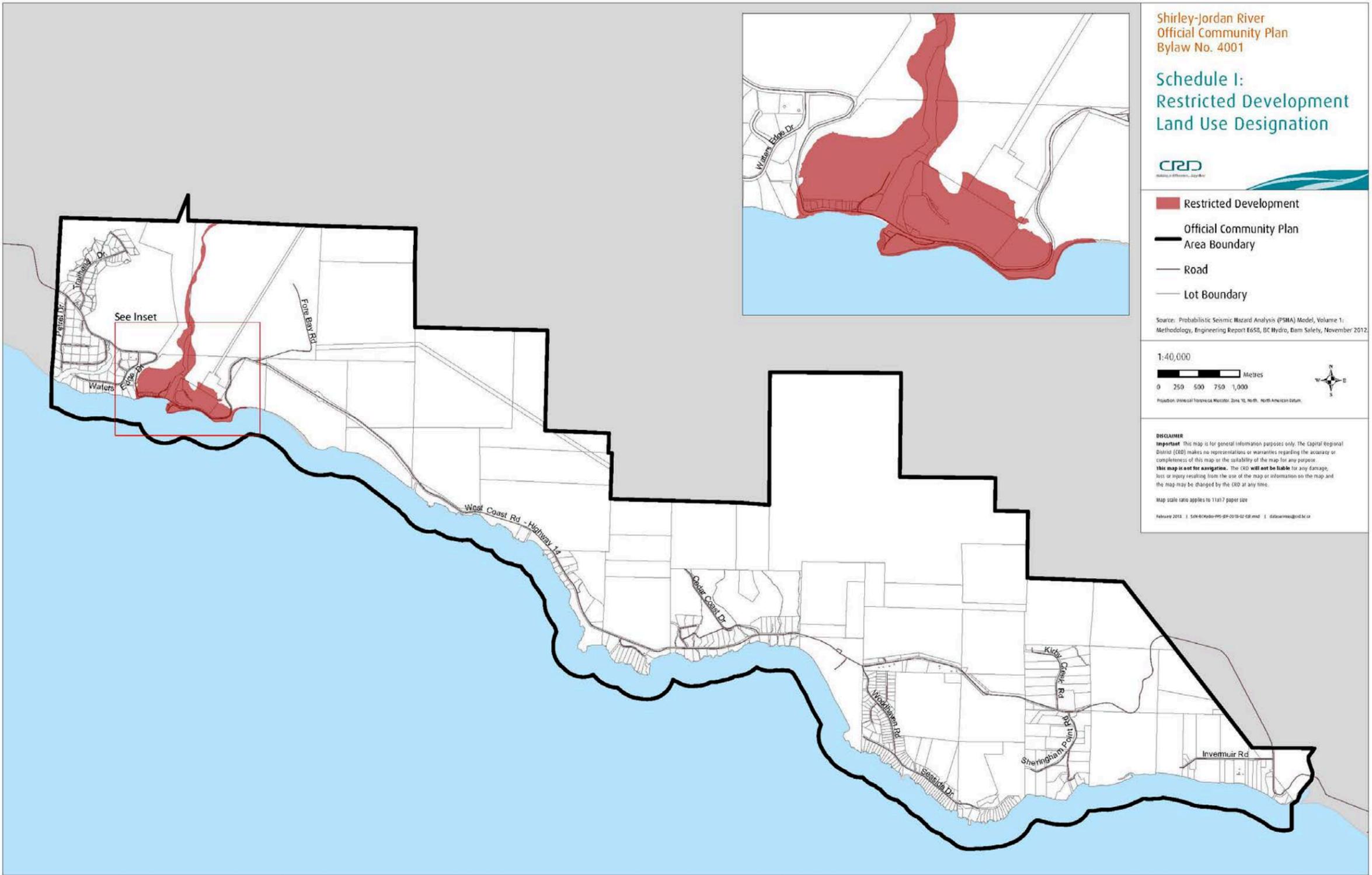












Cowichan Tribes

Wendy Miller

From: Tracy Fleming <Tracy.Fleming@cowichantribes.com>
Sent: Friday, April 29, 2016 1:59 PM
To: Wendy Miller
Cc: Candace Charlie
Subject: Re: Shirley - Jordan River Official Community Plan - CRD Referral

Hello Wendy,

We will not be responding to his referral. We defer to the first nations in whose core area this is located.

Tracy Fleming, M.Sc., R.P.Bio.
Referral Coordinator
Cowichan Tribes
5760 Allenby Road
Duncan, BC V9L 5J1

250-748-3196 (ext 358)

Please consider the environment before printing this message.

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>>> Wendy Miller <wmiller@crd.bc.ca> 4/20/2016 10:18 AM >>>
Good Morning,

Please find attached a referral letter and staff report and link to proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016" (Appendix B), which would repeal and replace the existing Shirley/Jordan River OCP, Bylaw No. 3717.

Appendix B:
<https://www.crd.bc.ca/docs/default-source/crd-document-library/committeedocuments/juandefucalandusecommittee/20160419/pps-jdf-2016-04-19-bl4001-trackedchangesaccepted-referral.pdf?sfvrsn=4>

Comment is requested by May 18, 2016.

Thank you,

Wendy Miller
Administrative Clerk | JDF Electoral Area Planning | 250.642.8100
JDF Local Area Services Building | Capital Regional District

Esquimalt Nation

Wendy Miller

From: Janice Rose <Janice@esquimaltnation.ca>
Sent: Tuesday, May 10, 2016 5:32 PM
To: Wendy Miller
Subject: RE: Shirley - Jordan River Official Community Plan - CRD Referral

Hi Wendy,

Esquimalt Nation council has no comments at this time.

Thank you.

Janice

From: Wendy Miller [wmiller@crd.bc.ca]
Sent: May 10, 2016 12:56 PM
To: Georgia Dixon
Subject: RE: Shirley - Jordan River Official Community Plan - CRD Referral

Good Afternoon,

I follow up to the below email.

Should you wish to make comment, submissions are requested by May 18, 2016.

Thank you,

Wendy Miller

Administrative Clerk | JDF Electoral Area Planning | 250.642.8100
JDF Local Area Services Building | Capital Regional District
3 – 7450 Butler Road, Sooke, BC V9Z 1N1

From: Wendy Miller
Sent: Wednesday, April 20, 2016 10:26 AM
To: 'georgia@esquimaltnation.ca' <georgia@esquimaltnation.ca>
Subject: Shirley - Jordan River Official Community Plan - CRD Referral

Good Morning,

Please find attached a referral letter and staff report and link to proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016" (Appendix B), which would repeal and replace the existing Shirley/Jordan River OCP, Bylaw No. 3717.

Appendix B:
<https://www.crd.bc.ca/docs/default-source/crd-document-library/committeedocuments/juandefucalandusecommittee/20160419/pps-jdf-2016-04-19-bl4001-trackedchangesaccepted-referral.pdf?sfvrsn=4>

Comment is requested by May 18, 2016.

Thank you,

Island Health



Excellent health and care, for everyone,
everywhere, every time.

May 26, 2016

June Klassen
Manager, Local Area Planning
Juan de Fuca Electoral Area Planning
Capital Regional District
3 – 7450 Butler Road
Sooke, BC V9Z 1N1

Dear Ms. Klassen:

Re: Proposed Bylaw No. 4001, Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016

Thank you for the opportunity to provide comment on the Shirley – Jordan River Official Community Plan update. How communities are planned and built, and the services and resources provided within them, directly impacts people's physical, mental, and social health. These impacts are reflected in levels of social cohesion, mental and physical fitness, chronic disease, obesity, and injury¹. By 2035, Sooke's population aged 45-74 is expected to increase by 53%, while the population aged 75+ is expected to grow by 194%². As the population ages, the prevalence rates of chronic conditions such as cardiovascular diseases, type II diabetes, and obesity will also increase³.

All of these health effects arise in part from our interaction with the built environment, e.g. the buildings, parks, schools, road systems and other infrastructure that we encounter in our daily lives. Research indicates that we can improve health and reduce illness through different approaches to planning our communities. According to the World Health Organization, 80% of some chronic diseases can be prevented through moderate exercise and improved nutrition; as well as having well designed homes, sidewalks and transportation systems to help promote activity for all ages³.

Island Health (VIHA) appreciates the opportunity to provide evidence-based recommendations and comments for this Official Community Plan review. Regulatory requirements, as well as Healthy Built Environment based highlights are itemized below.

Regulatory Considerations

Drinking Water

361 – On page 56 where reference is made to water licenses being required by the province, it could be further added that water supplies providing water to more than one single family residence or commercial operation (with public access) require construction and operating permits from Island Health's – Health Protection and Environmental Services department, for more details on this please refer to the *Drinking Water Protection Act and Regulation* and/or <http://www.viha.ca/mho/water/>. This comment is also applicable to section **383**.

Health Protection and Environmental Services

Located at: 201-771 Vernon Avenue | Victoria, BC V8X 5A7 Canada
Mailing address: 201-771 Vernon Avenue | Victoria, BC V8X 5A7 Canada

Tel: 250-519-3401 | Fax: 250-519-3402
[viha.ca](http://www.viha.ca)

Review – Shirley/Jordan River OCP Update
May 26, 2016

Page 2 of 4

414 – On page 87 it mentions that “on-site collection of rainwater is supported.” Rainwater capture can be utilized to provide domestic potable water to existing individual single-family residences, however Island Health (as referenced on page 57) greatly discourages its use as a potable water supply for the purposes of subdivision, as it is an unreliable (for quality and quantity) source of water for domestic purposes.

Subdivision and Sewage

484 – Page 106 under point B there is reference to no new parcels being created with an area of less than 0.5 acre. We would like to bring to your attention that under our *Subdivision Standards* this would be contingent on connection to a community water supply system. If there is only a single connection to a drinking water source, then the minimum lot size recommended is 1 Ha.

Select highlights under Island Health’s Healthy Built Environment (HBE) Initiative:

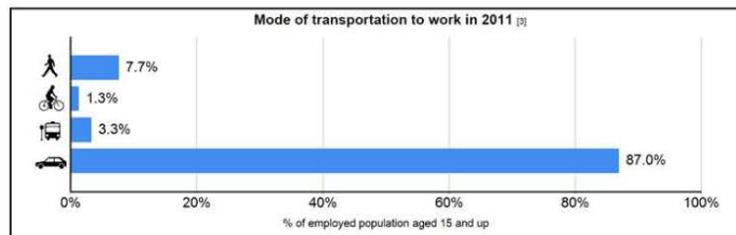
Traffic and Trails

Road Safety and Active Transportation: Broad objectives in these sections recognize the need for more trails throughout the community to increase connectivity, reduce reliance on cars, support a healthy lifestyle and offer a safe route for pedestrians and cyclists. Additionally, directed to the Ministry of Transportation & Infrastructure (MoTI) have been added to the OCP, calling for safety improvements to Highway #14.

Island Health would like to echo this sentiment and strongly encourage the Ministry of Transportation to improve road safety including the flashing light where fire trucks enter the highway in Shirley and a pedestrian crosswalk in Jordan River. Street safety improvements such as traffic calming and separated bicycle routes have been shown to greatly decrease the occurrence of traffic collisions and injuries among all road users. Evidence also illustrates that “safety concerns keep 1 in 5 Canadians from walking or bicycling.” 82% of Canadians are willing to walk more if there is better infrastructure⁴.

Active transportation that is convenient and safe can also increase transit use as well as walkability, and physical activity, while too improving mental health and social connectivity. Active transportation is one of the most cost-effective ways for an individual to become more physically active and remain healthy in the long-term. If all Canadians engaged in 60 minutes of physical activity per day, 33% of all deaths related to coronary heart disease, 25% of deaths related to stroke, 20% of deaths related to Type 2 diabetes, and 20% of deaths related to hypertension could be avoided⁴.

With the above HBE linkages in mind Island Health would like to highlight the illustration below. As seen in the graphic below a population of 13.7% (in Sooke) rely on alternative modes of transport to get to work. In the OCP, on page 73, it states that “mode of transportation for commuters is single-occupancy vehicles (93%) in the locality. To facilitate this population and possibly foster others to commute by modes besides automobiles, making active transportation convenient and safe is an integral component.



Reference: <http://www.phsa.ca/Documents/Community-Health-Profile/Sooke.pdf>

Food Security

In this update the increasing importance of local food security is recognized and policies supportive of local agriculture, farmers markets and farm gate sales have been added to the updated OCP. Community and home gardens are supported in all land use designations.

Research suggests that community gardens have the potential to build community and influence food knowledge and preferences, in addition to contributing to the local food supply. Farmers markets also encourage local food security and healthier food choices within the community however to keep food safety principles paramount they should be adhering to the provincial *Guidelines for the Sale of Foods at Temporary Food Markets*.

Overall, research suggests that support for local food production may increase the availability of healthy and fresh food, including fruits and vegetables, in communities while supporting local economies. We know that eating enough servings of vegetables and fruit is critical to good health; however, only 41% of British Columbians eat at least five servings of fruits and vegetables per day. There is evidence to show that even a one-serving-per-day increase is linked to a 20% reduction in chronic disease related mortality³. Therefore, these food security measures have the potential to contribute to improvements in the overall health of individuals, families, and the communities of Shirley and Jordan River.

Development and Local Economy

Affordable and rental housing options are recognized and supported through suites and home based business. Secondary dwellings provides the community with increased affordable housing options which may have a multitude of increased health benefits, e.g. allow people greater disposable income to buy necessities such as healthy food or medications. In addition, permitting secondary dwellings can assist families with facilitating "aging in place" such that either aging family members may be able to reside with their family, or conversely allowing seniors to bring in a tenant to offset costs or even a live in home care provider. Another benefit of this allowance will ensure suites are built to Building Code requirements rather than the installation of illegal substandard housing.

With the above in mind, the following two conditions are required to ensure a safe and healthy environment for secondary dwellings:

- a) As per section 7 of the *Health Hazard Regulation* it is the duty of a landlord to provide potable water to his/her tenant for domestic purposes.
- b) Increases to living space may impact properties serviced by septic systems, therefore sewerage systems must be adequately sized and designed and may require an assessment or upgrading by an Authorized Person as per the *Sewerage System Regulation*.

Review – Shirley/Jordan River OCP Update
May 26, 2016

Page 4 of 4

Thank you for the opportunity to review the Shirley/Jordan River Official Community Plan update. If you have any questions please do not hesitate to contact Rory Beise, your district Environmental Health Officer for regulatory considerations at 250-519-3401, or the undersigned at 250-519-3654 regarding Island Health's *Healthy Built Environment* Initiative.

Sincerely,



Jade Yehia, CPHI(C)
Regional Built Environment Consultant

c.c.: Rory Beise, Environmental Health Officer, Victoria
Joanne Lum, Senior Environmental Health Officer, Victoria

¹Provincial Health Services Authority (PHSA) (2015). Retrieved from: <http://www.phsa.ca/our-services/programs-services/population-public-health/healthy-built-environment>

²Island Health. (2013). *Local Health Area Profile*. Retrieved from http://www.viha.ca/mho/stats/lha_profiles.htm

³PlanH. (2014). Retrieved from: planh.ca/sites/default/files/planh_local_government_guide-web_0.pdf and ⁴<http://planh.ca/take-action/healthy-environments/page/healthy-built-environment>

Ministry of Transportation & Infrastructure

Wendy Miller

From: Sherratt, Grace TRAN:EX <Grace.Sherratt@gov.bc.ca>
Sent: Tuesday, May 17, 2016 3:05 PM
To: Wendy Miller
Subject: RE: Shirley - Jordan River Official Community Plan - CRD Referral

Hello Wendy,

Please accept this email as an official Ministry response to your referral of proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. a, 2016", **Ministry file 2016-02450**.

The Ministry has no objections to the proposed Bylaw, however we do request input be obtained from the Ministry with regards to the proposed 'Broad Objectives for Traffic' and required permits be obtained. Also, if significant revisions/changes are made, please re-refer the document for Ministry review.

If you require any additional information please feel free to contact myself directly.

Kind Regards,

GRACE SHERRATT | DISTRICT DEVELOPMENT TECHNICIAN
BC MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE | VANCOUVER ISLAND DISTRICT
240 - 4460 CHATTERTON WAY
VICTORIA BC V8X 5J2
T: 250.952.4511 | F: 250.952.4508

WEBSITE FOR DEVELOPMENT APPROVALS:
www.th.gov.bc.ca/Development_Approvals/home.htm | MINISTRY WEBSITE: <http://tranbc.ca/>

From: Wendy Miller [<mailto:wmler@crd.bc.ca>]
Sent: Wednesday, April 20, 2016 9:41 AM
To: Sherratt, Grace TRAN:EX
Subject: Shirley - Jordan River Official Community Plan - CRD Referral

Good Morning,

Please find attached a referral letter and staff report and link to proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016" (Appendix B), which would repeal and replace the existing Shirley/Jordan River OCP, Bylaw No. 3717.

Appendix B:
<https://www.crd.bc.ca/docs/default-source/crd-document-library/committeedocuments/juandefucalandusecommittee/20160419/ppsjdf-2016-04-19-bl4001-trackedchangesaccepted-referral.pdf?sfvrsn=4>

Comment is requested by May 18, 2016.

Thank you,

Wendy Miller
Administrative Clerk | JDF Electoral Area Planning | 250.642.8100

School District #62

Wendy Miller

From: Pete Godau <pgodau@sd62.bc.ca>
Sent: Tuesday, May 10, 2016 12:31 PM
To: Wendy Miller
Subject: RE: Shirley - Jordan River Official Community Plan - CRD Referral

Wendy,

No concerns from the school district.

Thanks,

Pete

From: Wendy Miller [mailto:wmiller@crd.bc.ca]
Sent: Tuesday, May 10, 2016 12:13 PM
To: Pete Godau <pgodau@sd62.bc.ca>
Subject: RE: Shirley - Jordan River Official Community Plan - CRD Referral

Good Afternoon,

I follow up to the below email.

Should you wish to make comment, submissions are requested by May 18, 2016.

Thank you,

Wendy Miller
Administrative Clerk | JDF Electoral Area Planning | 250.642.8100
JDF Local Area Services Building | Capital Regional District
3 – 7450 Butler Road, Sooke, BC V9Z 1N1

From: Wendy Miller
Sent: Wednesday, April 20, 2016 9:43 AM
To: 'Pete Godau' <pgodau@sd62.bc.ca>
Subject: Shirley - Jordan River Official Community Plan - CRD Referral

Good Morning,

Please find attached a referral letter and staff report and link to proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016" (Appendix B), which would repeal and replace the existing Shirley/Jordan River OCP, Bylaw No. 3717.

Appendix B:
<https://www.crd.bc.ca/docs/default-source/crd-document-library/committeedocuments/juandefucalandusecommittee/20160419/pps-jdf-2016-04-19-bl4001-trackedchangesaccepted-referral.pdf?sfvrsn=4>

Comment is requested by May 18, 2016.

JdF Agricultural Advisory Planning Commission

**Juan de Fuca Agricultural Advisory Planning Commission Meeting Minutes
May 9, 2016**

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Subsection 392 Reducing the Number of Vehicle Trips

Recognizes that farm gate sales can reduce the amount of travel necessary to purchase food and other goods.

Part 4 – Goals, Policies and Objectives

Subsection 403 Agriculture Land Use Designations

Designates all lands in the ALR as Agriculture. Permits lands outside of the ALR that are being farmed to be designated Agriculture.

Subsection 414 Policies for Ecological Health

The AAPC stated support for expanding the policy related to limiting the introduction of invasive species to include invasive animals. Addling geese eggs was forwarded as an example to limit an invasive animal and the addling method was supported as a best-practice opposed to hunting.

Subsection 464 Polices for Food Security

Emma Taylor outlined the polices. It advised that policy statement G would support regulations in the Land Use Bylaw to support siting of buildings to maximize the area available for agriculture. It was further advised that policy statement H would support the concept of a cooperative or group farm if a proposal for rezoning was submitted.

Part 5 - Development Permit Areas

Subsection 503 General exemption from a Development Permit

Statement J exempts normal farm practices as defined in the *Farm Practices Protection (Right to Farm) Act* and farm uses as defined in the *Agricultural Land Reserve Use, Subdivision and Procedure Regulation*.

Section 540 Sensitive Ecosystem Development Permit Area

The Sensitive Ecosystem Development Permit Area (DPA) includes seasonally flooded fields.

Section 560 Farmland Protection Development Permit Area

DPA has been retained in proposed Bylaw No. 4000. Emma Taylor advised that the Farmland Protection DPA buffer is on the adjacent land and not on land within the ALR. A DP would be required at the time of rezoning/subdivision.

Section 570 Medical Marihuana Production Facilities Development Permit Area

The DPA includes all land in the ALR and guides the form and character of medical marihuana production facilities.

b) Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016"

Emma Taylor directed attention to the table provided comparing the agricultural policy changes between existing Bylaw No. 3717 and proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016". It was advised that Bylaw No. 4000 and Bylaw No. 4001 are structured in the same way, sharing similar policy statements. It was further advised that water was the top priority communicated by the community and that the OCP includes information from the Sensitive Ecosystem Inventory commissioned in 2014.

Juan de Fuca Agricultural Advisory Planning Commission Meeting Minutes
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Emma Taylor spoke to proposed Bylaw No. 4001, highlighting changes reflected in the comparison table.

Subsection 344 Agriculture

Agriculture has been included under the Resource section of the OCP.

An APC member indicated there may have been historical oil and gas drilling in the area, and indicated concern that this type of resource extraction could affect water supply. Emma Taylor reported that this comment was also made and recorded at the May 4, 2016 meeting of the Shirley – Jordan River Advisory Planning Commission meeting.

The AAPC stated support for acknowledging that there is potential for agricultural opportunities to increase with climate change.

Emma Taylor responded to questions from the AAPC advising that:

- air photos were used to select the lands included in the ALR
- that there has been an increase in enquiries regarding opportunities to farm in the Plan area
- there has been change at the provincial level to support farm tourism and alcohol production on ALR lands

Subsection 385 New Land Use Designations

Table 8 reflects that 77 ha are designated Agriculture in the Plan area.

Subsection 443 Objectives for Resources

Objective B supports and encourages food production, processing and storage.

Subsection 444 Policies for Resources

Includes sixteen policy statements supporting agriculture.

Part 5 – Development Permit Areas

Section 560 Farmland Protection Development Permit Area

DPA has been retained in proposed Bylaw No. 4001 and includes improved mapping (Schedule G).

The AAPC stated overall positive comment regarding proposed Bylaw No. 4000 and Bylaw No. 4001, noting that the bylaws reflect increased community support for and awareness of agriculture.

MOVED by Dominique Bernardet, **SECONDED** by Teresa Willman that the AAPC reports that it has reviewed the agricultural aspects in Bylaw No. 4000, "Official Community Plan for East Sooke, Bylaw No. 1, 2016" and in Bylaw No. 4001, "Official Community Plan for Shirley - Jordan River, Bylaw No. 1, 2016" and that it supports the bylaws with the comments requested by the AAPC. **CARRIED**

7. Adjournment

The meeting adjourned at 7:12 p.m.

Chair

PPSS-35010459-968

JdFEA Parks and Recreation Advisory Commission

**Juan de Fuca Electoral Area Parks and Recreation
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April 26, 2016**

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Section 460 Food Security

Aylard Farm to be used for park, but remains in the Agricultural Land Reserve

Section 480 Settlement

Policy statements allow for fee simple or bareland strata subdivision of Rural A parcels, allowing potential park dedication opportunities.

Section 610 Development Approval Information Area

Policy statements allows for information to be obtained in connection with rezoning regarding provision of community services, including parks.

Proposed Bylaw No. 4001

E. Taylor directed attention to the table provided comparing the park and recreation policy changes between existing Bylaw No. 3717 and proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016", as referred by the Land Use Committee on February 16, 2016.

It was advised that proposed Bylaw No. 4001 includes information from the SEI commissioned in 2014.

Part 1 – Guiding Principles

Reviewed without comment from the Commission.

Part 2 – Administrative Structure

Section 208 Regional Growth Strategy Consistency

Proposed Bylaw No. 4001 specifically address the RGS with respect to park objectives and protecting regional green/blue spaces.

Section 210 Greenhouse Gas Reduction

Supports alternative transportation and protection of ecosystems through conservation and enhancement of forested areas.

Part 3 – Context

Section 320 Environment

Information has been updated to reflect the new SEI. New information includes updated creek mapping.

The Manager advised that Regional Parks wishes to proceed with a mapping exercise for the Rural Resource Lands (RRL). A meeting with the Commission is anticipated with direct follow up with some Commissioners regarding submission of ground-truth data.

E. Taylor confirmed that the SEI for Shirley – Jordan River included a degree of field verification but that further site specific opportunity is provided at the time that a parcel is considered for development.

Section 330 Parks and Trails

The Manager requested that "picnic area" for Sheringham Point be struck from Table 2.

**Juan de Fuca Electoral Area Parks and Recreation
Advisory Commission Meeting Minutes
April 26, 2016**

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The Commission stated support for adding access from the Plan area to the RRL to provide opportunity to permit access to the Leech Watershed under subsection 333. It was noted that, considering the private land holdings in Shirley – Jordan River, extension of the Galloping Goose may only be viable through an extension through the RRL. The Commission further stated that BC Hydro lands at Jordan River and BC Hydro easements over private land may provide park and connectivity opportunities.

E. Taylor reported that subsection 335 supports legal access to Priest Cabin Park and securing access to the Matterhorn Trail from Tieulie Place as priorities for the community. Links between neighbourhoods is also supported by the community.

Section 360 Services and Emergency Planning

E. Taylor reported that subsection 366 reflects community support for limiting the connection between Sheringham Point Road and Seaside Road for emergency purposes only and not for public use.

Section 380 Settlement and Economy

Updated information includes a subsection on Muir Creek to support acquisition of a parkland amenity.

Part Four – Goals, Policies and Objectives

Subsection 404 to be updated to reflect additional lands held by BC Hydro in Jordan River.

Section 430 Parks and Trails

Lands designated as Park are CRD Regional Park lands; CRD Community Parks are not designated as Park. Community Parks are acquired through subdivision of lands designated Settlement. Community Parks remain designated as Settlement, eliminating the need for an OCP amendment.

Subsection 433 identifies the acquisition of parkland in accordance with the goals and objectives of the both the Regional Parks Strategic Plan and the Juan de Fuca Community Parks Strategic Plan.

The Manager noted that subsection 434, policy statement B will be updated to match the revised policy statement in the East Sooke OCP to focus on stewardship opportunities. E. Taylor noted that policy statement M reaffirms support for acquiring lands adjacent to Muir Creek.

Section 470 Community Health

Subsection 474 supports local delivery of programs including recreational opportunities and fitness programs in the community.

**Juan de Fuca Electoral Area Parks and Recreation
Advisory Commission Meeting Minutes
April 26, 2016**

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Section 480 Development and Local Economy

Policy statements allow for fee-simple or bareland strata subdivision of Rural A parcels, allowing potential park dedication opportunities.

Subsection 484 recognizes use of Camp Jubilee as an outdoor recreational facility for organized camping, potentially supporting creation of the new zone for the Girl Guide camp.

The Commission stated support for a site visit to Camp Jubilee.

MOVED by Commissioner Jorna, **SECONDED** by Commissioner Kimmel that the Commission reports to the Land Use Committee that it has reviewed the parks and recreation aspects in Bylaw No. 4000, "Official Community Plan for East Sooke, Bylaw No. 1, 2016" and in Bylaw No. 4001, "Official Community Plan for Shirley - Jordan River Bylaw No. 1, 2016" and that it supports adoption of the bylaws with the minor revisions requested by the Commission. **CARRIED**

**6. Staff Reports
a) Staff News**

Sheringham Point Community Park and Operating Agreement

Further to the Alternate Director's report, the Manager confirmed that the SPLPS has signed the Operating Agreement and that the Operating Agreement is in the process of receiving final CRD approval. It was further confirmed that the contractor has completed the new parking area and trail head at Sheringham Point Park and that new signs and information kiosk will be installed in May. It is understood that Electoral Area Services Committee (EASC) will be supporting a request from the SPLPS for Gas Tax funding to support improvements to the statutory rights-of-way at Sheringham Point.

New Bylaw – "A Bylaw to Establish A Land Acquisition Fund for Juan de Fuca Electoral Area Community Parks

A new bylaw, Bylaw No. 4101, to replace the former Sooke Electoral Area Bylaw No. 1133 Land Acquisition Reserve Fund (1983), has been prepared, along with an accompanying staff report. Proposed Bylaw No. 4101 will permit use of the land acquisition reserve fund for purposes of acquiring other lands for dedication as park. The term "acquiring" in the bylaw includes "any interest in land, including any right, title or estate in it of any tenure, with all building and houses". This will include the ability to purchase statutory rights-of-way.

Pending Commission support, it is anticipated that proposed Bylaw No. 4101 will be considered by the EASC at its June meeting.

MOVED by Commissioner Douch, **SECONDED** by Commissioner Jorna that the Commission report that it has reviewed proposed Bylaw No. 4101, "Juan de Fuca Electoral Area Community Parks Reserve Fund Bylaw No. 1, 2016", and supports adoption of the bylaw. **CARRIED**

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Emma Taylor advised that the OCP is broken into seven parts. The APC agreed to open discussion to the membership and attendees after each part is reviewed by Planning.

6. Proposed Bylaws

- a) **Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016"**

Part One – Guiding Principles

Public comment included:

- support for stronger regulations for the Strait of Juan de Fuca related to Liquefied Natural Gas transport
- support for stronger forestry regulations
- natural resource transport and wildfires have an impact on local first responders

The Chair advised that the OCP can only address issues within the Plan area and issues under the authority of the CRD.

Part Two – Administrative Structure

Emma Taylor spoke to the following:

203 Plan Area

Describes the Plan area and proposed boundary adjustment.

208 Regional Growth Strategy Consistency

Outlines how the OCP relates to RGS strategic initiatives.

209 Minimum Parcel Size

Outlines that it is recognized that there are existing lots which have been created by subdivision within the Plan area that do not meet the general minimum lot size policies expressed in this Plan but that it is intended that any further amendments to the zoning bylaw applicable within the Plan area will be consistent with the minimum lot sizes as specified in this Plan to reflect the vision for the community.

211 Sand and Gravel

In accordance with the *Local Government Act*, OCPs must include statements and map designations respecting the approximate location and area of sand and gravel deposits. There are four known sand and gravel sites in the Plan area.

The Chair noted that Part Two was well debated by the Citizens' Committee.

Further to comment made by the public stating that the RGS remains under review, the APC stated support for striking, "A review of the RGS of the CRD is currently underway. The process has been carefully monitored to ensure consistency of this Plan with the updated RGS." in subsection 208.

Part Three – Content

310 Water

Water was the top priority communicated by the community. Emma Taylor directed attention to new information reflected on Map 3: Water Resources. It was advised that Points of Diversion are water licenses.

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In response to comment received from the APC and previous comment made by the Citizens' Committee, Emma Taylor advised that the OCP supports consideration of a Development Permit Area (DPA) for protection of key watersheds but that more watershed information is needed to implement a DPA. It was advised that protection can be enhanced through subdivision regulations and through existing DPAs. It was advised that subsection 414 supports establishment for water conservation and testing of future wells in times of seasonal dryness.

311 Hydrology

The APC stated support for revising the desired DPA for water conservation to specify conservation and protection.

313 Water Sustainability

It was advised that the new *Water Sustainability Act (WSA)* is now in force. The *WSA* supports the establishment of water advisory boards. Emma Taylor advised that there may be opportunity for the CRD to consider the concept of a water advisory board.

320 Environment

Public comment stated support for the OCP acknowledging known bald eagle nests but not supporting identifying nest location on Map 4 and Schedule E.

330 Parks and Trails

Emma Taylor advised that proposed Bylaw No. 4001 has also been referred to the Juan de Fuca Electoral Area Parks and Recreation Advisory Commission. It was further advised that the section reflects lands acquired in 2010 by Regional Parks in the Jordan River area. It was confirmed that the park at Sheringham Point (Table 2) is a CRD Community Park.

APC comments included:

- support for identifying the Sheringham Point Lighthouse site acquired by the Sheringham Point Lighthouse Preservation Society as a national heritage site in Table 2
- support for identifying the lands recently purchased by BC Hydro under subsection 335 Parkland Acquisition and subsection 372 Heritage
- updating Section 330 to reflect that the out-buildings in Jordan River desired for a meeting place are slated for demolition
- support for changing the title of subsection 334 from "Access to Water" to "Access to Waterfront" to clarify that the subsection does not address drinking water

In response to comment from the public regarding health of the tress and stability of the shoreline at Jordan River, Emma Taylor advised that Section 520 Shoreline Protection Development Permit Area supports shore protection works.

Public comment included:

- support for protection measures for the shores of Jordan River (fresh water)
- support for identification of historic sites in addition to historic buildings in subsection 372
- support for wording to clarify that Streamside Protection and Enhancement Areas (SPEAs) must be protected from industrial, commercial and residential development in subsection 336

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340 Resources

The APC stated support for road improvements to support wide roads and road shoulders to support paths for bikes and pedestrians as opposed to road improvements to support logging traffic.

The APC noted that the agricultural potential of Shirley and Jordan River outlined in subsection 344 may increase due to climate change.

An APC member indicated there may have been historical oil and gas drilling in the area, and indicated concern that this type of resource extraction could affect water supply.

360 Services and Emergency Planning

No comments were forthcoming/APC supported.

370 Community Health

No comments were forthcoming/APC supported.

380 Settlement and Economy

Emma Taylor advised that subsection 383 supports an alternative to permit rezoning and subdivision of Rural A parcels to fee simple lots. It was further advised that subsection 386 states that Muir Creek is administrative boundary between the community of Shirley – Jordan River and Otter Point.

APC comments included:

- support for changing the title of Table 5 to clarifying that the table reflects the number of house permits issued in a year and not the age of the house
- support for amending the sentence on p. 75 to read that PID: 029-235-952 is designated Coastal Upland

Emma Taylor responded to questions from the APC confirming that total potential parcels proposed by Bylaw No. 4001 has dropped from 1,891 to 1,047 and that Table 8 does not reflect community parks.

390 Climate Change

No comments were forthcoming/APC supported.

The Chair called for a five minute break, resuming review at Part 4.

Part Four – Goals, Policies and Objectives

401 Introduction and Land Use Designations

Emma Taylor responded to the question from the APC confirming that the Restricted Development Land Use Designation is not broken out in Table 9 as the designation overlays other Land Use Designations.

410 Water

Emma Taylor directed attention to policy statement I supporting testing of future wells in times of seasonal dryness. It was advised that the policy statement will be considered when the Land Use Bylaw, Bylaw No. 2040, is reviewed.

The APC stated support for revising policy statement I by changing the word “considered” to “applied”.

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Staff advised that that language of policy statement M and N supports extension of water services at such time that the RGS is amended. Cost of service expansion would be borne by the user. As supported by the LUC, a new policy statement will be added to support extension of private systems.

420 Environment

Emma Taylor advised that language has been updated to use the word “shoreline” as opposed for “foreshore”.

Public comment stated support for including language for protection of wildlife habitat, wildlife species and wildlife nesting/breeding areas.

430 Parks and Trails

Emma Taylor reported that objective J is new in subsection 433.

Public comment stated support for including use of SPEAS in policy statement I in subsection 434.

The APC stated support for adding the Jordan River Hamlet lands in policy statement N in subsection 434.

440 Resources

Public comment stated that the 15 m buffer between land in the Agricultural Land Reserve (ALR) and adjacent land is not sufficient.

Staff confirmed that the Farmland Protection DPA buffer is on the adjacent land and not on land within the ALR.

APC stated that the footer for Schedules B – I is incorrect.

Emma Taylor spoke to subsection 444, directing attention to the Land Use Designations on Schedule B. It was advised that there may be opportunity to re-designate smaller parcels from Coastal Upland to Pacific Acreage. It was further advised that the Coastal Upland parcel located across from Waters Edge Drive on West Coast Road is Private Managed Forest Land and cannot be designated Pacific Acreage.

450 Traffic

Public comment stated support for:

- flashing lights at subdivision access points
- posting of speed limit signs at the hamlet and Jordan River Regional Park
- changing the section title to “Transportation”
- support for movement triggered speed limit signs, similar to the sign at Loss Creek, at Kirby Creek, Muir Creek and Jordan River

460 Services and Emergency Planning

Public comment stated support for adding the following in subsection 464:

- improved cell phone coverage
- including a siren in policy statement G
- a new fire hall in Shirley is unlikely since an addition was recently completed, but future improvements may be required
- a new policy statement N supporting establishment of a fire protection service area/fire protection plan for Jordan River

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470 Community Health

Emma Taylor advised that the section is a new theme incorporated into Bylaw No. 4001.

7. Next Meeting

The APC noted that the Chair and Vice Chair will not be able to attend the scheduled continued meeting on May 25.

The Chair closed the meeting, advising that review of Bylaw No. 4001 will continue on May 25 unless otherwise posted. Should the meeting date change, notice of a new meeting date will be advertised.

The meeting closed at 9:43 p.m.

Chair

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Iain Lawrence responded to questions from the APC stating that:

- the proposed zone permits assembly uses
- assembly use permits the gathering of people on the property and could include use of the property for weddings
- the proposed zone also permits retail sales accessory to a heritage lighthouse facility
- access to the property is via a CRD statutory right-of-way, under the terms of an operating agreement with the applicant
- there is a lower parking lot, leading to a trail to the lighthouse site

The applicant stated that it is anticipated that visitors to the lighthouse will support local restaurants and that gift shop sales would be limited to such food items as ice cream or premade sandwiches. It was further stated that the trail permits wheelchair access to the lighthouse site but, at present, the lighthouse structure is not wheelchair accessible. Overall accessibility to the site and structure are still under review.

The APC stated that the rezoning application is supported by the Sheringham Point Lighthouse Preservation Society.

MOVED by Fiona McDannold, **SECONDED** by Dominique Bernardet that the APC state support for rezoning application RZ000243 to rezone the property from Rural Residential 2 (RR-2) to Community Facility – Heritage Lighthouse (P-2L) in order to recognize the use as a heritage lighthouse. **CARRIED**

6. Proposed Bylaws (Review resumed from the meeting of May 4, 2016)

a) Bylaw No. 4001, “Official Community Plan for Shirley – Jordan River, Bylaw No. 1, 2016”

The Chair resumed review of Bylaw No. 4001 at Section 480.

Part Four – Goals, Policies and Objectives

480 Development and Local Economy

Emma Taylor advised that:

- as there is a Settlement land use designation (LUD) in Bylaw No. 4001, the section title has been changed from Settlement and Local Economy to Development and Local Economy
- policy statement B refers to Schedule B
- lands designated Settlement in Bylaw No. 4001 are lands designated Settlement Containment Area in the current Official Community Plan (OCP)
- policy statement C allows parcel averaging, similar to the Settlement LUD in the current OCP
- there has been previous consideration to re-designating some smaller Coastal Upland parcels along West Coast Road
- the parcels under consideration were created by parcel averaging

Emma Taylor opened discussion to consider re-designating the smaller parcels along West Coast Road as Settlement. The Settlement LUD permits an average density of one parcel per 1 ha with no new parcel being less than 0.5 ha. Staff noted that The Shores subdivision could also be re-designated as Settlement to reflect existing lot sizes.

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APC comment included:

- concern for re-designating the parcels under consideration as Settlement as the Settlement designation supports a minimum parcel size of 0.5 ha
- support for designating parcels according to existing parcel size
- support for creating a new LUD for the parcels under consideration

Staff advised that the APC's concern could be addressed by revisiting the wording for policy statement B. It was suggested that parcel use should be examined to determine if a new designation is warranted.

Public comment included:

- policy statement B supports a minimum parcel size of 0.5 ha if no new parcels are created
- as the parcels under consideration already exist, re-designation would not result in creating legal non-conforming parcels
- current land use should determine parcel LUD
- support for creating a new LUD for the parcels under consideration
- support for breaking Section 480 out by LUD and listing applicable policies under each LUD

Emma Taylor advised that:

- lands designated Park are CRD Regional Park lands and provincial park lands
- CRD Community Parks are not designated Park
- mapping to be updated to reflect purchase of Regional Park lands by BC Hydro

APC comment included:

- policy statement G, supporting bed and breakfasts, eco-tourism, and low-impact adventure tourism, would be restricted by covenants on the title of some parcels
- covenants can include building schemes
- covenants can also limit parcel use
- OCP cannot address all covenants

Emma Taylor responded to questions from the APC and the public advising that:

- policy statements would apply to properties, but it is acknowledged that parcels may have specific constraints to development and may be bound by restrictive covenants
- policy statements guide future development
- some parcels in the Pacific Acreage LUD are already zoned for small-scale tourism development (policy statement G) or a small destination resort (policy statement K)
- parcels not currently zoned for tourism/resort use would have to rezone
- community support for such proposals would be determined through the rezoning process

Emma Taylor directed attention to policy statement V and the supplementary submission received from Debbie Read, Jordan River, requesting more language to regulate home base businesses. It was advised that the Land Use Bylaw, Bylaw No. 2040, regulates home based businesses, addressing such issues as noise, odour and parking. It was advised that the regulations for home based business can be considered when Bylaw No. 2040 proceeds to review.

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Public comment stated support for revising policy statement V to incorporate concern for water and the environment.

The APC completed review of Section 480, requesting that the smaller Coastal Upland parcels along West Coast Road being considered for re-designation be designated Pacific Acreage. It was further requested that policy statement V be revised to incorporate comment received in the supplementary submission.

490 Climate Change Adaptation and Greenhouse Gas Reduction

Emma Taylor responded to questions from the public confirming that the language for high wind is new. It was advised that:

- there is no schedule for Section 490
- flooding and erosion (subsection 493) is addressed by the Steep Slope Development Permit Area (DPA) and the Shoreline Protection DPA
- Floodplain regulations are included in Bylaw No. 2040

The Chair called for a five minute break, resuming review at Part 5.

Part 5 – Development Permit Areas

Emma Taylor advised that the section has been slightly reorganized since last presented to the Citizens' Committee to align with other OCPs and to support more user friendly handouts.

510 Steep Slope Development Permit Area

Bylaw No. 4001 includes improved mapping (Schedule C) for the DPA.

Subsection 514(c) is new, exempting a development permit for a building constructed under a valid building permit in the Steep Slope DPA provided that no other part of the land in the Steep Slope DPA will be altered for other purposes.

520 Shoreline Protection Development Permit Area

DPA has been renamed from Foreshore to Shoreline as the DPA includes all land lying 15 m upland of the natural boundary of the ocean. DPA does not extend out into the ocean. Lands included in the DPA are shown on Schedule D.

Public comment included:

- the Rural Resource Lands OCP (Coastal Habitat and Hazard Protection DPA) recommends a vertical elevation level setback based on height
- it is understood that the Sooke OCP also recommends a vertical elevation level setback
- considering low bank areas in the Plan area, it was suggested that a height setback be included in Shoreline Protection DPA
- there appears to be more tsunami awareness in communities

Emma Taylor stated that:

- there is not sufficient mapping information available at this time to implement a DPA for lands that are subject to flooding
- the Province is also updating its floodplain methodology
- floodplain regulations will be considered when Bylaw No. 2040 is reviewed

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APC comment included:

- concern for tree cutting on rocky shores to support ocean views
- support for educating property owners and tree companies regarding DPA regulations
- property owners are responsible for understanding regulations
- a company's due diligence should include understanding regulations

Staff stated that:

- there is opportunity for the CRD to support public awareness through Qualified Professionals (QPs) and CRD Bylaw Enforcement
- the CRD's ticketing bylaw (Bylaw No. 1857) provides opportunity for enforcement

Public comment stated support for expanding policy statement G to clarify that approval from the Department of Fisheries and Oceans and/or Environment Canada may be required for shoreline protection works.

530 Riparian Development Permit Area

Emma Taylor advised that, in consultation with the Province, Schedule D and Schedule E include lands defined as riparian assessment area and land 30 m from the natural boundary on either side of all watercourses. Bylaw No. 4001 includes improved mapping for Schedule D and Schedule E, increasing awareness of the DPA.

APC comment included:

- concern for when a watercourse abuts directly between the Shirley – Jordan River Plan area and the Rural Resource Lands Plan area and the different protection regulations in the Plan areas
- it appears that property owners within the Shirley – Jordan River Plan area are more heavily regulated
- resource development is regulated by the Province
- there is opportunity to report concerns related to resource extraction in the Rural Resource Lands Plan area to the Province

Staff stated that the:

- OCP's broad objectives (subsection 442) support greater dialogue between resource extraction proponents and local residents
- Riparian DPA is required by the Province, providing some flexibility based on parcel attributes

Public comment included:

- noting the amount of provincial land in the CRD, there may be opportunity to incorporate language regarding resource development into the Regional Growth Strategy (RGS)
- noting recent case law, it is unclear if exemption for subdivisions noted under subsection 534 is current

540 Sensitive Ecosystem Development Permit Area

Known eagle nest to be removed from Schedule E.

Staff advised that statement F is new, exempting the requirement for a development permit when the sensitive ecosystem has been identified by a QP and is protected by a

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registered restrictive covenant that includes a reference plan showing the location of the sensitive ecosystem on that parcel.

Emma Taylor directed attention to the supplementary submission, advising that the DPA supports specification of a buffer zone as recommended by a QP. The DPA includes ten classes of sensitive ecosystems and identifies mature forests as important ecosystems.

Public comment included:

- 100 m buffer around eagle nests supported by the DPA is not sufficient
- support for designating the entire Plan area as an eagle nest tree DPA
- it is understood that the Campbell River Bald Eagle Nest Tree DPA does not support any development within 60 m of a nest tree
- disturbance to a nest disrupts further nesting
- look to other local governments to determine how raptor nesting sites are protected

550 Commercial and Industrial Development Permit Area

Commercial DPA includes all land zoned commercial or tourist-commercial. Industrial DPA includes lands where industrial forestry uses have historically occurred. Bylaw No. 4001 expands the DPA language, providing guidance on form and character and water/energy conservation.

Public comment included support for subsection 554 having a separate guideline addressing Greenhouse Gas.

APC comment included:

- section language appears outdated and requires review to reflect alternative energy options
- support for revising guideline L to read "Where possible, use building products and design that demonstrate green technology in keeping with current LEED guidelines."

Pascal Knoglinger excused herself from the meeting at 9:35 p.m.

The Vice Chair resumed review of Bylaw No. 4001 at Part Six.

Part Six – Development Approval Information Area

Emma Taylor spoke to the areas designated development approval information area (DAIA). It was advised that the DAIA includes parcels that are 2 ha or larger as shown on Schedule H. The DAIA permits the ability to request submission of professional reports. Development approval information requirements and procedures are established by CRD Bylaw (Bylaw No. 2975).

Part 7 – Temporary Use Permits

Enables local government to issue temporary use permits (TUPs) to allow specific land uses to occur for a short period of time. A TUP can be issued for a maximum total of six years (three years plus three year renewal). A covenant can be required to ensure buildings associated with the TUP are removed upon permit expiration.

Appendix A – Definitions

Definition for Qualified Environmental Professional (QEP) is from the *Riparian Areas Regulation*.

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List of Schedules

Emma Taylor responded to a question from the public confirming that Schedule I Restricted Development Land Use Designation is referenced under subsection 409 Restricted Development Land Use Designation and under subsection 464 Policies for Services and Emergency Planning, policy statement G.

- b) **Bylaw No. 4070, “Land Use Bylaw for the Rural Resource Lands, Bylaw No. 1, 2009, Amendment No. 7, 2016”**
- c) **Bylaw No. 4071, “Juan de Fuca Land Use Bylaw, Bylaw No. 1, 1992, Amendment No. 128, 2016”**
- d) **Bylaw No. 4079, “Official Community Plan for the Rural Resource Lands, Bylaw No. 1, 2009, Amendment Bylaw No. 1, 2016”**

Emma Taylor advised that Bylaw Nos. 4070, 4071 and 4079 relate to the proposal considered by the Citizens' Committee to amend the Shirley – Jordan River OCP boundary by taking in a parcel (Lot 1, Block 70, Malahat District, Plan EPP33632) to provide a distinguishable boundary between the Shirley - Jordan River OCP area and the Rural Resource Lands OCP area.

Staff confirmed that Bylaw No. 4079 includes a housekeeping amendment to correct wording for Section 3.2.

Emma Taylor responded to questions from the APC and the public confirming that:

- zoning for the subject parcel will remain Resource Land should the parcel be included in the Shirley – Jordan River Plan area
- the minimum parcel size for subdivision for the subject parcel is 120 ha
- the subject parcel would be designated Coastal Upland under Bylaw No. 4001
- Bylaw No. 4001 permits a density of one parcel for 4 ha for lands designated Coastal Upland

APC comment included:

- the boundary amendment was considered by the Citizens' Committee to support potential park land dedication in the Muir Creek area
- rezoning of the subject parcel could potentially reduce gravel truck travel
- rezoning of the subject parcel to residential use could provide more opportunity for stewardship or park land dedication
- the proposed boundary amendment provides no clear benefit at this time

Public comment included:

- subject to rezoning, the subject parcel would have greater subdivision potential should it be taken into the Shirley – Jordan River Plan area
- it is understood that there is First Nation interest in Muir Creek
- formal park dedication would not been triggered should the subject parcel be subdivided into lots larger than 2 ha
- rezoning of the subject parcel to residential use could provide some improvement to Highway 14

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Staff advised that:

- subsection 484 supports density bonusing should community amenities or park land in the Muir Creek area are provided
- the Shirley/Jordan River APC would consider any proposal to rezone the subject parcel, should the parcel be taken into the Shirley – Jordan River Plan area
- applications to rezone a parcel in the Rural Resource Lands Plan area would be considered at a public information meeting
- applications for rezoning in the Rural Resource Lands Plan area require full CRD Board approval

MOVED by Brenda Mark, **SECONDED** by Dominique Bernardet that the APC state support for Bylaw No. 4001, "Official Community Plan for Shirley - Jordan River, Bylaw No. 1, 2016" with the revisions requested by the APC and without the proposed amendment to the Plan area boundary.

CARRIED

Emma Taylor advised that the proposed bylaw with referral comments, including the comments received this evening, will be considered by staff and the LUC. The bylaw will also be considered by the Planning, Transportation and Protective Services Committee and the CRD Board for a determination of consistency with the RGS. The bylaw would then proceed to first and second reading and to a public hearing followed by third reading and then adoption.

7. Adjournment

The meeting closed at 10:15 p.m.

Chair

Appendix D – Bylaw No. 4079, Bylaw No. 4070, Bylaw No. 4071

**CAPITAL REGIONAL DISTRICT
 BYLAW NO. 4079**

**A BYLAW TO AMEND
 BYLAW NO. 3591, “OFFICIAL COMMUNITY PLAN FOR THE RURAL RESOURCE LANDS, BYLAW
 NO. 1, 2009”**

The Regional Board of the Capital Regional District, in open meeting assembled, enacts as follows:

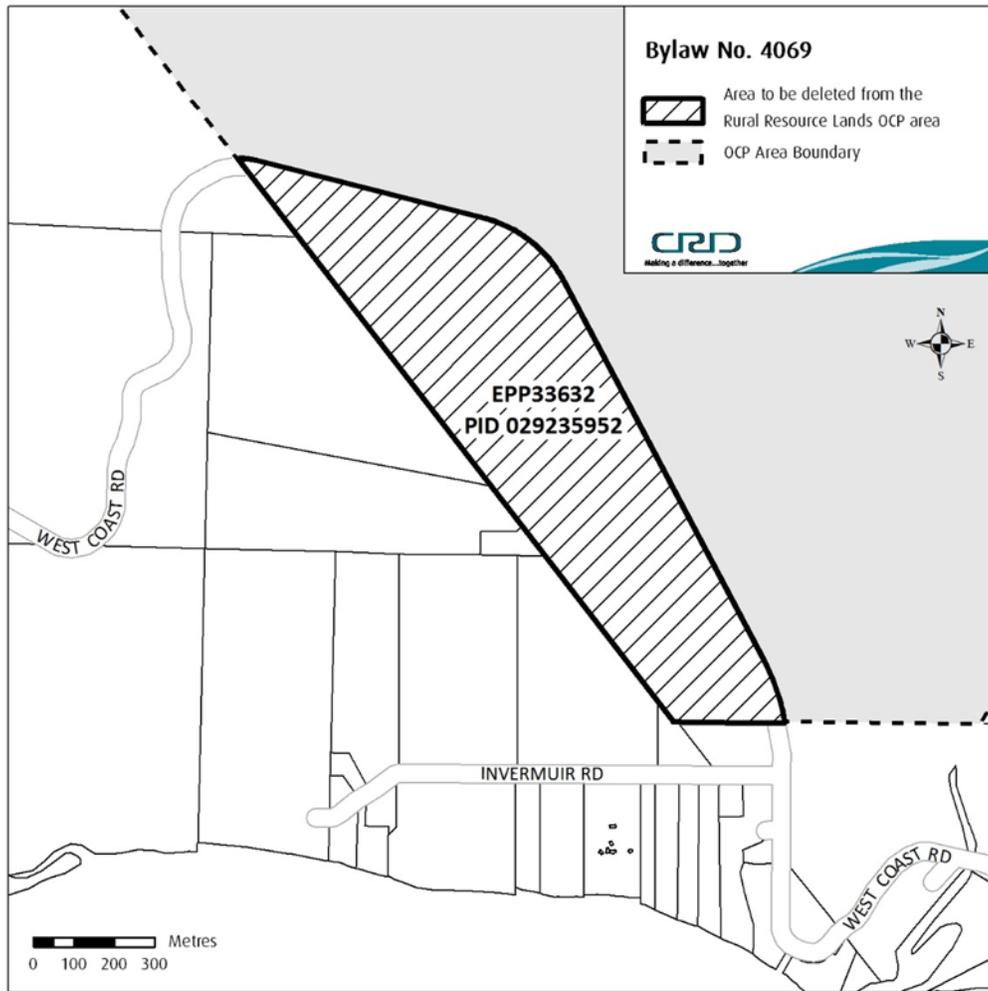
1. Bylaw No. 3591 being the "Land Use Bylaw for the Rural Resource Lands, Bylaw No. 1, 2009" is hereby amended:
 - A. SCHEDULE A, Part 3 Land Use Designations**
 - (i) By amending Section 3.2 Rural Resource Lands Designation, subsection 3.2.1 Rural Resource Lands Policies, item 3) by adding the word “Rural” before the word “Resource” and by deleting the word “120 ha” and replacing with the word “4 ha”.
 - B. MAPS**
 - (i) By excluding Lot 1, Block 70, Malahat District, Plan EPP 33632 which lies south and west of West Coast Road from the Rural Resource plan area, as shown on Plan No. 1 attached to and forming part of this bylaw.
 - (ii) By deleting “Map 1: Location” and replacing with a new “Map 1: Location”, as shown attached to and forming part of this bylaw.
 - (iii) By deleting “Map 2: Land Use Designations” and replacing with a new “Map 2: Land Use Designations” as shown attached to and forming part of this bylaw.
 - (iv) By deleting “Map 3: Development Approval Information Area” and replacing with a new “Map 3: Development Approval Information Area” as shown attached to and forming part of this bylaw.
 - (v) By deleting “Map 4: Development Permit Areas” and replacing with a new “Map 4: Development Permit Areas” as shown attached to and forming part of this bylaw
2. This bylaw may be cited as Bylaw No. 4079, “Official Community Plan for the Rural Resource Lands, Bylaw No. 1, 2009, Amendment Bylaw No. 1, 2016”.

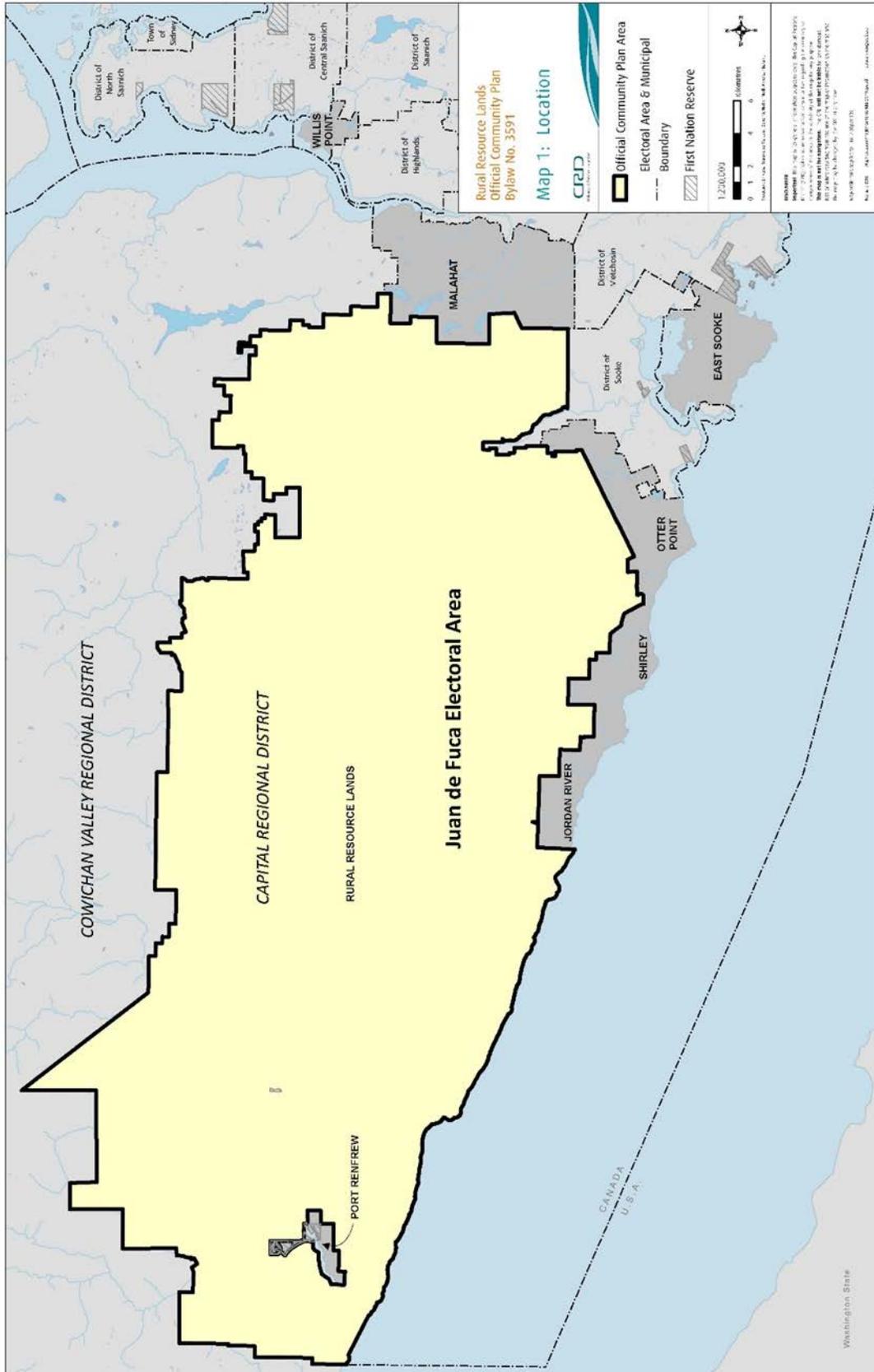
READ A FIRST TIME	THIS	DAY OF	2016
READ A SECOND TIME	THIS	DAY OF	2016
READ A THIRD TIME	THIS	DAY OF	2016
APPROVED by the Minister of Transportation and Infrastructure	THIS	DAY OF	2016
ADOPTED	THIS	DAY OF	2016

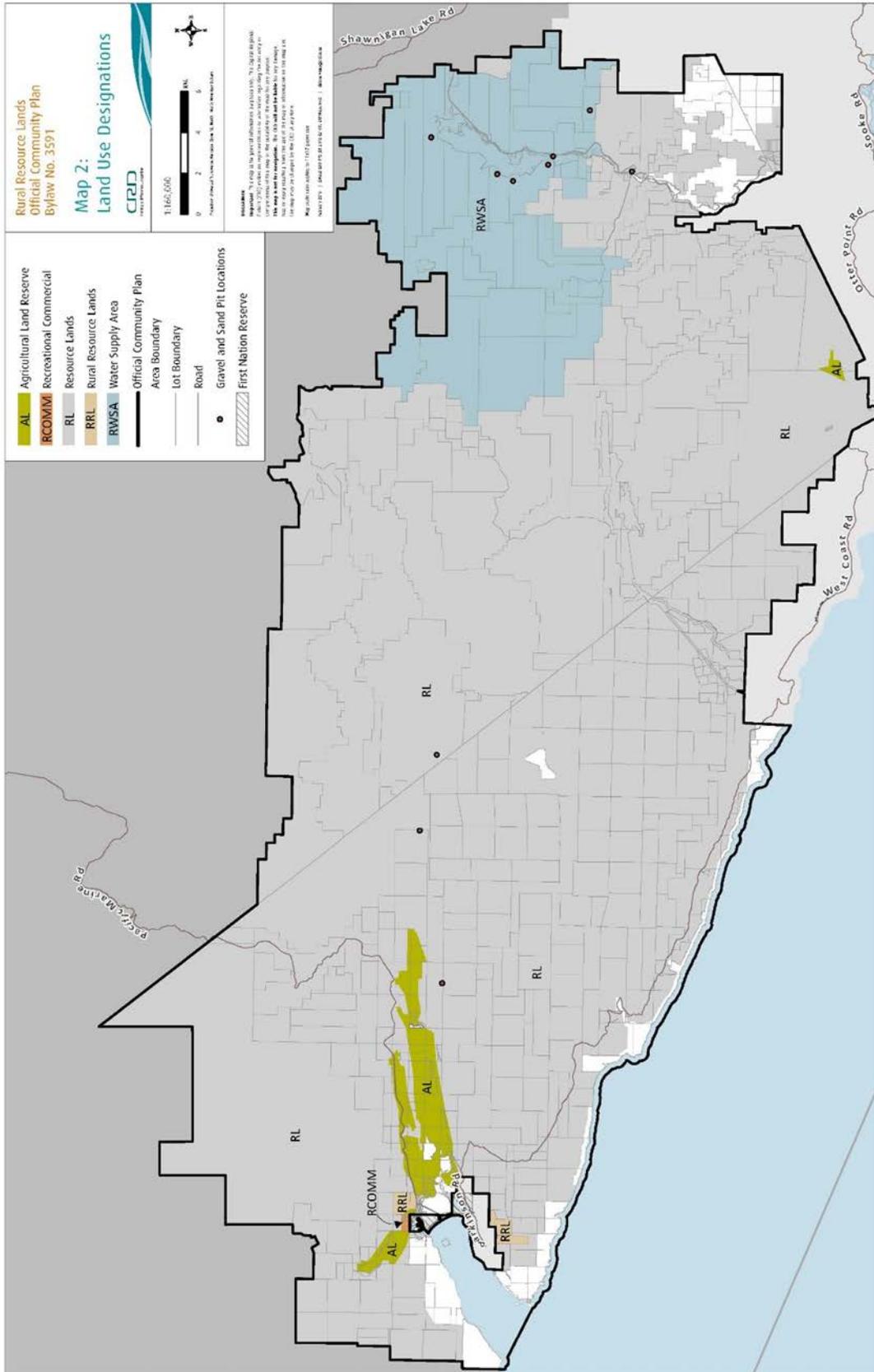
 CHAIR

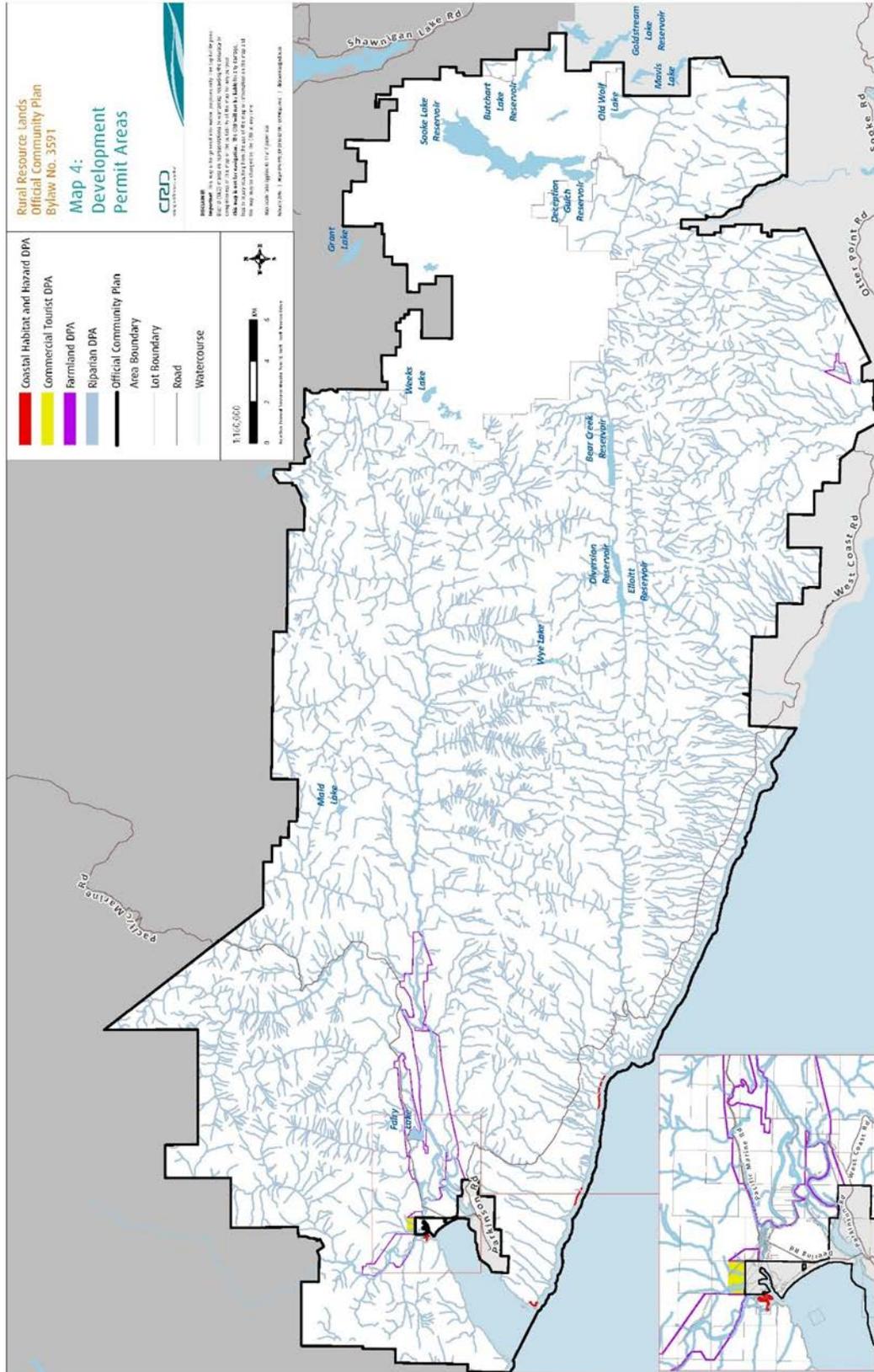
 CORPORATE OFFICER

Plan No.1









**CAPITAL REGIONAL DISTRICT
BYLAW NO. 4070**

**A BYLAW TO AMEND
BYLAW NO. 3602, "LAND USE BYLAW FOR THE RURAL RESOURCE LANDS,
BYLAW NO. 1, 2009"**

The Regional Board of the Capital Regional District, in open meeting assembled, enacts as follows:

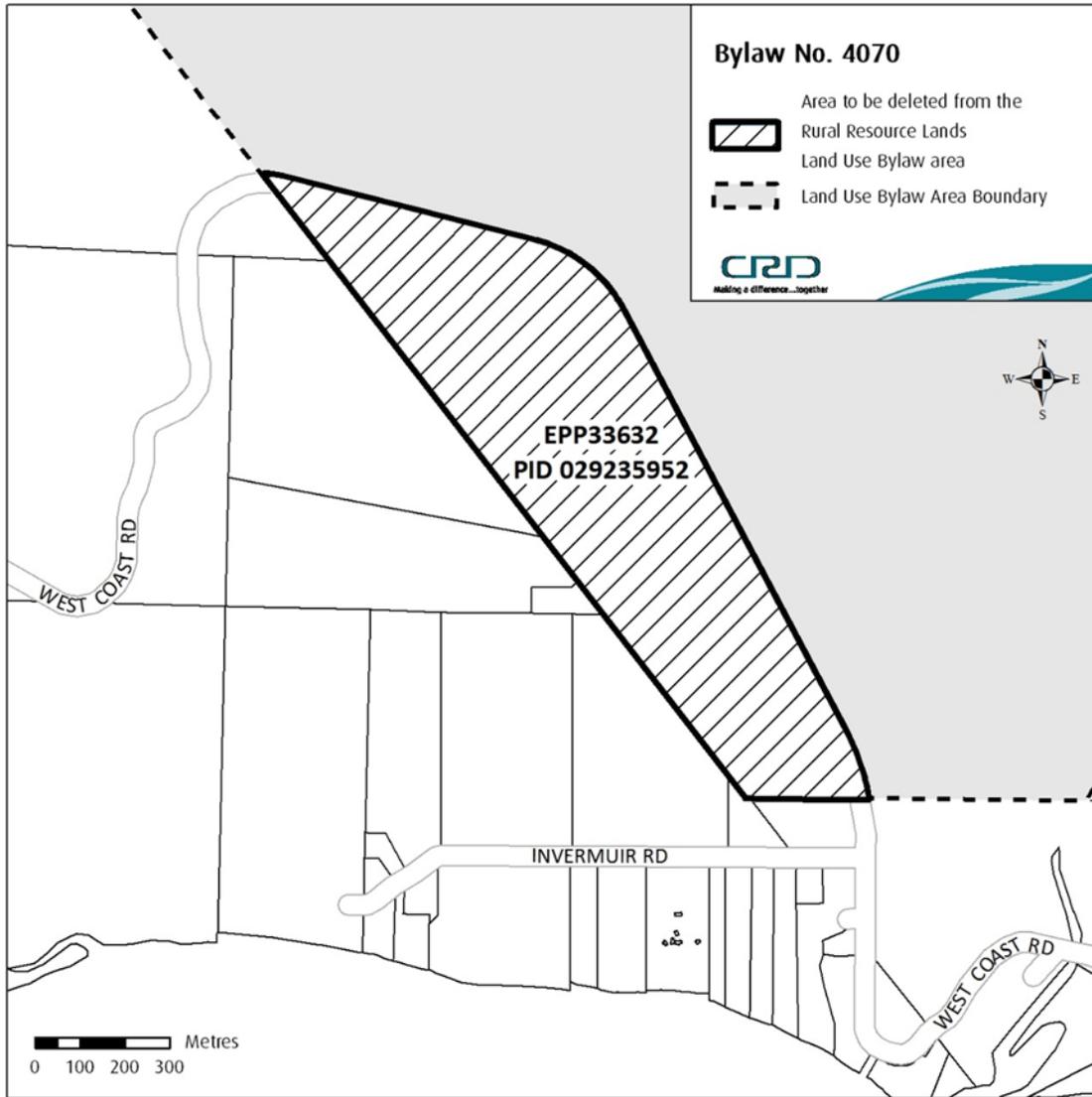
1. Bylaw No. 3602 being the " Land Use Bylaw for the Rural Resource Lands, Bylaw No. 1, 2009" is hereby amended:
 - A. SCHEDULE A, MAPS**
 - a) By excluding Lot 1, Block 70, Malahat District, Plan EPP 33632 which lies south and west of West Coast Road from the Rural Resource plan area, as shown on Plan No. 1 attached to and forming part of this bylaw.
 - b) By deleting "Map 1: Location" and replacing with a new "Map 1: Location" as shown attached to and forming part of this bylaw.
 - c) By deleting "Map 2: Official Land Use Zoning" and replacing with a new "Map 2: Official Land Use Zoning" as shown attached to and forming part of this bylaw.
2. This bylaw may be cited as Bylaw No. 4070, "Land Use Bylaw for the Rural Resource Lands, Bylaw No. 1, 2009, Amendment Bylaw No. 7, 2016".

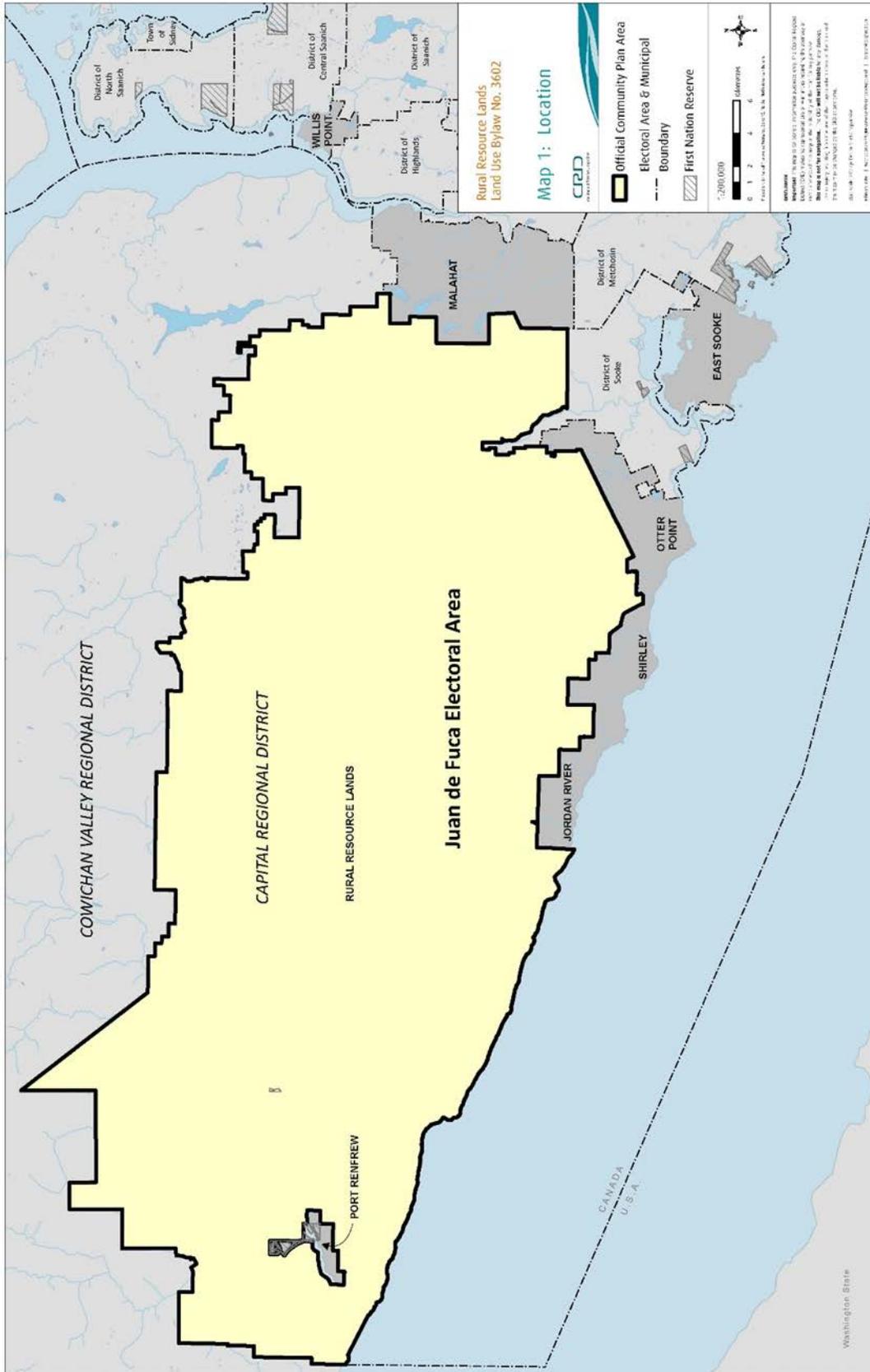
READ A FIRST TIME	THIS	DAY OF	2016
READ A SECOND TIME	THIS	DAY OF	2016
READ A THIRD TIME	THIS	DAY OF	2016
APPROVED by the Minister of Transportation and Infrastructure	THIS	DAY OF	2016
ADOPTED	THIS	DAY OF	2016

CHAIR

CORPORATE OFFICER

Plan No. 1





**CAPITAL REGIONAL DISTRICT
BYLAW NO. 4071**

**A BYLAW TO AMEND BYLAW NO. 2040,
"JUAN DE FUCA LAND USE BYLAW, BYLAW NO. 1, 1992"**

The Regional Board of the Capital Regional District, in open meeting assembled, enacts as follows:

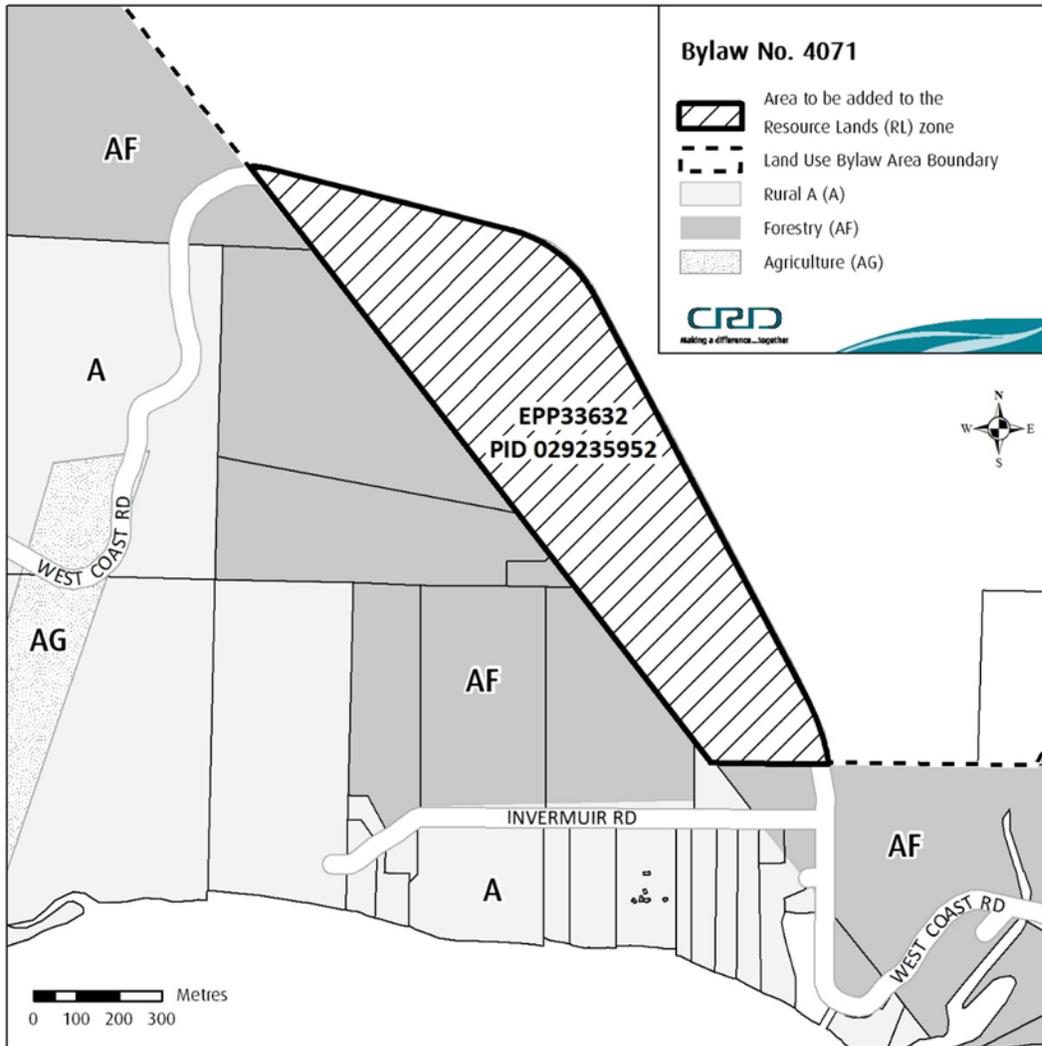
1. Bylaw No. 2040 being the " Juan de Fuca Land Use Bylaw, Bylaw No. 1, 1992" is hereby amended:
 - A. SCHEDULE B, ZONING MAPS**
 - a) By including Lot 1, Block 70, Malahat District, Plan EPP 33632 within the Resource Lands (RL) zone as shown on Plan No. 1 attached to and forming part of this bylaw.
 - b) By deleting "Map 3: Shirley Jordan River Zoning" and replacing with a new "Map 3: Shirley Jordan River Zoning" as shown attached to and forming part of this bylaw.
2. This bylaw may be cited as Bylaw No. 4071, "Juan de Fuca Land Use Bylaw, 1992, Amendment Bylaw No. 128, 2016".

READ A FIRST TIME	THIS	DAY OF	2016
READ A SECOND TIME	THIS	DAY OF	2016
READ A THIRD TIME	THIS	DAY OF	2016
APPROVED by the Minister of Transportation and Infrastructure	THIS	DAY OF	2016
ADOPTED	THIS	DAY OF	2016

CHAIR

CORPORATE OFFICER

Plan No. 1



8. Proposed Bylaws

- a) **Bylaw No. 4000, "East Sooke Official Community Plan, Bylaw No. 5, 2018"**
- b) **Bylaw No. 4001, "Shirley – Jordan River Official Community Plan, Bylaw No. 5, 2018"**

Iain Lawrence outlined the Official Community Plan review processes for East Sooke and Shirley-Jordan River that commenced in 2013 and highlighted the major changes to the proposed bylaws including new land use designations. It was further explained that the proposed policies provide an opportunity for parcels zoned Rural A to be rezoned for further subdivision, and that there is an overall increase in development potential in East Sooke and a decrease in Shirley-Jordan River.

Staff indicated that referral of the bylaws to agencies was completed in 2016 and the comments were incorporated into the bylaws where appropriate.

Staff directed attention to the supplementary agenda item #1 which outlines proposed changes to the bylaws related to servicing requirements.

Staff also confirmed that it is recommended that the bylaws relating to the proposed Shirley-Jordan River Official Community Plan boundary adjustment not proceed.

Discussion ensued on the policies providing development potential for Rural A zoned parcels, including:

- number of dwelling units
- lot size
- park dedication or cash-in-lieu requirements
- road dedication.

The correspondence received from Heather Phillips, included as supplementary agenda item #2, was reviewed.

Heather Phillips was in attendance and stated objection to the development policies in the East Sooke Official Community Plan, raising the following issues:

- growth rate projections are low compared to proposed development potential;
- only 42 dwellings are required to meet the housing needs for next 10 years;
- Otter Point and Shirley-Jordan River policies reduced the development potential;
- East Sooke absorbs 137% of projected growth for the entire Electoral Area;
- Port Renfrew is designated as a growth area in the Regional Growth Strategy;
- Rural A zoning and strata development has been controversial for decades;
- Regional Growth Strategy debate confirmed that density should be managed through land use bylaws and not provision of water and sewer services;
- rationale for development policies should not be based on real estate market;
- protection of groundwater resources and monitoring septic systems is needed until such time as community water is extended;
- Metchosin includes both a 4 hectare and a 1 hectare land use designation;
- 1 hectare parcel size changes rural character of community.

Director Hicks stated that the Regional Growth Strategy includes a cap on the number of dwellings which the Board agreed upon and that the proposed policies reflect the East Sooke community's vision. Iain Lawrence confirmed the number of water connections is specified in the Regional Growth Strategy.

MOVED by Stan Jensen, **SECONDED** by Roy McIntyre that the LUC recommend to the CRD Board:

1. a) That the referral of proposed Bylaw No. 4000, "Official Community Plan for East Sooke, Bylaw No. 5, 2018", directed by the Juan de Fuca (JdF) Land Use Committee to the Agricultural Land Commission, BC Hydro, Cowichan Tribes, Cowichan Valley Regional District, District of Metchosin, District of Sooke, East Sooke Advisory Planning Commission, East Sooke Fire Department, Halalt First Nation, Hul'qumi'num Treaty Group, Island Health, JdF Agricultural Advisory Planning Commission, JdF Electoral Area Parks and Recreation Advisory Commission, Lake Cowichan First Nation, Lyackson First Nation, Ministry of Agriculture, Ministry of Environment, Ministry of Forests, Lands, Natural Resource Operations (MFLNRO) – Arch Branch, MFLNRO – Crown Lands/Foreshore, Ministry of Transportation and Infrastructure, Pacheedaht First Nation, Penelakut Tribe, Scia'new First Nation, School District #62, Seagirt Waterworks Improvement District, Stz'uminus First Nation, Te'Mexw Treaty Association, T'Sou-ke First Nation, and appropriate CRD Departments, be approved and comments received;
 - b) That Section 454(l)(vi) be deleted and replaced with the following words:
 - vi. For areas not currently within an existing water service area, support the adoption of a new water service establishment bylaw for public water distribution systems managed and operated by the CRD in accordance with conditions 454(l)(i) through 454(l)(v), and the establishment of a mechanism to cover costs of the service and infrastructure.
 - c) That proposed Bylaw No. 4000, "Official Community Plan for East Sooke, Bylaw No. 5, 2018", be considered by the CRD Board for consistency with the Regional Growth Strategy;
 - d) That proposed Bylaw No. 4000, "Official Community Plan for East Sooke, Bylaw No. 5, 2018", be introduced and read a first and second time; and
 - e) That in accordance with the provisions of Section 469 of the *Local Government Act*, the Director for the Juan de Fuca Electoral Area, or Alternate Director, be delegated authority to hold a Public Hearing with respect to Bylaw No. 4000.
2. a) That the referral of proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", directed by the Juan de Fuca (JdF) Land Use Committee to the Agricultural Land Commission, BC Hydro, Cowichan Tribes, Cowichan Valley Regional District, District of Metchosin, District of Sooke, Esquimalt Nation, Halalt First Nation, Hul'qumi'num Treaty Group, Island Health, JdF Agricultural Advisory Planning Commission, JdF Electoral Area Parks and Recreation Advisory Commission, Lyackson First Nation, Malahat First Nation, Managed Forest Council, Ministry of Agriculture, Ministry of Environment, Ministry of Forests, Lands, Natural Resource Operations (MFLNRO) – Arch Branch, MFLNRO – Crown Lands/Foreshore, Ministry of Transportation and Infrastructure, Pacheedaht First Nation, Pauquachin First Nation, Penelakut Tribe, Scia'new First Nation, School District #62, Sheringham Waterworks, Shirley/Jordan River Advisory Planning Commission, Shirley Fire Department, Stz'uminus First Nation, Te'Mexw Treaty Association, Tsartlip Indian Band, Tsawout First Nation, Tseycum

Indian Band, T'Sou-ke First Nation, and appropriate CRD departments, be approved and the comments received;

- b) That Section 414(P) be added as follows:
 - P. No new CRD water systems are contemplated to service new or existing development and sewage treatment is to be provided by on-site systems.
- c) That proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", be considered by the CRD Board for consistency with the Regional Growth Strategy;
- d) That proposed Bylaw No. 4079, Bylaw No. 4070 and Bylaw No. 4071 not proceed;
- e) That proposed Bylaw No. 4001, "Official Community Plan for Shirley – Jordan River, Bylaw No. 5, 2018", be introduced and read a first and a second time; and
- f) That in accordance with the provisions of Section 469 of the *Local Government Act*, the Director for the Juan de Fuca Electoral Area, or Alternate Director, be delegated authority to hold a Public Hearing with respect to Bylaw No. 4001.

CARRIED

9. Adjournment

The meeting adjourned at 7:40 p.m.

Chair

RGS POLICY ANALYSIS OF SHIRLEY-JORDAN RIVER OCP

RGS Provision	Relevant OCP Policies & Summary of Analysis
Population, Dwelling Unit and Employment Projections	<p><i>Part 380</i> provides population and dwelling unit projections to the year 2024 and background information on the local economy.</p> <hr/> <p> Projected growth in the OCP aligns to RGS projections.</p>
Managing and Balancing Growth (Objectives 1.1 & 1.2)	<p><i>Part 386</i> provides estimated development potential and new land use designations (LUD).</p> <p><i>Parts 400</i> and <i>484</i> provide policies for development.</p> <hr/> <p> The proposed LUDs in the OCP align to the designated RGS policy areas. The plan area is entirely outside the Urban Containment Policy Area. The proposed LUDs provide for a settlement pattern that will avoid the creation of a future urban area and that support the maintenance of working landscapes. The proposed growth rate is slow to moderate and will continue to be monitored.</p>
Environment and Infrastructure (Objectives 2.1 & 2.2)	<p><i>Parts 414, 424</i> and <i>434</i> provide policies for ecological health, parks and trails and water supply.</p> <p><i>Parts 361</i> and <i>362</i> provide context for domestic water supply and sewage treatment.</p> <hr/> <p> The proposed policies for environment and infrastructure align to the RGS. Parkland acquisition and Development Permit Areas (DPA) are key tools to achieve the protection of healthy ecosystems. Policies to protect water resources support an integrated watershed management approach.</p> <p>The plan area is outside the designated water service area shown in Map 5 of the RGS. Policies for water servicing clearly identify that CRD water systems are not contemplated to service new and existing development and that sewage treatment is to be provided by on-site systems.</p>
Housing and Community (Objectives 3.1 & 3.2)	<p><i>Parts 464, 474</i> and <i>484</i> provide policies for community, housing affordability and emergency planning for natural hazards.</p> <hr/> <p> The proposed policies for community, housing affordability and emergency planning for natural hazards align to the RGS. Policies support community completeness in a rural setting, contribute to housing affordability in the plan area and plan for development that is climate change- and risk-adaptive.</p>
Transportation (Objective 4.1)	<p><i>Part 454</i> provides policies for transportation.</p> <hr/> <p> Policies provide for transportation options. No new major development is proposed, consistent with the plan area's location outside the Urban Containment Policy Area.</p>

RGS Provision	Relevant OCP Policies & Summary of Analysis
Economic Development (Objective 5.1)	<p><i>Parts 444 and 484</i> provide policies for economic development.</p> <hr/> <p>The proposed policies for economic development align to the RGS. Policies support farming in the ALR, forestry on Crown Lands and lands enrolled in the Private Managed Forest Lands (PMFL) program, and the diversification of the economy through support for low-impact tourism uses and home-based businesses provided all are in keeping with the character of the rural community.</p>
Food and Agricultural Systems (Objective 6.1)	<p><i>Part 444</i> provides policies for food systems and agriculture.</p> <p><i>Part 344</i> provides context for food security, including an inventory of cultivated land.</p> <hr/> <p>The proposed policies for agriculture align to the RGS. Policies support agricultural protection, local food production and distribution and agricultural resilience.</p>
Climate Action (Objective 7.1)	<p><i>Parts 494, 414, 444, 454 and 464</i> provide policies for climate action.</p> <p><i>Part 210</i> provides a target for Greenhouse Gas (GHG) emissions reductions of 3%.</p> <hr/> <p>The proposed policies for climate action align to the RGS. Within the context of a rural community, policies support the reduction of GHG emissions from transportation, support green building technologies and support adaptation to a changing climate.</p>



**REPORT TO PLANNING AND PROTECTIVE SERVICES COMMITTEE
MEETING OF WEDNESDAY, APRIL 25, 2018**

SUBJECT Capital Regional District Emergency Management Organization Appointments

ISSUE

The Capital Regional District (CRD) Emergency Management Bylaws require the CRD Board to appoint a number of positions which includes the CRD Deputy Emergency Manager.

BACKGROUND

The *Emergency Program Act* requires local authorities to establish and maintain an emergency management organization. The CRD Emergency Management Bylaw No. 3447 included both an Emergency Management Committee, appointed by the CRD Board, and an Emergency Coordinating Committee (ECC), appointed by the Chief Administrative Officer (CAO). Additionally, the Bylaw also requires the appointment of an Emergency Manager and Deputy Emergency Manager by the CRD Board.

CONCLUSION

Appointment by the Board of the Deputy Emergency Manager is required by the CRD Emergency Management Bylaw No. 3447.

RECOMMENDATION

That the Planning and Protective Services Committee recommends to the Capital Regional District Board:

That the following appointment be made:

CRD Deputy Emergency Manager.

Conrad Cowan, Manager, Electoral Area Fire & Emergency Programs

Submitted by:	Shawn Carby, CD, BHSc, MAL, Senior Manager Protective Services
Concurrence:	Kevin Lorette, P.Eng., MBA, General Manager Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

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**REPORT TO PLANNING AND PROTECTIVE SERVICES COMMITTEE
MEETING OF WEDNESDAY, APRIL 25, 2018**

SUBJECT **Cost Analysis of a Regional Fire Dispatch Model for the Capital Regional District**

ISSUE

At the December 13, 2017 Capital Regional District (CRD) Board meeting, staff were directed to review the potential for a Regional Fire Dispatch model as per the following recommendations:

THAT staff be asked to:

- 1. Provide an analysis of the feasibility of co-locating 911 with police and fire dispatch in the new purpose-built centre, or within Saanich Emergency Services Building.*
- 2. Provide advice on the process required to establish a regional fire dispatch centre and a corresponding governance model.*
- 3. Consult with municipal staff to identify issues that will need to be addressed to create a regional fire dispatch centre and governance model.*

Additionally, staff were directed to facilitate a meeting with Victoria, Saanich, Langford and E-Comm to explore models for the unification of fire dispatch services within the region.

Staff presented the requested feasibility report at the April 11, 2018 CRD Board meeting and were directed to undertake a cost analysis of the potential regional fire dispatch service out of the Saanich and CRD facilities.

BACKGROUND

Please refer to the Planning and Protective Services Committee Regional Fire Dispatch report of March 23, 2018 for a fulsome background on the regional fire dispatch concept.

Based on that input from the dispatch focus group, the required components of a regional fire dispatch centre were determined based on full participation of all agencies to be as follows:

- Post disaster facility with seamless back-up at another site in case of systems failure;
- Have four work stations for operations and access to additional workstations for training and major events;
- Compliant with National Fire Protection Association (NFPA) standards for fire dispatch including staffing, training, facility, radios, technology, computer aided dispatch (CAD and records management);
- Staffing ratio of between 1:8,000 and 1:12,000 of dispatchers to annual call volume based on a range of service expectations (3 dispatchers 24/7); and
- Must meet NFPA performance standards and metrics.

IMPLICATIONS

Financial Implications

The consolidation of fire dispatch services into a regional service delivery model would create a number of economies of scale in the areas of staffing, technology, facilities and administration resulting in best value for tax dollars. Staff completed a high level analysis of a unified service operated within one of the facilities in the region and determined that there would be direct cost savings over having three fire dispatch providers in the region. The savings would result from a decrease in staffing

requirements as there are currently four dispatchers on duty 24/7 in the region to manage the combined annual call volume of 28,000 of the three dispatch centres. It is anticipated that a consolidated regional fire dispatch service would require up to three dispatchers 24/7 with some potential staffing variations during peak time hours. Administrative overhead and supervision costs would also decrease with a consolidation of fire dispatch as there would be fewer workstations, less equipment, common information technology and support, as well as fewer back-up service arrangements. Indirect and future investment would also decrease, especially in consideration of next generation technology due to the fact that only one site would need upgrading.

Recently, the municipalities of Esquimalt, Sidney, North Saanich, View Royal, and Colwood went to an RFP process and have indicated that they are going to Surrey for fire dispatch services.

Table 1 shows the cost impact of consolidating fire dispatch for the whole region. Table 2 shows cost impact of consolidating the remaining parts of the region less the five municipalities that went to RFP. It is important to note that there is a decrease in dispatch staffing requirements for the Table 2 calculations.

Table 1
Projected Fire Dispatch Costs for Region - All

Current 2018	Saanich FD 2019	Variance	CRD FD 2019	Variance
\$3,236,681	\$2,819,000	-13%	\$2,386,879	-26%

Table 2
Projected Fire Dispatch Costs for Region - Less 5 RFP Agencies

Current (Adjusted) 2018	Saanich FD 2019	Variance	CRD FD 2019	Variance
\$3,156,880	\$2,474,200	-22%	\$1,791,870	-43%

Specific cost projections for Saanich and CRD are attached as Appendix A and Appendix B respectively. Saanich Fire Dispatch uses a weighted cost allocation model based on call volume and population while CRD Fire Dispatch costs are apportioned based on population per Bylaw 3854.

A significant component of the cost difference between the systems is due to the technological costs associated with Saanich's agreement with E-Comm for CAD and RMS support which for 2019 will be approximately \$490K.

This analysis shows that there would still be a significant benefit to consolidating fire dispatch in the region even with the five municipalities contracting directly with Surrey. Table 3 shows the respective cost allocations for participating agencies for the various models for comparison.

Table 3 – Consolidated Cost Allocation

Participants	Population	2017	2018	SFD All Agencies 2019	CRD All Agencies 2019	SFD Less 5 2019	CRD Less 5 2019
Colwood	16,859	\$89,390	\$135,500	\$109,000	\$106,423		
Victoria	85,792	\$715,000	\$715,000	\$712,400	\$541,567	\$768,700	\$495,461
Central Saanich	16,814	\$104,776	\$166,200	\$132,000	\$106,139	\$142,400	\$97,103
Esquimalt	17,655	\$96,308	\$195,700	\$154,500	\$111,448		
Langford	35,342	\$248,073	\$274,617	\$239,100	\$223,099	\$257,800	\$204,105
Saanich	114,148	\$1,329,632	\$909,500	\$731,500	\$720,566	\$788,300	\$659,221
Oak Bay	18,094	\$109,390	\$197,300	\$155,900	\$114,219	\$168,300	\$104,495
North Saanich	11,249	\$88,700	\$88,700	\$69,200	\$71,010		
Metchosin	4,708	\$33,047	\$35,432	\$37,600	\$29,720	\$41,200	\$27,189
Sidney	11,672	\$49,746	\$113,500	\$87,300	\$73,680		
View Royal	10,408	\$63,923	\$135,400	\$107,100	\$65,701		
Highlands	2,225	\$15,618	\$17,308	\$13,700	\$14,045	\$15,000	\$12,850
Sooke	13,001	\$91,257	\$99,922	\$108,100	\$82,070	\$116,600	\$75,083
JDF	4,860	\$34,113	\$37,012	\$34,900	\$30,679	\$38,300	\$28,067
SSI	10,557	\$74,102	\$79,791	\$78,800	\$66,642	\$85,000	\$60,968
SGL	4,732	\$33,215	\$35,799	\$47,900	\$29,871	\$52,600	\$27,328
		\$3,176,290	\$3,236,681	\$2,819,000	\$2,386,879	\$2,474,200	\$1,791,870

Note: Victoria Fire Dispatch costs based on available 2017 numbers.

Operations Implications

A regional fire dispatch model could potentially decrease response times and improve public safety by having responders on scene faster despite municipal boundaries. A singular dispatch could enable supplementary agreements to dispatch the closest responder to the call versus the designated department for a specific area or enable improved mutual aid responses between communities through automatic aid policies. Assistance could be immediately dispatched from a single site which decreases delays, errors, and compatibility issues versus having calls transferred to and from another dispatch centre to make requests.

When municipalities enter into an automatic aid agreement for fire services they benefit from the combined resources of all municipalities participating and receive credit to their municipality when looking at the resourcing for fire protection requirements. This can impact issues such as number of firefighters required, number of specialty vehicles such as ladder trucks (which can cost \$1.6 to \$2.2 million each), training costs, purchasing etc. Additionally, there are potential savings that residents and businesses may receive from insurance rates due to the increased level of fire protection that an automatic aid regional system provides. An automatic aid system would not be as effective and beneficial if not inclusive of all regional services.

Technology

Computer Aided Dispatch (CAD)

Both the Saanich Fire Dispatch and the CRD Fire Dispatch utilize CAD systems that are NFPA compliant. Saanich uses Intergraph while CRD uses FDM. Both platforms are compatible with additional software applications to enhance service capability such as station alerting (Locution,

Phoenix G2, etc.), emergency event software (i.e., E2MV), and are compatible with Records Management System (RMS) software. Both CAD systems provide direct linkage with BC Emergency Health Services (EHS) dispatch CAD for incident sharing. Calls from 911 public service answering points and police dispatch are transferred by phone to the fire dispatch systems.

RMS

Both the Saanich and CRD Fire Dispatch services utilize the FDM records management software for fire service related records keeping and can employ all FDM modules as required.

It is important to note that the technological costs will fluctuate based on the technology needs identified by the individual service, such as mobile CAD, as well as currently unknown costs of the move to next generation telecommunications equipment.

Intergovernmental Implications

The establishment of a regional fire dispatch service that meets the needs of all fire departments in the region aligns with the regional initiatives to improve service and gain efficiencies through consolidation of services.

Governance of a regional fire dispatch system would depend somewhat on the model chosen. To realize the greatest efficiency and value the preferred governance model would be a combined service with an in-region contractor.

CONCLUSION

The consolidation of fire dispatch services into a regional service delivery model could potentially decrease response times and improve public safety and would create a number of economies of scale in the areas of staffing, technology, facilities and administration resulting in best value for tax dollars.

RECOMMENDATION

That the Planning and Protective Services Committee recommends to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Shawn Carby, CD, BHSc, MAL, Senior Manager Protective Services
Concurrence:	Kevin Lorette, P.Eng., MBA, General Manager Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

SC:tt

Attachments: Appendix A – Saanich Fire Dispatch Costing
Appendix B – CRD Fire Dispatch Costing

Appendix A

CAPITAL REGION FIRE DISPATCH MODEL – ALL AGENCIES

DISTRICT OF SAANICH

Regional Fire Dispatch Centre

Projections of Total Cost of Service



UNAUDITED - FOR INFORMATION PURPOSES ONLY

	2017	%	2018	%	2019	%	2020	%	2021	%	2022	%	2023	%
Direct Costs - Fire Dispatch Centre														
Personnel - Fire Dispatch	\$ 1,207,603	70.8%	\$ 1,237,793	70.6%	\$ 1,752,067	68.5%	\$ 1,795,868	68.3%	\$ 1,840,765	68.1%	\$ 1,886,784	68.0%	\$ 1,933,954	67.8%
Personnel - Fire Suppression (Relief Duty and Annual Training)	87,672	5.1%	89,864	5.1%	92,110	3.6%	94,413	3.6%	96,773	3.6%	99,193	3.6%	101,673	3.6%
Services Purchased	58,377	3.4%	59,836	3.4%	61,332	2.4%	62,866	2.4%	64,437	2.4%	66,048	2.4%	67,699	2.4%
Ecomm CAD	217,880	12.8%	225,050	12.8%	390,990	15.3%	403,920	15.4%	417,380	15.4%	432,913	15.6%	450,229	15.8%
Ecomm RMS	112,840	6.6%	117,350	6.7%	238,600	9.3%	248,140	9.4%	258,060	9.6%	266,492	9.6%	275,213	9.6%
Utilities	3,000	0.2%	3,075	0.2%	3,152	0.1%	3,231	0.1%	3,311	0.1%	3,394	0.1%	3,479	0.1%
Equipment Supplies	12,899	0.8%	13,221	0.8%	13,552	0.5%	13,891	0.5%	14,238	0.5%	14,594	0.5%	14,959	0.5%
Fixed Maintenance	6,132	0.4%	6,285	0.4%	6,442	0.3%	6,603	0.3%	6,769	0.3%	6,938	0.2%	7,111	0.2%
Total Direct Cost of Service	\$ 1,706,403	100.0%	\$ 1,752,475	100.0%	\$ 2,558,246	100.0%	\$ 2,628,932	100.0%	\$ 2,701,734	100.0%	\$ 2,776,356	100.0%	\$ 2,854,317	100.0%
Indirect Costs by Source														
District of Saanich - Corporate Shared Services														
Payroll and Human Resources	\$ 15,827	8.6%	\$ 16,223	8.6%	\$ 22,963	8.8%	\$ 23,537	8.8%	\$ 24,125	8.8%	\$ 24,728	8.8%	\$ 25,347	8.8%
Information Technology	24,964	13.5%	25,588	13.5%	26,228	10.1%	26,883	10.1%	27,556	10.0%	28,244	10.0%	28,951	10.0%
Other Corporate Services	31,480	17.0%	32,330	17.1%	47,195	18.1%	48,499	18.1%	49,843	18.2%	51,219	18.2%	52,657	18.2%
Capital Investment	23,890	12.9%	24,535	13.0%	35,815	13.7%	36,805	13.8%	37,824	13.8%	38,869	13.8%	39,960	13.8%
Fire Department Shared Services														
Fire Administration	68,522	37.1%	70,235	37.1%	99,417	38.1%	101,902	38.1%	104,450	38.1%	107,061	38.0%	109,737	38.0%
Fire Staff Development	20,003	10.8%	20,507	10.8%	29,029	11.1%	29,754	11.1%	30,494	11.1%	31,248	11.1%	32,031	11.1%
Total Indirect Cost of Service	\$ 184,686	100.0%	\$ 189,417	100.0%	\$ 260,647	100.0%	\$ 267,380	100.0%	\$ 274,292	100.0%	\$ 281,370	100.0%	\$ 288,683	100.0%
Indirect Costs/Direct Costs	10.8%		10.8%		10.2%		10.2%		10.2%		10.1%		10.1%	
Total Cost of Service (Rounded)	\$ 1,891,089		\$ 1,941,900		\$ 2,818,900		\$ 2,896,300		\$ 2,976,000		\$ 3,057,700		\$ 3,143,000	
Annual Rate of Increase			2.7%		45.2%		2.7%		2.8%		2.7%		2.8%	

CAPITAL REGION FIRE DISPATCH MODEL – ALL AGENCIES

Cost of Service Recoveries by Participating Organization Table (full cost recovery)							
Participating Organization	Actual	Projected (Full-Cost Recovery)					
	2017	2018	2019	2020	2021	2022	2023
Central Saanich			132,000	135,600	139,400	143,200	147,200
Colwood			109,000	112,000	115,100	118,300	121,600
Esquimalt			154,500	158,700	163,100	167,600	172,300
Highlands			13,700	14,100	14,400	14,800	15,200
Juan de Fuca Electoral Area			34,900	35,800	36,800	37,800	38,800
Langford			239,100	245,700	252,500	259,400	266,700
Metchosin			37,600	38,600	39,600	40,700	41,800
North Saanich			69,200	71,000	72,900	74,800	76,900
Oak Bay			155,900	160,200	164,600	169,200	173,900
Saanich			731,500	751,700	772,400	793,700	815,900
Salt Spring Island Electoral Area			78,800	81,000	83,300	85,500	87,900
Sidney			87,300	89,600	91,900	94,400	97,000
Sooke			108,100	111,100	114,100	117,300	120,500
South Gabriola Island Electoral Area			47,900	49,200	50,500	51,900	53,300
Victoria			712,400	732,000	752,300	773,000	794,600
View Royal			107,100	110,000	113,100	116,200	119,400
			\$ 2,819,000	\$ 2,896,300	\$ 2,976,000	\$ 3,057,800	\$ 3,143,000

Breakdown of Recoveries:							
Saanich	\$ -	\$ -	\$ 731,500	\$ 751,700	\$ 772,400	\$ 793,700	\$ 815,900
Existing Client Group	-	-	815,000	837,100	860,100	883,700	908,300
Victoria	-	-	712,400	732,000	752,300	773,000	794,600
CRD Fire Dispatch Clients	-	-	560,100	575,500	591,200	607,400	624,200
Total Recoveries	\$ -	\$ -	\$ 2,819,000	\$ 2,896,300	\$ 2,976,000	\$ 3,057,800	\$ 3,143,000

CAPITAL REGION FIRE DISPATCH MODEL WITH 5 RFP AGENCIES EXCLUDED, CRD INCLUDED

DISTRICT OF SAANICH
Regional Fire Dispatch Centre
Projections of Total Cost of Service



UNAUDITED - FOR INFORMATION PURPOSES ONLY

	2017	%	2018	%	2019	%	2020	%	2021	%	2022	%	2023	%
Direct Costs - Fire Dispatch Centre														
Personnel - Fire Dispatch	\$ 1,207,603	70.8%	\$ 1,237,793	70.6%	\$ 1,570,818	70.1%	\$ 1,610,089	70.0%	\$ 1,650,341	69.8%	\$ 1,691,600	69.6%	\$ 1,733,890	69.4%
Personnel - Fire Suppression (Relief Duty and Annual Training)	87,672	5.1%	89,864	5.1%	92,110	4.1%	94,413	4.1%	96,773	4.1%	99,193	4.1%	101,673	4.1%
Services Purchased	58,377	3.4%	59,836	3.4%	61,332	2.7%	62,866	2.7%	64,437	2.7%	66,048	2.7%	67,699	2.7%
Ecomm CAD	217,880	12.8%	225,050	12.8%	311,750	13.9%	322,090	14.0%	332,850	14.1%	345,583	14.2%	359,406	14.4%
Ecomm RMS	112,840	6.6%	117,350	6.7%	180,320	8.1%	187,530	8.2%	195,030	8.3%	201,886	8.3%	208,992	8.4%
Utilities	3,000	0.2%	3,075	0.2%	3,152	0.1%	3,231	0.1%	3,311	0.1%	3,394	0.1%	3,479	0.1%
Equipment Supplies	12,899	0.8%	13,221	0.8%	13,552	0.6%	13,891	0.6%	14,238	0.6%	14,594	0.6%	14,959	0.6%
Fixed Maintenance	6,132	0.4%	6,285	0.4%	6,442	0.3%	6,603	0.3%	6,769	0.3%	6,938	0.3%	7,111	0.3%
Total Direct Cost of Service	\$ 1,706,403	100.0%	\$ 1,752,475	100.0%	\$ 2,239,477	100.0%	\$ 2,300,713	100.0%	\$ 2,363,750	100.0%	\$ 2,429,235	100.0%	\$ 2,497,209	100.0%
Indirect Costs by Source														
District of Saanich - Corporate Shared Services														
Payroll and Human Resources	\$ 15,827	8.6%	\$ 16,223	8.6%	\$ 20,587	8.8%	\$ 21,102	8.8%	\$ 21,630	8.8%	\$ 22,170	8.8%	\$ 22,725	8.7%
Information Technology	24,964	13.5%	25,588	13.5%	26,228	11.2%	26,883	11.2%	27,556	11.2%	28,244	11.2%	28,951	11.1%
Other Corporate Services	31,480	17.0%	32,330	17.1%	41,315	17.6%	42,444	17.6%	43,607	17.7%	44,815	17.7%	46,069	17.7%
Capital Investment	23,890	12.9%	24,535	13.0%	31,353	13.4%	32,210	13.4%	33,092	13.4%	34,009	13.4%	34,961	13.5%
Fire Department Shared Services														
Fire Administration	68,522	37.1%	70,235	37.1%	89,132	38.0%	91,360	38.0%	93,644	37.9%	95,986	37.9%	98,385	37.9%
Fire Staff Development	20,003	10.8%	20,507	10.8%	26,026	11.1%	26,676	11.1%	27,339	11.1%	28,015	11.1%	28,717	11.1%
Total Indirect Cost of Service	\$ 184,686	100.0%	\$ 189,417	100.0%	\$ 234,641	100.0%	\$ 240,675	100.0%	\$ 246,868	100.0%	\$ 253,240	100.0%	\$ 259,807	100.0%
Indirect Costs/Direct Costs	10.8%		10.8%		10.5%		10.5%		10.4%		10.4%		10.4%	
Total Cost of Service (Rounded)	\$ 1,891,089		\$ 1,941,900		\$ 2,474,100		\$ 2,541,400		\$ 2,610,600		\$ 2,682,500		\$ 2,757,000	
Annual Rate of Increase			2.7%		27.4%		2.7%		2.7%		2.8%		2.8%	

CAPITAL REGION FIRE DISPATCH MODEL WITH 5 RFP AGENCIES EXCLUDED, CRD INCLUDED

Cost of Service Recoveries by Participating Organization Table (full cost recovery)							
Participating Organization	Actual	Projected (Full-Cost Recovery)					
	2017	2018	2019	2020	2021	2022	2023
Central Saanich			142,400	146,300	150,300	154,400	158,700
Colwood			-	-	-	-	-
Esquimalt			-	-	-	-	-
Highlands			15,000	15,400	15,800	16,200	16,700
Juan de Fuca Electoral Area			38,300	39,200	40,300	41,400	42,500
Langford			257,800	264,800	272,100	279,600	287,400
Metchosin			41,200	42,300	43,400	44,600	45,800
North Saanich			-	-	-	-	-
Oak Bay			168,300	172,900	177,600	182,500	187,500
Saanich			788,300	809,800	831,900	854,800	878,600
Salt Spring Island Electoral Area			85,000	87,300	89,700	92,200	94,800
Sidney			-	-	-	-	-
Sooke			116,600	119,800	123,100	126,500	130,000
South Gabriola Island Electoral Area			52,600	53,900	55,300	56,800	58,400
Victoria			768,700	789,600	811,200	833,600	856,700
View Royal			-	-	-	-	-
	\$ -	\$ -	\$ 2,474,200	\$ 2,541,300	\$ 2,610,700	\$ 2,682,600	\$ 2,757,100

Breakdown of Recoveries:							
Saanich	\$ -	\$ -	\$ 788,300	\$ 809,800	\$ 831,900	\$ 854,800	\$ 878,600
Existing Client Group	-	-	310,700	319,200	327,900	336,900	346,200
Victoria	-	-	768,700	789,600	811,200	833,600	856,700
CRD Fire Dispatch Clients	-	-	606,500	622,700	639,700	657,300	675,600
Total Recoveries	\$ -	\$ -	\$ 2,474,200	\$ 2,541,300	\$ 2,610,700	\$ 2,682,600	\$ 2,757,100

Appendix B - CRD Cost Projections

CRD Projections with All Agencies

913 Fire Dispatch - CRD Cost Projection - All			2018	2019	2020	2021	2022
Cost Center Group: 100888							
429000 Interest Income			200	200	200	200	200
430000 GILT - Fed			11,770	11,770	11,770	11,770	11,770
430020 GILT - PCC			660	660	660	660	660
486000 Requisitions			2,280,080	2,386,880	2,496,350	2,559,070	2,623,360
Total Revenues			2,292,710	2,399,510	2,508,980	2,571,700	2,635,990
Cost Center Group: 100889							
501000 Travel Expense			1,030	1,060	1,090	1,120	1,150
502030 Telephone - Telecomm			5,940	6,090	6,240	6,400	6,560
503130 Contract for Services			2,241,260	2,346,770	2,454,930	2,516,300	2,579,200
506010 Insurance-PublicLiab			870	890	910	930	950
506020 Insurance - Fidelity			20	20	20	20	20
506090 Insurance- SrvcContr			50	50	50	50	50
514400 Staff Training & Development			8,360	8,570	8,780	9,000	9,230
530010 Alloc - Finance & Corp Svc			5,880	6,030	6,180	6,330	6,490
530360 Alloc - Emerg Program Coord - 5%			21,570	22,110	22,660	23,230	23,810
547070 Transfer to ERF			7,730	7,920	8,120	8,320	8,530
Total Expenditures			2,292,710	2,399,510	2,508,980	2,571,700	2,635,990
	Population	%					
Colwood	16,859	4.5%	101,662	106,423	111,304	114,101	116,967
Victoria	85,792	22.7%	517,335	541,567	566,405	580,636	595,223
Central Saanich	16,814	4.4%	101,390	106,139	111,007	113,796	116,655
Esquimalt	17,655	4.7%	106,462	111,448	116,560	119,488	122,490
Langford	35,342	9.3%	213,116	223,099	233,331	239,193	245,202
Saanich	114,148	30.2%	688,325	720,566	753,614	772,548	791,956
Oak Bay	18,094	4.8%	109,109	114,219	119,458	122,459	125,536
North Saanich	11,249	3.0%	67,833	71,010	74,267	76,133	78,045
Metchosin	4,708	1.2%	28,390	29,720	31,083	31,864	32,664
Sidney	11,672	3.1%	70,383	73,680	77,059	78,996	80,980
View Royal	10,408	2.8%	62,761	65,701	68,714	70,441	72,210
Highlands	2,225	0.6%	13,417	14,045	14,690	15,059	15,437
Sooke	13,001	3.4%	78,397	82,070	85,834	87,990	90,201
JDF	4,860	1.3%	29,306	30,679	32,086	32,892	33,719
SSI	10,557	2.8%	63,660	66,642	69,698	71,449	73,244
SGI	4,732	1.3%	28,534	29,871	31,241	32,026	32,831
	378,116	100.0%	2,280,080	2,386,880	2,496,350	2,559,070	2,623,360
Annual inflation	2.5%						
Langford Contract Costs			2018	2019	2020	2021	2022
Fire Dispatch staff, supervision, and O&M			2,150,000	2,253,250	2,359,080	2,418,060	2,478,510
CAD License			56,000	57,400	58,830	60,300	61,810
Ani Ali 911			3,000	3,070	3,150	3,230	3,310
CAD Map			3,000	3,070	3,150	3,230	3,310
Rip n Run			560	570	580	590	600
BCEHS Gateway			1,800	1,840	1,890	1,940	1,990
Email Gateway			500	510	520	530	540
RMS Core Modules			24,000	24,600	25,210	25,840	26,490
Mobile CAD			2,400	2,460	2,520	2,580	2,640
Sub-total of Technological costs			91,260	93,520	95,850	98,240	100,690
Grand Total			2,241,260	2,346,770	2,454,930	2,516,300	2,579,200

CRD Projections Less 5 RFP Agencies

913 Fire Dispatch CRD Cost Projection - Less 5 RFP Agencies			2018	2019	2020	2021	2022	
Cost Center Group: 100888								
429000	Interest Income		200	200	200	200	200	
430000	GILT - Fed		11,770	11,770	11,770	11,770	11,770	
430020	GILT - PCC		660	660	660	660	660	
486000	Requisitions		1,699,580	1,791,870	1,886,470	1,933,940	1,982,600	
Total Revenues			1,712,210	1,804,500	1,899,100	1,946,570	1,995,230	
Cost Center Group: 100889								
501000	Travel Expense		1,030	1,060	1,090	1,120	1,150	
502030	Telephone - Telecomm		5,940	6,090	6,240	6,400	6,560	
503130	Contract for Services		1,660,760	1,751,760	1,845,050	1,891,170	1,938,440	
506010	Insurance-PublicLiab		870	890	910	930	950	
506020	Insurance - Fidelity		20	20	20	20	20	
506090	Insurance- SrvcContr		50	50	50	50	50	
514400	Staff Training & Development		8,360	8,570	8,780	9,000	9,230	
530010	Alloc - Finance & Corp Svc		5,880	6,030	6,180	6,330	6,490	
530360	Alloc - Emerg Program Coord - 5%		21,570	22,110	22,660	23,230	23,810	
547070	Transfer to ERF		7,730	7,920	8,120	8,320	8,530	
Total Expenditures			1,712,210	1,804,500	1,899,100	1,946,570	1,995,230	
		Population	%					
Victoria		85,792	27.7%	469,942	495,461	521,618	534,744	548,199
Central Saanich		16,814	5.4%	92,102	97,103	102,230	104,802	107,439
Langford		35,342	11.4%	193,593	204,105	214,881	220,288	225,830
Saanich		114,148	36.8%	625,268	659,221	694,024	711,488	729,389
Oak Bay		18,094	5.8%	99,113	104,495	110,012	112,780	115,618
Metchosin		4,708	1.5%	25,789	27,189	28,625	29,345	30,083
Highlands		2,225	0.7%	12,188	12,850	13,528	13,868	14,217
Sooke		13,001	4.2%	71,215	75,083	79,047	81,036	83,075
JDF		4,860	1.6%	26,622	28,067	29,549	30,293	31,055
SSI		10,557	3.4%	57,828	60,968	64,187	65,802	67,458
SGI		4,732	1.5%	25,920	27,328	28,771	29,495	30,237
		310,273	100.0%	1,699,580	1,791,870	1,886,470	1,933,940	1,982,600
Annual inflation		2.5%						
Langford Contract Costs			2018	2019	2020	2021	2022	
	Fire Dispatch staff, supervision, and O&M		1,569,500	1,658,240	1,749,200	1,792,930	1,837,750	
	CAD License		56,000	57,400	58,830	60,300	61,810	
	Ani Ali 911		3,000	3,070	3,150	3,230	3,310	
	CAD Map		3,000	3,070	3,150	3,230	3,310	
	Rip n Run		560	570	580	590	600	
	BCEHS Gateway		1,800	1,840	1,890	1,940	1,990	
	Email Gateway		500	510	520	530	540	
	RMS Core Modules		24,000	24,600	25,210	25,840	26,490	
	Mobile CAD		2,400	2,460	2,520	2,580	2,640	
	Sub-total of Technological costs		91,260	93,520	95,850	98,240	100,690	
	Grand Total		1,660,760	1,751,760	1,845,050	1,891,170	1,938,440	



**REPORT TO PLANNING AND PROTECTIVE SERVICES COMMITTEE
MEETING OF WEDNESDAY, APRIL 25, 2018**

SUBJECT **Tsunami After Action Report and Options for a Regional Emergency Notification System**

ISSUE

At the January 24, 2018 Planning and Protective Services Committee meeting, staff were directed to bring back a report as soon as practicable on the recent tsunami incident and resulting debrief, and include information on options for exploring a regional emergency notification system.

BACKGROUND

At 01:32 hrs Pacific Standard Time (PST) on Tuesday, January 23, 2018 the National Tsunami Warning Centre (NTWC) registered an 8.0 earthquake in the Gulf of Alaska with enough power to potentially generate a Tsunami. At 01:39 PST the Province of BC activated its Provincial Emergency Notification System (PENS) for local government, prompting activation of local emergency plans and urging immediate evacuation of areas identified at risk. A series of messages ensued, ultimately culminating in a cancellation of the Tsunami warning at 04:13.

As the earthquake occurred approximately 1000 km away this was considered a distant tsunami event with an anticipated potential inundation time in the region of greater than three hours after the initial earthquake. This is different from a localized event from a nearby earthquake, such as a Cascadia fault rupture, which could see a tsunami inundation impacting parts of the region in as little as 20 minutes in the Port Renfrew area.

Local authorities throughout the Capital Regional District (CRD) activated their plans specific to tsunami warning events. While each of the local authorities followed their specific plans there were variations in the planned responses in that some emergency programs had plans specific to distant tsunami warning events while others did not. This variation in plans lead to some municipalities sending out public notifications to evacuate high risk, low lying areas as their plans do not differentiate between local and distant tsunami warnings while other programs had specified notification timings for distant events that were not triggered in this instance prior to cancellation of the warning.

On February 1, 2018, the CRD facilitated a regional after action debrief with representatives of the Local Government Emergency Preparedness Advisory Committee (LGEPAC) as well as from Emergency Management BC (EMBC) to gain a greater understanding of the different jurisdictional responses to this event. This debrief was designed to ascertain what went well, challenges faced, and opportunities for improvement. The resulting After Action Review (AAR) document for this event is attached as Appendix A.

The main opportunities identified in the AAR document recommended for follow-up are:

- Enhance tsunami education and awareness for the public identifying the respective level of risk and actions to take during a tsunami warning.
- Consider the acquisition of a common situational awareness and emergency management operating platform that can be used by all local authorities to improve information sharing and reporting for multi-jurisdictional emergencies.
- Look at developing a more effective public-facing single window access portal for emergency information that can be established as the source of truth for emergency events in the region.
- Establishment of consistent approaches to tsunami warning protocols within each local authority within the region, where feasible and appropriate based on risk, in order to minimize inconsistency of messaging and notification.

Planning and Protective Services Committee – April 25, 2018

Tsunami After Action Report & Options for a Regional Emergency Notification System 2

- Expansion of public emergency notification system tools to those local authorities that currently do not have that service.
- Work collaboratively with local media to improve messaging and coordination during tsunami warnings and other emergencies.

On April 6, 2018 the provincial government expanded the Alert Ready program developed by the federal government that projected emergency warnings to the public through TV and radio to now include LTE compatible cellular phones. The advent of this program will significantly increase the ability to get notifications out to the public quickly though is still limited to areas with effective cellular coverage and will only activate on compatible phones. Staff met with senior officials from EMBC and were advised that the Province will only be using Alert Ready for tsunami warnings initially and may expand to other types of emergencies in the future. The messaging expected to go out on the provincial Alert Ready notifications will be presented in the form of a high level overview, recommending at-risk populations to move to safer areas, and directing the public to their local authorities for area specific notifications and information. EMBC has indicated that any Alert Ready tsunami warning they issue will trigger a task number for the impacted local authorities. Information on the Alert Ready program from the Province is attached as Appendix B.

ALTERNATIVES

Alternative 1:

That the Planning and Protective Services Committee recommends to the Capital Regional District Board:

- a) That the After Action Report be received for information;
- b) That staff be directed to work with local authority Emergency Program Coordinators to investigate and cost out a joint situational awareness and emergency management software solution for the region for consideration in the 2019 service planning process; and
- c) That the Local Government Emergency Preparedness Advisory Committee work with the Regional Emergency Management Partnership to review local tsunami warning plans to improve consistency and ensure alignment with the regional concept of operations and report back on the outcome.

Alternative 2:

That the After Action Report be received for information.

Alternative 3:

That the After Action Report not be received.

IMPLICATIONS

Intergovernmental Implications

Local authorities are responsible for their own emergency planning consistent with the requirements of the *Emergency Program Act* and Regulations. It is an expectation of the public that each municipality and electoral area will coordinate their planning and response to maximize public safety and to improve effectiveness of response.

For large scale events that affect multiple jurisdictions it is appropriate for all municipalities and the Region to collaborate on a consistent approach for mitigation of the emergency. The Regional Emergency Management Partnership (REMP) is focused on this initiative as part of their 2018 priorities to establish a regional concept of operations that will guide the collaborative regional response to multijurisdictional events. A collaboration on tsunami warning plans to align the local authorities within the region will lead to improved coordination and response between local authorities.

There are opportunities to approach certain components of emergency planning at a regional level to take advantage of economies of scale and cost efficiencies such as emergency notification systems and emergency management software platforms. The ability for all authorities within the Region to maintain collaborative situational awareness and share emergency management response, resources, and information will be critical to an effective regional response and recovery from a large scale emergency.

Operations Implications

Public Alert Notification Systems

With the introduction of the Alert Ready program, there is a need to have a clear and consistent approach to tsunami warning notifications and response amongst all jurisdictions to avoid conflicting messaging and disparate response. The Alert Ready messaging will direct the public to their respective local authority for further information and response direction. This messaging will likely go out very quickly and may coincide with the local governments receiving the same initial notification. This in turn will force local emergency programs to work very quickly to gain situational awareness, activate their emergency programs/plans and begin preparations to evacuate and receive at risk populations, and begin messaging to the public. Depending on the proximity of the tsunami generating event this can have lead times of as little as 20 minutes to eight hours or more.

The systems used by the different jurisdictions do not have to be the same product and can be designed to meet the needs of each area as required and still benefit from collaborative messaging and consistency. As these public alert notification systems rely on voluntary subscriptions by the public, there are significant challenges with ensuring total effective coverage and emergency teams will still need to rely on other notification delivery modalities, such as door to door, in the event of a life safety threat scenario. Municipalities that do not currently have a public alert notification system in place are encouraged to acquire a system to ensure that they are able to get area specific messaging out to their residents.

Tsunami Warning Planning

A collaboration on tsunami warning plans within the region would be a relatively simple action for local authorities that can be pursued readily with minimal cost. This would be best accomplished by the LGEPAC in conjunction with REMP to align with the upcoming concept of operations for regional emergencies currently underway.

The ability for local authorities to act quickly during events to follow-up with pertinent information will rely on their ability to gather factual information and coordinate responses with other local authorities and response agencies at all levels. An effective shared situational awareness and emergency management software platform would enhance the ability for local authorities to share information, coordinate, and respond effectively to a large scale emergency while collaborating with other pertinent response agencies.

A common emergency management and situational awareness software platform should be considered for coordinating the sharing of information, resources and response, and command and control of crisis situations. A shared platform integrates, correlates and analyzes operational information to create a dynamic, geospatial, and common operating picture. Along with analytic-based real-time insights to help speed the decision making process and dissemination of information for normal and off-normal incident management. This type of software solution will significantly enhance the capacity for regional coordination and collaboration during emergency events to support a regional concept of operations approach through the REMP.

Financial Implications

Public alert notification systems costs are dependent on the product chosen, number of public subscriptions, and features required by the purchasing municipality. The CRD has an agreement with RMS to extend the service rate agreement negotiated in 2016 to additional municipalities in the region if requested.

Consideration of a regional emergency management and situational awareness software platform will require the assessment and review of available products. This type of platform would include single window access to emergency information for the public as well as a common operating platform that other emergency response agencies from outside local government can use to collaborate on the response. A report on potential candidate platforms and associated costing will be brought back to this committee.

CONCLUSION

While overall, the local authorities were effective in the implementation of their individual tsunami warning emergency plans, the variations in emergency plans and public notifications led to indications of concern from the public that the response in the region was disparate and not well coordinated amongst the jurisdictions. The introduction of the new Alert Ready system will help to get the message out widely during any future tsunami warnings and would be supported locally by municipal and regional public alert systems where in place. The development of a regional concept of operations by the REMP along with planning collaboration between jurisdictions will improve consistency of the regional response. Additionally, it is clear that an enhancement of tsunami warning education to the public in conjunction with collaboration with the media would be beneficial to future tsunami warning events. Most of the recommendations in the AAR can be managed through the LGEPAC and REMP.

RECOMMENDATION

That the Planning and Protective Services Committee recommends to the Capital Regional District Board:

- a) That the After Action Report be received for information;
- b) That staff be directed to work with local authority Emergency Program Coordinators to investigate and cost out a joint situational awareness and emergency management software solution for the region for consideration in the 2019 service planning process; and
- c) That the Local Government Emergency Preparedness Advisory Committee work with the Regional Emergency Management Partnership to review local tsunami warning plans to improve consistency and ensure alignment with the regional concept of operations and report back on the outcome.

Submitted by:	Shawn Carby, CD, BSc, MAL, Senior Manager Protective Services
Concurrence:	Kevin Lorette, P.Eng., MBA, General Manager Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

SC:tt

Attachments: Appendix A – Tsunami Warning After Action Review
Appendix B – Alert Ready FAQs



**LGEPAC
AFTER ACTION REPORT**
Tsunami Warning Event
Task Number # INAC # 185841
January 23, 2018

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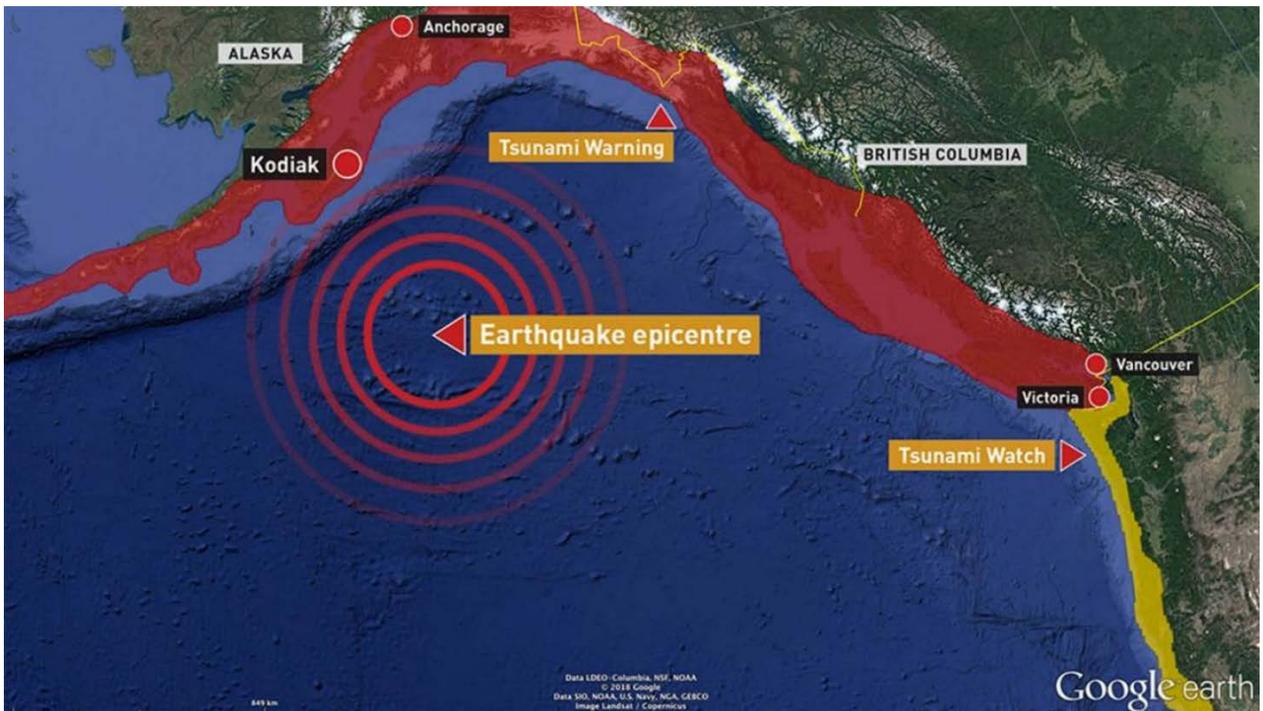
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1.0 BACKGROUND

At 01:32 Pacific Standard Time (PST) hrs on Tuesday, January 23, 2018 the National Tsunami Warning Centre (NTWC) registered an 8.0 earthquake in the Gulf of Alaska with enough power to potentially generate a Tsunami. A series of messages ensued as detailed under timeline of events, ultimately culminating in a cancellation of the Tsunami warning at 04:13.

2.0 OBJECTIVES

The After Action Report (AAR) consolidates the lessons shared at an operational debriefing held at the corporate offices of the CRD on February 1, 2018 as well as direct feedback from participants.

The objectives of this After Action Report are to:

- a) provide a record of Local Government and CRD response operations as a result of the tsunami warning event; and,
- b) document the lessons learned from the event to support the refinement of the emergency response plans, including plans specific to tsunami warnings.
- c) identify ways we can improve the collective response within the region and develop plans on how to move those actions forward.

The debrief was intended to identify successes, challenges and potential improvements to emergency preparedness within the Capital Regional District related to a tsunami warning event, it was not intended to be critical and does not replace Local Authorities (LA) after action reviews. The issues and challenges identified in this AAR are not consistent or pertinent to each local authority rather it reflects a generalized overview of the impact and actions throughout the region as a whole.

3.0 TIMELINE OF EVENT

The NTWC sent out seven (7) messages specific to this earthquake directed to the west coast of North America. For purposes of debriefing the first five (5) messages are of interest. EMBC issued:

01:35 PST (12:35 AKST) NTWC – Msg. #1 –

Tsunami Warning in effect for British Columbia, the Juan de Fuca Strait coast, the outer west coast of Vancouver Island, the central coast and northeast Vancouver Island, and the north coast of Haida Gwaii. Southeast Alaska, South Alaska and the Alaska Peninsula and the Aleutian Islands.

Tsunami Watch in effect for California, Oregon and Washington

Initial magnitude M8.0; earthquake occurred at 0132 BC time. Tsunami inundation forecast at Tofino 04:40 PST and Neah Bay 04:55 PST. No tsunami observations available to report.

01:39 PST Province of BC activated its Provincial Emergency Notification System (PENS) for local government, prompting activation of local emergency plans and urging immediate evacuation of areas identified at risk.

02:04 PST (01:04 AKST) NTWC – MSG #2 – same warning areas, revised magnitude, no tsunami observations to report; revised magnitude M8.2 Tsunami inundation forecast at Tofino 04:40 PST and Neah Bay 04:50 PST. No tsunami observations available to report.

02:23 PST EMBC issues BC Bulletin #1 advising of tsunami warning covering Tsunami Inundation Zones A, B, C, D, Zone E not at risk and urging immediate evacuation of identified areas at risk.

02:42 PST (01:42 AKST) NTWC – MSG #3 – BC still under warning, including Juan de Fuca Strait; Washington State still under a Watch, including Strait of Juan de Fuca; revised magnitude M7.9. No change in forecast arrival times, still no tsunami observations available to report.

03:16 PST (02:16 AKST) NTWC – MSG #4 - BC still under warning, including Juan de Fuca Strait; Washington State – Juan de Fuca Strait still under a Watch; first tsunami observation - .5 foot (six inches) in Old Harbour, Alaska

03:13 PST EMBC Advises of PREOC Activation

04:12 PST (03:12 AKST) NTWC - MSG #5 – BC Warning cancelled; several observations maximum wave height of .7 foot

04:16 PST EMBC issues cancellation of Tsunami Warning

4.0 MASS NOTIFICATION SYSTEMS

Presently, there are a number of processes used by local authorities within the region to notify the public regarding safety threats such as tsunami warnings these include sirens, telephone trees, door to door, social media, etc. The effectiveness of the varied processes depend on a number of factors such as location, communication services available, and voluntary subscription uptake. The different geographic and demographic areas of the region have different levels of risk and notification needs that require adaptive approaches tailored to each area. While there are a number of local authorities that have public mass notification programs this is not the case for all nor may they be appropriate for each local authority's notification requirements depending on the factors mentioned above.

The public emergency notification systems currently in place within the region are:

CRD - Public Alert Notification System (PANS) through RMS

Victoria – Vic Alert (Connect Rocket)

Sidney - RMS

North Saanich - RMS

Central Saanich - RMS

Metchosin – One Call Now

The remaining municipalities do not currently have emergency notification systems in place though several have indicated this as a priority for exploration. One of the benefits surrounding the tsunami warning event was the elevated media attention, in that it increased public awareness of the local emergency alert systems available in the region. This led to a significant increase in subscriptions to those public alert notification programs in all areas. This also created a challenge of expectation amongst the public for such systems to be in place and that messaging will be consistent which is not necessarily realistic considering the significant variations in geography and demography in the region. It is important to note that local authorities will utilize door-to-door or other notification methods for high risk areas as required in conjunction with emergency notification systems to ensure at risk populations are informed.

On April 6, 2018 the provincial government expanded the Alert Ready program developed by the federal government that projected emergency warnings to the public through TV and radio to now include LTE compatible cellular phones. The advent of this program will significantly increase the ability to get notifications out to the public quickly though is still limited to areas with effective cellular coverage and will only activate on compatible phones. The messaging expected to go out on the provincial Alert Ready notifications will be presented in the form of a high level overview, recommending at-risk populations to move to safer areas, and directing the public to their local authorities for area specific notifications and information.

5.0 SUCCESSES, CHALLENGES & OPPORTUNITIES

5.1 Successes

1. No injuries, deaths or property losses were recorded as a result of the event
2. Several authorities had protocols in place for a distant tsunami generating event, others relied on Emergency Management British Columbia (EMBC) for direction
3. The Provincial Emergency Notification System (PENS) system worked effectively
4. Social media was an effective way to get the message out. By monitoring other Local Governments, emergency programs were able to reaffirm a common source of truth message
5. Emergency Program Coordinators (EPCs) were notified quickly and connected with their the First Responder agencies early during the event
6. Evacuations that were undertaken by local authorities appeared to go well
7. Emergency Operating Centres (EOCs) were activated in a timely manner
8. Some emergency programs placed Emergency Social Services (ESS) on standby or activated ESS reception centres to support potentially displaced residents and these activations went well
9. Municipalities reported that the public alert notification systems appeared to function as intended
10. Post event subscription to local mass notification systems expanded significantly due to an increase in public awareness of both the tsunami threat and public emergency & preparedness programs

5.2 Challenges

1. Local authorities in the CRD do not have consistent planned approaches to the management of distant tsunami events. As an example, there are inconsistent

- pre-inundation evacuation timeframes – some evacuated coincident with EMBC message others followed their existing protocols which lead to no evacuation taking place. This created a perception with the public that there was a disorganized response between the local authorities within the region.
2. Conflicting social media direction, particularly from out of area, caused challenges for accurate messaging. As an example Washington State was under a tsunami watch while the CRD was under a tsunami warning.
 3. Conflicting public response, some upset they were not notified others were “glad as it wasn’t needed”.
 4. No effective regional single access “source of truth option” available to public that provides real-time updates and direction of public to local authority sites.
 5. In general, it appears that the public’s perception of risk does not match the actual reality of the tsunami risk for the CRD as some residence self-evacuated despite not being in an inundation zone.
 6. Cross-over from public notification systems created challenges in messaging as residents get messages from different local authority emergency programs if they are signed up to multiple notification systems.
 7. There are multiple notification systems covering different local authority areas– need a clear process to improve coordination of messaging when there is cross-over.
 8. Public expectations with respect to notifications – people want to know regardless whether they are at risk or not.
 9. Determining the appropriate action (to set off or not) tsunami sirens for distant events when the expected inundation times are several hours away – activate immediately or wait in order to avoid extended displacement of residents.
 10. Mass notifications not consistently applicable across entire region given the difference in ground elevations & topography – public does not understand different risk levels for different municipalities.
 11. Some media outlets (Weather Network) continued to broadcast evacuation notification despite cancellation. Additionally, some outlets reported on PTWC instead of NTWC which is not applicable or relevant to the CRD which created conflicting messaging.
 12. In isolated cases, media contacted Elected Officials directly, circumventing the emergency managers and Local Government’s official points of contact, hence the need to disseminate both timely and accurate messaging to Elected Officials.
 13. Local authorities in the CRD do not have a collaborative platform for situational awareness and emergency response information sharing amongst regional partners since the discontinuation of the E-Team software in 2016.
 14. Unnecessary self-evacuation by residents will create public safety challenges for local authority emergency programs if unprepared for receipt of these individuals amassing in undetermined areas/facilities not identified as collection points.

5.3 Opportunities

1. Need to reinforce authoritative information source through Public Education (EmergencyinfoBC <https://www.emergencyinfobc.gov.bc.ca/> and <https://twitter.com/emergencyinfobc?lang=en> and Prepare Yourself <https://www.crd.bc.ca/prepare-yourself/>).

2. Potential to amend current distant tsunami event planning guidelines based on modelling / scientific evidence to reflect a consistent response amongst the different local authorities.
3. Unnecessary evacuations put population at risk, a better determination of actual threat is required in conjunction with improved public awareness.

6.0 RECOMMENDATIONS

Recommendations:

1. That local authorities in the CRD work collaboratively with with provincial, federal and scientific partners to conduct modelling and to determine a best practice for distant tsunami events recognizing specific areas may have different threat levels and requirements.
2. Local authorities should work with the Regional Emergency Management Partnership (REMP) to consider establishing minimum evacuation times based on anticipated inundation for distant tsunami events. Local Government would have the ability to increase evacuation times based on known local population/demographics at risk.
3. Work with appropriate government agencies to consider re-aligning the tsunami warning boundaries, with an aim to associate hazard areas more closely with each other (Saanich Peninsula to be part of Zone E), to be more consistent with NWTC boundaries and to provide more detailed notifications instead of including all zones in the warning, unless warranted (Zone E).
4. That local authorities collaborate to update and ratify the 2012 Emergency Communications Plan for Tsunami Alerts in the Capital Regional District to ensure enhanced situational awareness and consistent public messaging during tsunami warning events.
5. Investigate the possibility of a regional situational awareness and emergency management collaborative platform or software solution to enhance coordination of information sharing and response within the region (replaces the E-Team program that was discontinued in 2016).
6. Establish a single window access to regional emergency information that is readily accessible to the public and directs to individual municipal sites for area specific directions and warnings.
7. Work collaboratively with local media partners to enhance public messaging during emergencies.
8. Public alert notification systems in the local authorities within the region will need to be ready to respond to the new "Alert Ready" program being implemented by the Province for tsunami warnings as that program will be directing the public to follow local authority direction. Local notification systems will need to be on top of the messaging to provide clear direction as to what to do and where to go as agencies will be inundated with calls as soon as the alert ready message goes out.
9. Encourage expansion of public alert notification systems in the region to areas where no program exists currently if appropriate for that local authority.
10. Enhance public education and messaging for susceptible areas and populations within the region.

7.0 CONCLUSION

While overall, the local authorities were effective in the implementation of their individual tsunami warning emergency plans, the variations in emergency plans and public notifications led to indications of concern from the public that the response in the region was disparate and not well coordinated amongst the jurisdictions. The introduction of the new Alert Ready system will help to get the message out widely during any future tsunami warnings and would be supported locally by municipal and regional public alert systems where in place. The development of a regional concept of operations by the REMP along with planning collaboration between jurisdictions will improve consistency of the regional response. Additionally, it is clear that an enhancement of tsunami warning education to the public in conjunction with collaboration with the media would be beneficial to future tsunami warning events.

APPENDIX 1 NWTTC MESSAGES

WEAK51 PAAQ 230935
TSUAK1

BULLETIN

Public Tsunami Message Number 1

NWS National Tsunami Warning Center Palmer AK
1235 AM AKST Tue Jan 23 2018

...A TSUNAMI WARNING IS NOW IN EFFECT...

...A TSUNAMI WATCH IS NOW IN EFFECT...

Tsunami Warning in Effect for;

- * BRITISH COLUMBIA, The Juan de Fuca Strait coast, the outer west coast of Vancouver Island, the central coast and northeast Vancouver Island, and the north coast and Haida Gwaii
- * SOUTHEAST ALASKA, The inner and outer coast from The BC/Alaska Border to Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Attu, Alaska including the Pribilof Islands

Tsunami Watch in Effect for;

- * CALIFORNIA, The coast from The Cal./Mexico Border to The Oregon/Cal. Border including San Francisco Bay
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border including the Columbia River estuary coast
- * WASHINGTON, Outer coast from the Oregon/Washington border to Slip Point, Columbia River estuary coast, and the Juan de Fuca Strait coast

PRELIMINARY EARTHQUAKE PARAMETERS

-
- * The following parameters are based on a rapid preliminary assessment and changes may occur.
 - * Magnitude 8.0
 - * Origin Time 0032 AKST Jan 23 2018
0132 PST Jan 23 2018
0932 UTC Jan 23 2018
 - * Coordinates 56.0 North 149.2 West

- * Depth 12 miles
- * Location 175 miles SE of Kodiak City, Alaska
365 miles S of Anchorage, Alaska

FORECASTS OF TSUNAMI ACTIVITY

- * Tsunami activity is forecasted to start at the following locations at the specified times.

SITE	FORECAST START OF TSUNAMI
----	-----
* Alaska	
Kodiak	0145 AKST Jan 23
Seward	0155 AKST Jan 23
Elfin Cove	0155 AKST Jan 23
Sitka	0200 AKST Jan 23
Yakutat	0205 AKST Jan 23
Valdez	0215 AKST Jan 23
Sand Point	0220 AKST Jan 23
Cordova	0225 AKST Jan 23
Unalaska	0240 AKST Jan 23
Homer	0255 AKST Jan 23
Craig	0300 AKST Jan 23
Cold Bay	0300 AKST Jan 23
Adak	0305 AKST Jan 23
Shemya	0350 AKST Jan 23
Saint Paul	0400 AKST Jan 23
* British Columbia	
Langara	0210 AKST Jan 23
Tofino	0340 AKST Jan 23
* Washington	
Neah Bay	0455 PST Jan 23
Long Beach	0500 PST Jan 23
Moclips	0500 PST Jan 23
Westport	0510 PST Jan 23
Port Angeles	0530 PST Jan 23
Port Townsend	0555 PST Jan 23
* Oregon	
Port Orford	0505 PST Jan 23
Charleston	0510 PST Jan 23
Seaside	0510 PST Jan 23
Newport	0515 PST Jan 23
Brookings	0515 PST Jan 23
* California	
Crescent City	0520 PST Jan 23
Horse Mountain	0525 PST Jan 23
Fort Bragg	0525 PST Jan 23
Monterey	0555 PST Jan 23
San Francisco	0620 PST Jan 23

Port San Luis 0620 PST Jan 23
Santa Barbara 0635 PST Jan 23
Los Angeles Harb 0650 PST Jan 23
Newport Beach 0700 PST Jan 23
La Jolla 0705 PST Jan 23
Oceanside 0705 PST Jan 23

OBSERVATIONS OF TSUNAMI ACTIVITY

* No tsunami observations are available to report.

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.
- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

If you are in a tsunami watch area;

- * Prepare to take action and stay alert for further information.

IMPACTS

Impacts will vary at different locations in the warning areas.

If you are in a tsunami warning area;

- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.
- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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WEAK51 PAAQ 231005
TSUAK1

BULLETIN

Public Tsunami Message Number 2

NWS National Tsunami Warning Center Palmer AK
105 AM AKST Tue Jan 23 2018

UPDATES

- * Revised magnitude

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI WATCH REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * BRITISH COLUMBIA, The Juan de Fuca Strait coast, the outer west coast of Vancouver Island, the central coast and northeast Vancouver Island, and the north coast and Haida Gwaii
- * SOUTHEAST ALASKA, The inner and outer coast from The BC/Alaska Border to Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Attu, Alaska including the Pribilof Islands

Tsunami Watch in Effect for;

- * CALIFORNIA, The coast from The Cal./Mexico Border to The Oregon/Cal. Border including San Francisco Bay
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border including the Columbia River estuary coast
- * WASHINGTON, Outer coast from the Oregon/Washington border to Slip Point, Columbia River estuary coast, and the Juan de Fuca Strait coast

PRELIMINARY EARTHQUAKE PARAMETERS - UPDATED

- * The following parameters are based on a rapid preliminary assessment and changes may occur.
- * Magnitude 8.2
- * Origin Time 0032 AKST Jan 23 2018
0132 PST Jan 23 2018
0932 UTC Jan 23 2018
- * Coordinates 56.0 North 149.1 West

- * Depth 12 miles
- * Location 175 miles SE of Kodiak City, Alaska
360 miles S of Anchorage, Alaska

FORECASTS OF TSUNAMI ACTIVITY

- * Tsunami activity is forecasted to start at the following locations at the specified times.

SITE	FORECAST START OF TSUNAMI
----	-----
* Alaska	
Kodiak	0145 AKST Jan 23
Elfin Cove	0150 AKST Jan 23
Seward	0155 AKST Jan 23
Yakutat	0200 AKST Jan 23
Sitka	0200 AKST Jan 23
Valdez	0215 AKST Jan 23
Cordova	0220 AKST Jan 23
Sand Point	0220 AKST Jan 23
Unalaska	0240 AKST Jan 23
Homer	0250 AKST Jan 23
Craig	0300 AKST Jan 23
Cold Bay	0300 AKST Jan 23
Adak	0305 AKST Jan 23
Shemya	0345 AKST Jan 23
Saint Paul	0400 AKST Jan 23
* British Columbia	
Langara	0210 AKST Jan 23
Tofino	0340 AKST Jan 23
* Washington	
Neah Bay	0450 PST Jan 23
Long Beach	0455 PST Jan 23
Moclips	0500 PST Jan 23
Westport	0505 PST Jan 23
Port Angeles	0530 PST Jan 23
Port Townsend	0555 PST Jan 23
* Oregon	
Port Orford	0505 PST Jan 23
Seaside	0505 PST Jan 23
Newport	0510 PST Jan 23
Charleston	0510 PST Jan 23
Brookings	0515 PST Jan 23
* California	
Crescent City	0520 PST Jan 23
Fort Bragg	0525 PST Jan 23
Horse Mountain	0525 PST Jan 23
Monterey	0555 PST Jan 23
San Francisco	0620 PST Jan 23

Port San Luis 0620 PST Jan 23
Santa Barbara 0635 PST Jan 23
Los Angeles Harb 0650 PST Jan 23
Newport Beach 0700 PST Jan 23
Oceanside 0705 PST Jan 23
La Jolla 0705 PST Jan 23

OBSERVATIONS OF TSUNAMI ACTIVITY

* No tsunami observations are available to report.

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.
- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

If you are in a tsunami watch area;

- * Prepare to take action and stay alert for further information.

IMPACTS

Impacts will vary at different locations in the warning areas.



If you are in a tsunami warning area;

- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.
- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.



Public Tsunami Message Number 3

NWS National Tsunami Warning Center Palmer AK
142 AM AKST Tue Jan 23 2018

UPDATES

- * Revised magnitude

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI WATCH REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * BRITISH COLUMBIA, The Juan de Fuca Strait coast, the outer west coast of Vancouver Island, the central coast and northeast Vancouver Island, and the north coast and Haida Gwaii
- * SOUTHEAST ALASKA, The inner and outer coast from The BC/Alaska Border to Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Attu, Alaska including the Pribilof Islands

Tsunami Watch in Effect for;

- * CALIFORNIA, The coast from The Cal./Mexico Border to The Oregon/Cal. Border including San Francisco Bay
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border including the Columbia River estuary coast
- * WASHINGTON, Outer coast from the Oregon/Washington border to Slip Point, Columbia River estuary coast, and the Juan de Fuca Strait coast

FORECASTS OF TSUNAMI ACTIVITY

- * Tsunami activity is forecasted to start at the following locations at the specified times.

SITE	FORECAST START OF TSUNAMI
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* Alaska Kodiak	0145 AKST Jan 23
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Seward 0155 AKST Jan 23
Elfin Cove 0155 AKST Jan 23
Sitka 0200 AKST Jan 23
Yakutat 0205 AKST Jan 23
Valdez 0215 AKST Jan 23
Sand Point 0220 AKST Jan 23
Cordova 0225 AKST Jan 23
Unalaska 0240 AKST Jan 23
Homer 0250 AKST Jan 23
Craig 0300 AKST Jan 23
Cold Bay 0300 AKST Jan 23
Adak 0305 AKST Jan 23
Shemya 0350 AKST Jan 23
Saint Paul 0400 AKST Jan 23

* British Columbia

Langara 0210 AKST Jan 23
Tofino 0340 AKST Jan 23

* Washington

Neah Bay 0450 PST Jan 23
Moclips 0500 PST Jan 23
Long Beach 0500 PST Jan 23
Westport 0510 PST Jan 23
Port Angeles 0530 PST Jan 23
Port Townsend 0555 PST Jan 23

* Oregon

Port Orford 0505 PST Jan 23
Seaside 0505 PST Jan 23
Charleston 0510 PST Jan 23
Newport 0515 PST Jan 23
Brookings 0515 PST Jan 23

* California

Crescent City 0520 PST Jan 23
Horse Mountain 0525 PST Jan 23
Fort Bragg 0525 PST Jan 23
Monterey 0555 PST Jan 23
San Francisco 0615 PST Jan 23
Port San Luis 0620 PST Jan 23
Santa Barbara 0635 PST Jan 23
Los Angeles Harb 0650 PST Jan 23
Oceanside 0700 PST Jan 23
Newport Beach 0700 PST Jan 23
La Jolla 0705 PST Jan 23

OBSERVATIONS OF TSUNAMI ACTIVITY

* No tsunami observations are available to report.

PRELIMINARY EARTHQUAKE PARAMETERS - UPDATED

* Magnitude 7.9
* Origin Time 0032 AKST Jan 23 2018
0132 PST Jan 23 2018



0932 UTC Jan 23 2018

- * Coordinates 56.0 North 149.1 West
- * Depth 12 miles
- * Location 175 miles SE of Kodiak City, Alaska
360 miles S of Anchorage, Alaska

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.
- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

If you are in a tsunami watch area;

- * Prepare to take action and stay alert for further information.

IMPACTS

Impacts will vary at different locations in the warning areas.

If you are in a tsunami warning area;

- * A tsunami with damaging waves and powerful currents is possible.



- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.
- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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WEAK51 PAAQ 231116
TSUAK1



BULLETIN

Public Tsunami Message Number 4

NWS National Tsunami Warning Center Palmer AK
216 AM AKST Tue Jan 23 2018

UPDATES

* Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI WATCH REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * BRITISH COLUMBIA, The Juan de Fuca Strait coast, the outer west coast of Vancouver Island, the central coast and northeast Vancouver Island, and the north coast and Haida Gwaii
- * SOUTHEAST ALASKA, The inner and outer coast from The BC/Alaska Border to Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Attu, Alaska including the Pribilof Islands

Tsunami Watch in Effect for;

- * CALIFORNIA, The coast from The Cal./Mexico Border to The Oregon/Cal. Border including San Francisco Bay
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border including the Columbia River estuary coast
- * WASHINGTON, Outer coast from the Oregon/Washington border to Slip Point, Columbia River estuary coast, and the Juan de Fuca Strait coast

FORECASTS OF TSUNAMI ACTIVITY

* Tsunami activity is forecasted to start at the following locations at the specified times.

SITE	FORECAST START OF TSUNAMI
----	-----

* Alaska



Kodiak 0145 AKST Jan 23
 Seward 0155 AKST Jan 23
 Elfin Cove 0155 AKST Jan 23
 Sitka 0200 AKST Jan 23
 Yakutat 0205 AKST Jan 23
 Valdez 0215 AKST Jan 23
 Sand Point 0220 AKST Jan 23
 Cordova 0225 AKST Jan 23
 Unalaska 0240 AKST Jan 23
 Homer 0250 AKST Jan 23
 Craig 0300 AKST Jan 23
 Cold Bay 0300 AKST Jan 23
 Adak 0305 AKST Jan 23
 Shemya 0350 AKST Jan 23
 Saint Paul 0400 AKST Jan 23

* British Columbia

Langara 0210 AKST Jan 23
 Tofino 0340 AKST Jan 23

* Washington

Neah Bay 0450 PST Jan 23
 Moclips 0500 PST Jan 23
 Long Beach 0500 PST Jan 23
 Westport 0510 PST Jan 23
 Port Angeles 0530 PST Jan 23
 Port Townsend 0555 PST Jan 23

* Oregon

Port Orford 0505 PST Jan 23
 Seaside 0505 PST Jan 23
 Charleston 0510 PST Jan 23
 Newport 0515 PST Jan 23
 Brookings 0515 PST Jan 23

* California

Crescent City 0520 PST Jan 23
 Horse Mountain 0525 PST Jan 23
 Fort Bragg 0525 PST Jan 23
 Monterey 0555 PST Jan 23
 San Francisco 0615 PST Jan 23
 Port San Luis 0620 PST Jan 23
 Santa Barbara 0635 PST Jan 23
 Los Angeles Harb 0650 PST Jan 23
 Oceanside 0700 PST Jan 23
 Newport Beach 0700 PST Jan 23
 La Jolla 0705 PST Jan 23

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

 * Observed max tsunami height is the highest recorded water level
 above the tide level up to the time of this message.

SITE	TIME	OBSERVED MAX
-----	OF MEASUREMENT	TSUNAMI HEIGHT
-----	-----	-----

Old Harbor Alaska 0256 PST Jan 23 0.5ft

PRELIMINARY EARTHQUAKE PARAMETERS

-
- * Magnitude 7.9
 - * Origin Time 0032 AKST Jan 23 2018
 0132 PST Jan 23 2018
 0932 UTC Jan 23 2018
 - * Coordinates 56.0 North 149.1 West
 - * Depth 12 miles
 - * Location 175 miles SE of Kodiak City, Alaska
 360 miles S of Anchorage, Alaska

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.
- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

If you are in a tsunami watch area;

- * Prepare to take action and stay alert for further information.

IMPACTS

Impacts will vary at different locations in the warning

areas.

If you are in a tsunami warning area;

- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.
- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

\$\$



WEAK51 PAAQ 231212
TSUAK1

BULLETIN**Public Tsunami Message Number 5**

NWS National Tsunami Warning Center Palmer AK
312 AM AKST Tue Jan 23 2018

UPDATES

- * A tsunami has been confirmed and some impacts are expected
- * Updated observations
- * Revised alert areas

...A TSUNAMI ADVISORY IS NOW IN EFFECT...

Tsunami Advisory in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Hinchinbrook Entrance, Alaska (90 miles E of Seward) to Chignik Bay, Alaska

Alerts in the following areas have been canceled because additional information and analysis have better defined the threat.

- * The Tsunami Watch is canceled for the coastal areas of California, Oregon and Washington from The Cal./Mexico Border to The Wash./BC Border
- * The Tsunami Warning is canceled for the coastal areas of British Columbia, Southeast Alaska and South Alaska and the Alaska Peninsula from The Wash./BC Border to Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * The Tsunami Warning is canceled for the coastal areas of South Alaska and the Alaska Peninsula and Aleutian Islands from Chignik Bay, Alaska to Attu, Alaska

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted

more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----

* Alaska
Homer 0250 AKST Jan 23 less than 1ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

* Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
Kodiak Alaska	0329 PST Jan 23	0.6ft
Seward Alaska	0331 PST Jan 23	0.4ft
Old Harbor Alaska	0338 PST Jan 23	0.7ft
Sitka Alaska	0318 PST Jan 23	0.4ft
Yakutat Alaska	0335 PST Jan 23	0.5ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 7.9
 * Origin Time 0032 AKST Jan 23 2018
 0132 PST Jan 23 2018
 0932 UTC Jan 23 2018
 * Coordinates 56.0 North 149.1 West
 * Depth 12 miles
 * Location 175 miles SE of Kodiak City, Alaska
 360 miles S of Anchorage, Alaska

RECOMMENDED ACTIONS - UPDATED

Actions to protect human life and property will vary within tsunami advisory areas.

If you are in a tsunami advisory area;

- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.

- * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.

- * Do not go to the shore to observe the tsunami.

- * Do not return to the coast until local emergency officials indicate it is safe to do so.

IMPACTS

Impacts will vary at different locations in the advisory areas.

If you are in a tsunami advisory area;

- * A tsunami with strong waves and currents is possible.
- * Waves and currents can drown or injure people who are in the water.
- * Currents at beaches and in harbors, marinas, bays, and inlets may be especially dangerous.
- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.



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WEAK51 PAAQ 231240

TSUAK1

BULLETIN

Public Tsunami Message Number 6

NWS National Tsunami Warning Center Palmer AK

340 AM AKST Tue Jan 23 2018

UPDATES

* Updated observations

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

* SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Hinchinbrook Entrance, Alaska (90 miles E of Seward) to Chignik Bay, Alaska

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----

* Alaska			
Homer	0250 AKST Jan 23		less than 1ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
Kodiak Alaska	0329 PST Jan 23	0.6ft

Seward Alaska	0331 PST Jan 23	0.4ft
Old Harbor Alaska	0338 PST Jan 23	0.7ft
Sitka Alaska	0318 PST Jan 23	0.4ft
Yakutat Alaska	0335 PST Jan 23	0.5ft
Langara BC	0330 PST Jan 23	0.4ft

PRELIMINARY EARTHQUAKE PARAMETERS

- * Magnitude 7.9
- * Origin Time 0032 AKST Jan 23 2018
0132 PST Jan 23 2018
0932 UTC Jan 23 2018
- * Coordinates 56.0 North 149.1 West
- * Depth 12 miles
- * Location 175 miles SE of Kodiak City, Alaska
360 miles S of Anchorage, Alaska

RECOMMENDED ACTIONS

- * See message number 5 for recommended actions.

IMPACTS

- * See message number 5 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

\$\$

WEAK51 PAAQ 231313
TSUAK1

BULLETIN

Public Tsunami Message Number 7

NWS National Tsunami Warning Center Palmer AK
413 AM AKST Tue Jan 23 2018

...THE TSUNAMI ADVISORY IS CANCELLED...

- * The Tsunami Advisory is canceled for the coastal areas of South Alaska and the Alaska Peninsula

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
Kodiak Alaska	0329 PST Jan 23	0.6ft
Seward Alaska	0331 PST Jan 23	0.4ft
Old Harbor Alaska	0338 PST Jan 23	0.7ft
Sitka Alaska	0318 PST Jan 23	0.4ft
Yakutat Alaska	0335 PST Jan 23	0.5ft
Langara BC	0330 PST Jan 23	0.4ft

RECOMMENDED ACTIONS - UPDATED

- * Do not re-occupy hazard zones until local emergency officials indicate it is safe to do so.

IMPACTS - UPDATED

- * A tsunami was generated by this event, but no longer poses a threat.
- * Some areas may continue to see small sea level changes.
- * The determination to re-occupy hazard zones must be made by local officials.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal regions outside California, Oregon, Washington, British Columbia, and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This will be the final U.S. National Tsunami Warning Center message issued for this event.

\$\$

APPENDIX 2 EMBC MESSAGES

Tue 23/01/2018 03:13

EMBC VIR PREOC Operations 1 EMBC:EX <preoc1.ops1@gov.bc.ca>

VIR PREOC Activation for Earthquake/Tsunami Event January 23, 2018

To:

The VIR Provincial Regional Emergency Coordination Centre is activated today.

VIR PRECC OPERATIONAL PERIOD – January 23, 2018 1430–1700hr

The primary contact numbers and email address are:

Phone: 250 952-4909

Fax: 250 952-4539

E-mail: preoc.ops1@gov.bc.ca

David Tomaz

Operations Section Chief

Vancouver Island Provincial Regional Emergency Operations Centre (PREOC)

Emergency Management BC

PO Box 9201 Stn Prov Gov

Victoria, B.C. CANADA V8W 9J1

Ph: 250-952-4900 Fax: 250-952-4539

24 Hour Emergency Reporting 1-800-663-3456

Follow us on Twitter [@EmergencyInfoBC](https://twitter.com/EmergencyInfoBC) and [@PreparedBC](https://twitter.com/PreparedBC)

Tue 23/01/2018 04:27

EMBC VIR PREOC Operations 1 EMBC:EX <preoc1.ops1@gov.bc.ca>

VIR PREOC Update 0415

To:

Latest from National Tsunami Centre Bulletin #5

Warning has been cancelled!

BULLETIN

Public Tsunami Message Number 5

NWS National Tsunami Warning Center Palmer AK

312 AM AKST Tue Jan 23 2018

UPDATES

- * A tsunami has been confirmed and some impacts are expected
- * Updated observations
- * Revised alert areas

...A TSUNAMI ADVISORY IS NOW IN EFFECT...

Tsunami Advisory in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Hinchinbrook Entrance, Alaska (90 miles E of Seward) to Chignik Bay, Alaska

Alerts in the following areas have been canceled because additional information and analysis have better defined the threat.

- * The Tsunami Watch is canceled for the coastal areas of California, Oregon and Washington from The Cal./Mexico Border to The Wash./BC Border
- * The Tsunami Warning is canceled for the coastal areas of British Columbia, Southeast Alaska and South Alaska and the Alaska Peninsula from The Wash./BC Border to Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * The Tsunami Warning is canceled for the coastal areas of South Alaska and the Alaska Peninsula and Aleutian Islands from Chignik Bay, Alaska to Attu, Alaska

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

There may still be some water activity visible in our regional coastal regions so diligence is still prudent.

David Tomaz

Operations Section Chief

Vancouver Island Provincial Regional Emergency Operations Centre (PREOC)

Emergency Management BC

PO Box 9201 Stn Prov Gov

Victoria, B.C. CANADA V8W 9J1

Ph: 250-952-4909 Fax: 250-952-4539

24 Hour Emergency Reporting 1-800-663-3456

Follow us on Twitter [@EmergencyInfoBC](#) and [@PreparedBC](#)



Alert Ready + WPAs – Awareness Campaign

Current FAQs on AlertReady.ca:

1. What is Alert Ready?

Alert Ready is a service designed to deliver critical and potentially life-saving emergency alert messages to Canadians. The Alert Ready system was developed in partnership with federal, provincial, and territorial emergency management officials, Pelmorex Weather Networks (Television) Inc., the broadcast industry, and wireless service providers to ensure you receive emergency alerts immediately and know when to take action to keep you and your family safe.

2. Who sends emergency alerts?

Federally, emergency alerts are only issued by Environment and Climate Change Canada.

Provincially emergency alerts are only issued by EMBC at this time.

Media companies, including television, radio stations, cable and satellite distributors, as well as websites receive these emergency alerts and relay them to their consumers.

Beginning in April 2018, wireless service providers will also distribute emergency alerts received from alerting authorities directly to their consumers' compatible wireless devices using Cell Broadcast distribution.

3. What types of emergency alerts are issued via Alert Ready in BC?

The Alert Ready system is used by EMBC to issue Tsunami warnings only. Environment and Climate Change Canada can also issue alerts for other environmental hazards in BC.

The future state of alerting in BC will allow participating local authorities to issue alerts for their area of responsibility. However, broadcasters and wireless service providers are only required to distribute emergency alerts for situations that pose an immediate threat-to-life.

Government officials developed and agreed on a specific list of the types of alerts that are considered a threat-to-life and should be distributed immediately, interrupting radio and television broadcasts. These "Broadcast Immediately" emergency alerts have the highest level of severity, urgency and certainty.

Issuing alerts outside of this list (for example heavy rainfall or blizzard warnings) is at the discretion of each of the broadcasters. Wireless service providers will only receive and relay messages that are issued for threat-to-life situations.

4. What are the different ways I will receive emergency alerts?

You can currently expect to receive emergency alerts via Canadian radio and TV, cable and satellite operators. Beginning in April 2018, emergency alerts will also be sent to compatible wireless devices.

5. Can I choose which way an emergency alert is sent to me?

No. Regulations require all commercial, campus, community and Indigenous radio and television broadcasters, cable, satellite and IPTV providers, as well as wireless service providers to distribute emergency alerts.

There is no sign-up or opt-in required. Emergency alerts will be automatically sent through these broadcast channels, and to your compatible wireless device.

You cannot opt out of receiving threat-to-life emergency alerts.

6. What do emergency alerts look and sound like?

Emergency alerts, on radio, television and compatible wireless devices, begin with a distinct sound, known as the Canadian Alert Attention Signal. Emergency alerts sent to WPA-compatible wireless devices will also cause the phone to vibrate. The sound and vibration conveys a sense of urgency and reinforces the alert message.

On television and radio, the emergency alert sound will be followed by an automated message with the emergency alert details. On television, the emergency alert details in text will be presented either as a full screen or a crawler section at the top or bottom of the screen.

On compatible wireless devices, the emergency alert will display an “EMERGENCY ALERT/ALERTE D’URGENCE” banner, followed by text that describes the situation and provides instructions on what actions to take and where to find more information. At the top of each emergency alert, the issuing government agency will be clearly indicated.

7. Will emergency alerts be sent out in different languages?

EMBC alerts only in English. However, the language used for alerts is determined by the alerting authority, as such the future state will allow alternate languages from local authorities but English first will be mandatory. Broadcasters and wireless service providers pass on emergency alert text exactly how it is received from the alerting authority.

8. Are emergency alerts available in alternate formats to accommodate the visually and hearing impaired?

Yes, alternate formats can be issued, but not every alerting authority or every device will have the capacity to produce alternate formats. For example, emergency alerts distributed via radio and TV

broadcast can include an audio file version of the text portion of the emergency alert message if one is provided by alerting authorities. If audio files are not provided, broadcasters may use text-to-speech software to create an audio version of the message. For emergency alerts distributed via compatible wireless devices, emergency alerts may be read to the recipient if their device supports this accessibility feature. The vibration feature that accompanies emergency alerts sent to compatible wireless devices will help to make hearing impaired people aware of the alerts.

9. Will emergency alerts be for my specific area?

Yes. The alerting authority determines what areas are affected by an incident, weather or environmental situation, and uses a standard system that will typically correspond with municipal, regional or provincial boundaries based on SGC codes. The standardized system will allow participating radio, television, cable and satellite companies to broadcast the emergency alerts that are most relevant to the communities they serve.

Emergency alerts intended for wireless devices are issued to a defined geographic area, which can be as small as a few city blocks, so that only people in the defined area receive the emergency alerts. Compatible wireless devices in the targeted area will receive the emergency alerts within seconds of being issued, provided the phones are powered on and connected to the LTE cellular network.

10. What should I do if I receive an emergency alert?

Upon receiving the emergency alert it is important to take action safely. Alerting authorities will include, within the technical limitations of the system the description of the hazard, the area impacted and the information you need for any action you need to take. This could include but is not limited to: limit unnecessary travel, evacuate the areas, shelter-in-place, etc.

11. Will emergency alerts interrupt scheduled broadcast programming?

Yes. A crawl across the top or bottom of the screen or a full-page display is expected for most emergency alerts. The exact manner in which emergency alerts will be broadcast is left to the discretion of the local television broadcaster, cable or satellite distributor.

12. How will I know when an emergency alert has ended?

Alerting authorities may choose to distribute an “all-clear” message at their discretion once the situation has been resolved. The all-clear message would be distributed via broadcast services at their discretion but will not be sent to wireless devices.

In addition they may cancel or update an emergency alert anytime if the situation has changed or is considered “all-clear.” Radio, television, cable and satellite companies have the option to notify the public when an emergency alert is no longer in effect based on this information.

As part of an emergency alert message, alerting authorities must also set a time when they expect the alert to expire. The expiry time is different from the “all-clear” message, as it is set in advance and does not necessarily indicate when an emergency is over. Because each emergency alert issued requires that an expiry date and time be included, alerting authorities estimate when they think the alert will need to be updated or cancelled.

13. Are a lot of emergency alerts being issued?

Currently only Tsunami alerts and environment Canada alerts are issued in BC, the future state will increase to all hazards after which the amount and type of alert will vary by jurisdiction.

14. Will multiple emergency alerts be generated for the same event if sent by multiple alerting authorities?

This situation is very unlikely. Emergency management officials are experts in their fields and coordinate activities, including public alerting, very closely and will be monitoring emergency alerts issued by neighboring jurisdictions.

15. What type of security is in place so that I know the emergency alerts are being sent by an authorized agency?

The operators of the Alert Ready system and government officials at all levels take security very seriously.

In addition to the security measures that government agencies take every day to ensure access to their system is by authorized personnel only, additional passwords and user identification is needed for users of the Alert Ready system. Separately, Pelmorex Weather Networks (Television) Inc., the operator of the Alert Ready system, has additional measures in place to prevent unauthorized access.

16. Will the future state BC Emergency Notifications replace my local mass notification system?

These systems are designed with the target of alerting as large percentage of the population as possible very rapidly; however this capacity limits their usability for more location specific information. It is recommended that local authorities consider their specific overall alerting needs in making a decision on use of the system as non BI messages like boil water advisories are distributed but are not mandatory for broadcast. Under no circumstances can this be changed.

Planning and Protective Services Committee for their April 25 meeting.
Submitted April 18, 2018

To Directors on the Committee

Re: RGS in relationship to East Sooke OCP .

I am deeply concerned about any potential changes to the current CRD Bylaw 3718. The East Sooke OCP CRD Bylaw 4000, as proposed, with one hectare parcel sizes and maybe two dwellings each creates too great a density. The OCP only needs to provide planning to accommodate residential use for the next five years, whereas the RGS is providing for 20 or more years. The parcel sizes permitted within the Settlement Area should be limited to or remain at 2 ha. where they are at present.

This position matches the Juan de Fuca Electoral Area's argument that land use planning and zoning will limit growth. The JdF Director has argued that restricting access to community water supplies is not an appropriate means of limiting growth. Therefore, planning and zoning must be used to achieve the goals of the RGS to limit sprawl. If this is not the case then I would recommend restricting access to community water be used as a backup to ensure that the RGS is upheld.

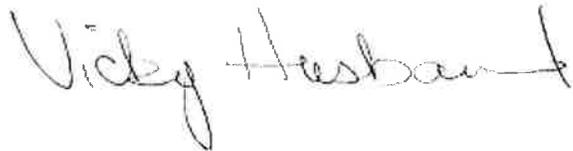
Another serious concern is that with community water access comes the expense of laying water lines and the demand for greater density and development to keep individual costs down. Coming in from the back door.

I would strongly recommend that the CRD Board keep the Settlement Area designation the same as it is in the current bylaw, CRD Bylaw 3718, so that there won't be any change in the number of new parcels.

My overriding concern is for the RGS to be consistent with controlling

sprawl in rural areas and in municipalities.

Yours sincerely,

A handwritten signature in black ink that reads "Vicky Husband". The signature is written in a cursive style with a horizontal line extending from the end of the word "Husband".

Vicky Husband
301 Ross Durrance Rd,
Victoria, V9E 2A3
250 478-0388