



ENVIRONMENT COMMISSION

JANUARY 20, 2011

6:00 PM – CVRD Board Room, 175 Ingram Street

AGENDA

1. **ELECTION OF CHAIR AND CO-CHAIR**
2. **ADOPTION OF AGENDA:** 1-2
3. **ADOPTION OF MINUTES:** 3-6
M1 Adoption of minutes of Environment Commission from December 20, 2010
4. **BUSINESS ARISING OUT OF MINUTES:**
B1 Sign in Sheet for public presentations
B2 Combining Economic and Environment Commissions
B3 Letter to Duncan Christian School re Solar BC Grant
5. **DELEGATIONS**
Cowichan Tribes
6. **CORRESPONDENCE**
C1 Email Dated January 12, 2011 to Kate Lindsay re Mid-Island Biosphere Reserve proposal 7-10
C2 Annual Guide from North Cowichan/Island Savings Centre 11
7. **COMMITTEE REPORTS**
CR1 Land Committee – Justin Straker 13-26
CR2 Communications - Chris Wood 27-29
CR3 Water – Rodger Hunter
8. **STAFF REPORTS**
9. **INFORMATION**
10. **NEW BUSINESS**
11. **NEXT MEETING:**
12. **ADJOURNMENT:**

Distribution:

CVRD Director Gerry Giles (Chair)
Roger Wiles
Peter Keber
Chris Wood
Dave Polster
CVRD Director Phil Kent
CVRD Director Rob Hutchins
CVRD Director Tom Walker

Rodger Hunter (Co-Chair)
Kevin Visscher
Bruce Sampson
Bruce Fraser
Justin Straker
Judy Stafford
Larry George, Cowichan Tribes

As Well As Full Agenda:

Warren Jones, CAO, CVRD
Brian Dennison, General Manager, Engineering and Environment Services
Kate Miller, Manager, Regional Environmental Policy Division

Full Agenda as Hard Copy

Director I. Morrison
Director L. Duncan
Director K. Kuhn
Director L. Iannidinardo

Agenda Cover Only:

Director G. Seymour	Director T. McGonigle
Director M. Marcotte	Director B. Harrison
Director D. Haywood	Director K. Cossey
Director M. Dorey	
Tom Anderson, Manager, Planning and Development Services	

Minutes of the regular meeting of the ENVIRONMENT COMMISSION held in the CVRD Boardroom, 175 Ingram Street, Duncan, on December 16, 2010 at 6:00 pm.

PRESENT: Director Giles – Chair	Rodger Hunter
Director Iannidinardo	John Morris
Director Hutchins	Bruce Fraser
Roger Wiles	Dave Polster
Justin Straker	Chris Wood
Pete Keber	Judy Stafford
Bruce Sampson	Director Lorne
Director Kent	

ALSO Kate Lindsay, Sr. Environmental Analyst
PRESENT: Dyan Freer, Recording Secretary

ABSENT: Larry George, Kate Miller, Kevin Visscher

**APPROVAL
OF AGENDA**

It was moved and seconded that the agenda be approved as presented.

MOTION CARRIED

**ADOPTION
OF MINUTES**

It was moved and seconded that the minutes of the November 18, 2010, Environment Commission meeting be adopted as presented.

MOTION CARRIED

**BUSINESS ARISING
OUT OF MINUTES**

B1 Environment Commission 2011-2012 member appointments

It was noted that the CVRD Board had appointed the following individuals for a one year term on the CVRD Environment Commission, expiring December 31, 2011:

Bruce Fraser, Judy Stafford, Bruce Sampson

and appointed the following individuals to the CVRD Environment Commission for a two year term expiring December 31, 2012:

Chris Wood, Peter Keber, Rodger Hunter, Roger Wiles, Justin Straker

and that John Morris was re-appointed to the Environment Commission for a one year term to expire December 31, 2011.

A special thank you to the commission members – we are being recognized and appreciated by the directors and in the community.

- B2 Signup sheet** for presentations on SoE within the Community will be circulated. There is a need to speak to various groups about the State of the Environment report- i.e. schools, youth groups. Dyan will send out the sign-up sheet to people to add groups to the list and commission members put their name down where they wish. Could we get students trained to do this? We should be with them as back-up, but would be a benefit to involve youth.

ACTION: Rodger will speak to Kevin Visscher about orchestrating this.

B3 Land Committee Recommendations

Discussion and explanation to review the recommendations as presented and to accept or reject them to have the CVRD Board work towards preserving our quality of life.

Recommendation #1 – Assess regional carrying capacity and cumulative effects to balance our activities and needs with requirements for ecosystem integrity.

It was moved and seconded that the CVRD Environment Commission recommends that the CVRD and partner organizations conduct a structured evaluation of regional environmental carrying capacities and the cumulative effects of human activities on the ecosystem goods and services in the CVRD, including current effects, and a range of plausible future effects.

MOTION CARRIED

Recommendation #3 – Immediate and Mid-Term Action

It was moved and seconded that the CVRD begin and advance a collaborative process to address land-use and potential opportunities/constraints on public, crown and private forest lands in the region.

MOTION CARRIED

Excellent work done by the Lands Committee. Discussion on the three recommendations ensued.

It was moved and seconded to refer Recommendation #2 back to lands committee to amend it for next meeting and to have more discussion on how to present it to the Board.

MOTION CARRIED

Opposed Judy Stafford and Phil Kent

It was moved and seconded to endorse the land committee's recommendation #1 and #3 and defer #2 to the next commission meeting for further amendments.

MOTION CARRIED

It was moved and seconded that the committee review its parkland acquisition principle to include Garry Oak ecosystems and old growth forests, Eagle Heights grasslands, Chemainus Bald Eagle tree, and Koksilah big trees.

DEFERRED

CORRESPONDENCE

11 responses were received by email in response to our advertorials. Acknowledgment of Chris Wood for very excellent work in producing these ads. Discussion on what to do with correspondence that comes in? Decision to ask staff to ensure that all are acknowledged and to forward to appropriate department within the CVRD.

INFORMATION

- Report from the representative of the Economic Development Committee – feels that in some functions the Environment and Economic Commissions should work together. Suggestion to bring both committees together to discuss the benefits of having one sustainable growth commission. This will be the topic at the next meeting
- Economic well-being and environmental health to be discussed by the Ladysmith Environmental Committee
- Climate Smart Program Launched - 10 businesses to be chosen to receive training to manage their own green house carbon emissions, to save money and reduce emissions. Request will go out for participants from Economic Development Cowichan.

**COMMITTEE
REPORTS**

CR1 Communications – Chris Wood

- Energy advertorial appears next week – the end of the whole run
- Next target should be land use. Discussion on the strategy for the next year. Need more sophisticated communication method for 2011. Who is the target audience and how do we reach them? Reinforce around 12 things and expand delivery, better media on website, animations, some cost involved with this idea.
- Could leverage with the Board
- Specific communications needed on specific topics – i.e. ecosystems and land use.
- Target developers, real estate professionals, builders, decision makers. Make value of sustainability included in their business decisions
- Engage students in environmental decision making. Prepare a dialogue between schools and students and get it viral by using Twitter and You Tube.
- Awards – recognize achievers in community. Model it on CRD's eco-star awards.

ACTION: Lands Committee will work on how to accomplish this. Communications will bring back specifics.

It was moved and seconded to endorse the framework of the communications committee for 2010 and carry on with a budget of \$26,000 for 2011.

MOTION CARRIED

CR2 Agriculture – Judy Stafford

85 people attended workshop from Vancouver, Victoria to Courtney, with 40% younger farmers. Requests for another, longer workshop, and a road show to reach other communities. It was very good value. Absolutely excellent speaker. Biggest gain was the collaborative effort including Agricultural Society, CVRD Environment Commission., CGC, Duncan Fire Department, City of Duncan, with the lunch consisting of local food from farmers. Every CVRD committee or meeting should use local food – we need to walk the talk! Group will meet again and plan the 2011's focus. There is also a blog available.

CR2 Land – Justin Straker

The workshop for invited guests will be going ahead on the subject of future land uses – model based approach with speaker – planned for February 17th.

NEW BUSINESS

- NB1** Request for endorsement letter to promote sustainable energy use in our community to aid Duncan Christian School's Solar BC grant application

MOTION CARRIED

ACTION: Chair will write the letter.

- NB2** Consideration of amalgamating the Environment and Economic Development Commissions – further discussion tabled to next meeting.

- NB3** Information Environmental Initiatives Bylaw passed and has been ratified by the Board. This Bylaw provides a standalone financial mechanism for the existing Environmental Policy Division which currently sits in General Government allocation.

- NB4** Invitation by Peter Nix for the Environment Commission to Attend Earth Day Celebrations. Commission will take note of that event.

NEXT MEETING

Thursday, January 20, 2011

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 9:05 pm.

Chair

Recording Secretary

Dated: _____

Subject: FW: The CVRD & a Mid Island Biosphere Reserve proposal
Attachments: Mid Island Bio Rsrve proposed- Media Release, n25'10.doc; Bio Rsrv - Mid Island Proposal, leaflet, fall'2010.pdf

January 12, 2011

Hello Ms Lindsay,

I obtained your name from the CVRD website, and would request that you forward this note as appropriate to the CVRD Environment Committee, Council & Staff.

I wanted to informally touch in with CVRD representatives, since the organization that I work with, MISSI, is gearing up to raise a mid island biosphere reserve proposal for an area that is shared by the Regional District of Nanaimo and Cowichan Valley Regional District. I've attached a couple of background files.

Our letter to the Regional District of Nanaimo, reviewed last night by the Board, notes that "Interest has been expressed in developing the proposal so as to include areas of the Nanaimo River, Haslam Creek and Chase River watersheds, extending to the coast and marine areas, and Gulf Islands." I would add that further outreach with residents and organizations is expected to further define the area that may be proposed, and so we want to be certain that the CVRD is aware of the opportunity.

MISSI will shortly be announcing meetings, and invitations to form a steering committee. In this respect we would then like to inquire about opportunity to work in a complementary manner to that of the CVRD, community representatives and organizations that may have an interest in such a proposal. We see the Mid Island Biosphere Reserve proposal as a positive initiative, and would like to invite suggestions you may have, or reference materials you think appropriate for our review.

And of course, if you have questions or wish further information, please don't hesitate to be in touch.

all the best,

Laurie Gourlay
president, Mid Island Sustainability & Stewardship Initiative
P.O. Box 333, Cedar, B.C., V9X 1W1
<www.missimidisland.com> (250 722-3444)

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"All would be better off if each person took into  
account the effect of his or her acts upon others."  
World Commission on Environment & Development  
~~~ Our Common Future, 1987 ~~~  
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**Media Release**  
**- for immediate release**

**November 25, 2010**

## **Not One, But Two Biosphere Reserves Proposed for Vancouver Island!**

MISSI has written organizations in the capital region to "express interest in working together to establish two new biosphere reserves on Vancouver Island - for the south and mid island regions."

The Victoria coalition met on November 23rd to consider proposing a biosphere reserve for the capital region. The President of the Mid Island Sustainability and Stewardship Initiative has written to congratulate them ...and inform them of similar mid island efforts underway for the past several years.

"Our 'Mid Island Biosphere Reserve' proposal goes back to the beginning of MISSI in 2007, and before that," Gourlay wrote, adding that public meetings for the proposal are planned for the new year.

"Discussions we've had with elected representatives, about our reserve proposal, have already led to public statements and support," Gourlay notes. "MLA Doug Routley mentioned our local proposal for a biosphere reserve, for the region of Cedar-Yellowpoint-Ladysmith, while recognizing MISSI's work in the Legislature some two years ago." <<http://www.leg.bc.ca/hansard/38th4th/h81125p.htm>>

In the interim, prior to launching a public campaign however, MISSI's Board and supporters have been gathering information, participating in local forums, and extending contacts throughout the region.

"UNESCO Biosphere Reserves are positive and engaging examples of regional sustainability efforts – means to engage communities and residents in implementing practical steps for long-term economic and environmental prosperity," stated Gourlay in his letter to University of Victoria's Environmental Law Centre. "We believe there are many benefits to working together, and that Vancouver Island's rich biodiversity lends itself to a larger, long-term vision for protecting sustainability options."

Along with his letter Gourlay included a leaflet on the proposed Mid Island Biosphere reserve, as well as backgrounder and related information on work underway - materials now posted for public review and feedback on MISSI's website <[www.missimidisland.com](http://www.missimidisland.com)>

Gourlay ended on a hopeful note for all Vancouver Islanders, saying that MISSI "looks forward to working towards a vision and lasting legacy, and a lifetime investment that will continue to give for all generations to come."

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For more information :

Laurie Gourlay, President - MISSI

\*Mid Island Sustainability & Stewardship Initiative, P.O. Box 333, Cedar, B.C., V9X 1W1  
(250 722-3444) <<http://www.missimidisland.com>>

*\*MISSI, a local non-profit society, works within processes that advance sustainability, stewardship and the mid-island regio..*

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**B**iosphere Reserves are 'working areas', where jobs and economic activities are advanced within a framework of long-term prosperity and sustainability.

Furthering economic development, while addressing social costs and benefits, are essential goals of biosphere reserves.

## ***Economic & Ecological Sustainability***

*...thinking globally, acting locally.*

Agri-tourism and food security are fostered, balanced growth and community sustainability advanced ... and responsible, locally-appropriate, low-cost solutions put in place to address regional and global challenges.

The benefits of biosphere reserves and a transition to sustainability include efficiency and preventive approaches that help cut the expensive costs of cleanup, while protecting health and ecological benefits.

Conservation of renewable resources and appropriate development minimize waste, maximize efficiency and recycling, and avoid the use of hazardous materials and processes. This cooperative approach helps public and private interests work together for us all...

## ***A Necklace of Historical, Cultural & Natural Pearls...***

*Consider the possibility of a mid island UNESCO biosphere reserve and buffer, from the Southern Gulf Islands National Marine Park to Ladysmith Harbour to Nanaimo estuary ... & points between.*

Parks, walkways and heritage features would provide major eco-tourist and economic benefits. Water-front, marine environment and harbour developments would be improved with shorelines, wildlife, conservation and natural resource goals in mind.

### ***\*Three Key Goals Balance a Biosphere Reserve:***

- ***Economic***
- ***Social***
- ***Environmental***



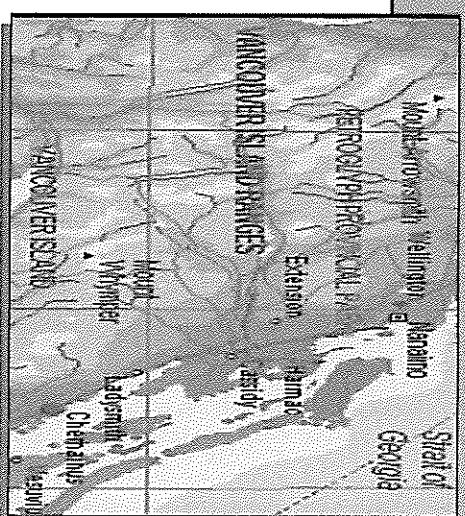
A designated UNESCO Biosphere Reserve would protect biodiversity and habitat, and also generate substantial interest in protecting special places and species in the mid island region—our 'pearls' of historical, cultural and natural importance.

Please consider adding your voice to this initiative ...and to leaving a living and lasting legacy!

*Please direct inquiries to: Mid Island Sustainability & Stewardship Initiative, <[www.misustainability.com](http://www.misustainability.com)>*

# ***Mid Island Biosphere Reserve***

## ***Ladysmith... Yellowpoint... Cedar...***



***Special Places, Diverse Communities, Green Lands & Blue Seas.***

# Leadership in Conservation and

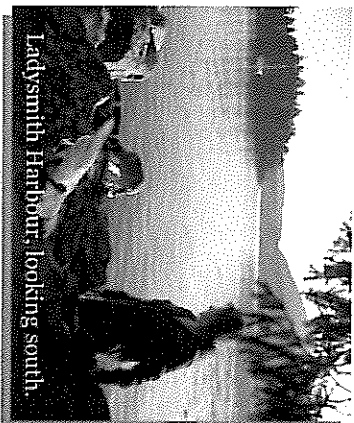
## Sustainable Development!



This innovative initiative began in 2006 with a discussion about the need to foster long-term economic and ecological solutions for community planning and development in the mid island region.

We wanted to retain special places that are close to home, and to keep those recreational, heritage and green spaces that are nearby -so that we could all continue to enjoy them.

A biosphere reserve proposal opens the door to such solutions, and to further steps we might take together to share our coastal beauty, quality of life and a sustainable economy for the mid island communities of Vancouver Island.



Ladysmith Harbour, looking south.

## 'Mid Island' Biosphere Reserve A proposal for Ladysmith...

### Yellowpoint... Cedar...

A sustainable, economically-rewarding, job-creating and conservation-oriented working reserve for the mid island region would encompass the lands and seas that extend along the narrow east coast of Vancouver Island, between the coastal mountain range and Gulf Islands.

From the rural countryside south of Ladysmith to the southern urban boundaries of Nanaimo the green lands, marine waters, communities and towns, would all be embraced within a larger UNESCO Biosphere plan.

More information about this proposal, upcoming meeting dates as well as opportunities to get involved, can be found by contacting the Mid Island Sustainability & Stewardship Initiative, P.O. Box 333, Cedar, B.C., V9X 1W1 (250) 722-3444, (Thistle@shaw.ca) <[www.missmidisland.com](http://www.missmidisland.com)>

(Fall, 2010)

## Your Comments...

Please jot down your thoughts and ideas, and forward to:

Mid Island Sustainability & Stewardship Initiative  
Laurie Gourlay - MISSI President,  
P.O. Box 333, Cedar, B.C., V9X 1W1  
(Thistle@shaw.ca) <[www.missmidisland.com](http://www.missmidisland.com)>

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**W**e encourage all who love Vancouver Island's beauty and welcoming spirit, to consider the protection of special places and to positively contribute to sustainable development and our quality of life - where you live, work and play!

For instance, talk with friends and family about the 'pearls' you find important to your community...and along Vancouver Island's east coast.

And too, please look for means to retain these special places and linkages--so all will benefit. You may be surprised at how many agree!

Please consider supporting this proposal for a Mid Island Biosphere Reserve. Our economy and future prosperity is furthered as you help.

Your support, suggestions and ideas are always welcome!



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**Subject:** FW: 2011 Annual Guide

**Importance:** High

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**Sent:** Wednesday, January 12, 2011 3:39 PM

**To:** Allison Nelson

**Subject:** 2011 Annual Guide

Hello,

The ISC along with North Cowichan are in the process of creating the 2011 Annual Guide, which is a directory for programs, facility schedules, parks guides, rental information, contacts and more.

This guide will be released February 25 2011 and be delivered to homes through the local newspaper.

If there is any department within the CVRD who would like to get their info into this guide they can contact me for information and deadlines.

Thanks,

*Denise Begley*

Youth Outreach Programmer

CVRD

Office: 250-746-0417

Cell: 250-710-0667

[dbegley@cvrd.bc.ca](mailto:dbegley@cvrd.bc.ca)

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Cowichan Valley Regional District Environment Commission

Land Subcommittee Report – Recommended Targets and Actions  
December, 2010

**Securing our Wealth**

Wisely, the CVRD Corporate Strategic Plan adopted earlier this year identifies "Sustainable Land Use" as its number one goal, followed immediately by "A Healthy Environment." These goals recognize that our wealth in the Cowichan flows from nature, in ways both obvious and not.

Both before and after European contact, First Nations in this region prospered on the bounty of salmon and other resources drawn from the environment. Historically and into the present, our living forests generated jobs and industrial activity. In the new century, our verdant landscape attracts both tourist dollars and investment from new settlers.

Other ecological services that support our wealth are less apparent but no less essential. The capacity of upland forests to absorb precipitation is a dominant factor in reducing (or raising) the risk of costly and dangerous downstream flooding. How well landscape surfaces permit rainwater to permeate the ground and refill an aquifer determines whether wells can be relied on to serve our homes and communities. Beds of eelgrass in the Cowichan estuary, scarcely seen from shore, supply the nursery stock of small creatures that support commercial fishing at the top of the marine food chain. And in the emerging markets for renewable energy and the recapture of excess carbon from the atmosphere, the big trees that cover two-thirds of the CVRD are enviable productive assets.

Viewed on a global scale the human economy, after millennia of expansion in a context of nature surplus, has transitioned into an irrevocable context of nature scarcity. As confirmed by the Millennium Ecosystem Assessment and numerous other authorities, the human economic demand on nature—that is, on productive living ecosystem services—exceeds supply. In this new world of permanent nature-scarcity, the Cowichan's highly productive ecosystems constitute economic assets of great and increasing value.

The quality of those assets however, depends entirely on their health, and on our ability to maintain this health in the future. The 2010 State of the CVRD Environment Report inventoried 80 indicators of our environmental assets' health. It found that virtually all are on negative

trends. The region is losing rare ecosystems, eelgrass beds are retreating, and the diverse species structure that provides resilience to ecosystems is fraying and eroding.

### **A natural wealth management strategy for the CVRD**

In respect of its mandate to provide guidance to the CVRD Board on achieving sustainable prosperity in the Cowichan region, your Environment Commission has therefore developed the recommendations presented below. These recommendations are designed to arrest and reverse the decline in ecosystem services now draining our natural wealth account, and to protect these assets as the foundation of our region's future.

Our developed recommendations fall in three broad categories:

1. assessment of regional carrying capacity and cumulative effects of human land use;
2. protective "targets" for land-based indicators; and
3. immediate actions for regional improvement and achievement of targets.

Recommendations are based on consideration of the context described above, and on specific information contained in the CVRD's SoE 2010.

### **Recommendation #1 – Assess Regional Carrying Capacity and Cumulative Effects**

We know that our continued existence and prosperity rely not only on a functional environment around us, but on our thoughtful use of the land, goods and services that our environment provides. This means that we must balance our activities and the benefits they generate with the continued ability of our regional environment to provide a healthy and resilient foundation for these activities. We therefore need tools to help us quantify the economic and ecologic costs and benefits of our actions, and the ecological "carrying capacities" of our region, so that we can evaluate our land-use decisions with respect to these costs, benefits and capacities.

**The CVRD Environment Commission recommends that the CVRD and partner organizations conduct a structured evaluation of regional environmental carrying capacities, and the cumulative effects of human activities on the ecosystem goods and services in the CVRD, including current effects and a range of plausible future effects.** This recommended assessment would be referenced to the range of pre-industrial

environmental “baseline” conditions, and would include explicit (and transparent, quantified, and defensible) evaluation of the environmental and economic “trade-off” decisions that we are likely to face in the near future in the CVRD. This process would support identification of future environmental and economic goals for the region, and a range of strategies (e.g., zoning, protection, focused development, best practices, restoration) to achieve these goals.

## **Recommendation #2 – Set Protective Targets for Land-Based Indicators**

As work proceeds in detail to balance economic and environmental needs and develop strategic targets for sustainability, the 2010 SoE makes it clear that for long-term environmental health, policy change must be initiated now. We recommend that the CVRD adopt targets for the maintenance of ecosystem function and services, based on data included in the CVRD report, and on the “precautionary principle”<sup>1</sup>:

**Issue:** We know that as our human footprint expands unmanaged across the landbase, so does the risk of loss of ecological integrity and function on that landbase. Correspondingly, as we manage our activities to preserve ecosystem function, the risk to ecological integrity declines, and our ability to support our future prosperity grows. Table 1 illustrates this concept of land management and ecological risk, showing information on levels of landbase protection and attendant risk from a science review of conservation planning and target-setting for eastern Vancouver Island.

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<sup>1</sup> Principle #15 of the Rio Declaration on Environment and Development states: “In order to protect the environment, the precautionary approach shall be widely applied.... Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.” <http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163>

**Table 1. Estimated ranges of protection associated with different risk and certainty levels. Inferred from review of thresholds (Price et al. 2007) and hypotheses about uncertainty (from Holt, 2007).**

Range of habitat protection	Estimated maximum risk level	How much certainty?
70% plus	Low	High
60% - 70%	Low – Moderate	Moderate
50% - 60	Moderate	Moderate – Low
40% - 50%	Moderate	Moderate – Low
30% - 40%	Moderate - High	Moderate – Low
<30%	High	High

Currently, our level of habitat protection in the CVRD is very low, totaling less than 8% across the region. Only the wettest Coastal Western Hemlock (CWH) forests are above the “high-risk” 30% threshold, due to their inclusion in Pacific Rim National Park Reserve. Overall, our human footprint, including forest harvesting, covers 75% of the region.

**Recommendation:**

**The CVRD develop and adopt targets for maintenance of ecosystem function and services across the CVRD land base.**

The CVRD Environment Commission has reviewed available information, and has developed recommendations for specific targets (Attachment A). The Environment Commission acknowledges that these targets need to be refined and supported, and that managers need to understand the consequences both of adopting these targets, and of not adopting these targets. Therefore, the above recommendation is presented as two specific recommendations for immediate action:

- 1. The CVRD Board direct CVRD staff to conduct an analysis and impact statement for adoption of the attached targets, and report back to the CVRD Board and Environment Commission. This activity should be identified in the 2011 CVRD work plan, with corresponding budget allocated; and**
- 2. The CVRD Environment Commission and Economic Development Cowichan form a sub-committee to work together to explore the implications and consequences of adoption of the attached targets.**



### **Recommendation #3 – Immediate and Mid-Term Actions**

**Immediate** – identified opportunities or “low-hanging” fruit to improve indicator status, public perspectives and knowledge, and to progress towards targets:

- **Re-zoning to conservation designation of all identified Sensitive Ecosystems** (see SoE 2010, McPhee et al. 2000, and AXYS Environmental Consulting Ltd., 2005) in the CVRD – examples include the Koksilah “Big Trees” area, Eagle Heights, and the Chemainus “Balds”.
- **Develop a conservation/restoration strategy for Garry oak and associated ecosystems to meet targets for conservation and old forest contained in this report** – this represents a starting point, as this process will have to be conducted for multiple ecosystems.
- **Undertake small-scale environmental modification projects of CVRD facilities** – Attachment B of this document presents a vision and example for environmental drainage modification of the Kerry Park parking. Such projects are intended to both reduce the ecological footprint of these facilities and to provide demonstrations of simple, ecologically appropriate ways of changing current practices.

**Mid-Term** – during development of this report, we recognized that many of the recommended actions and targets can only be implemented and achieved through collaboration with various industrial and governmental partners. Of particular importance in the CVRD, where 80% of the land base is in forest cover, is the presence of industrial private forest landholders/licensees. **We recommend that the CVRD begin and advance a collaborative process to address land-use and potential opportunities/constraints on public/Crown and private forest lands in the region.**

## References

- AXYS Environmental Consulting Ltd., 2005. Redigitizing of Sensitive Ecosystems Inventory polygons to exclude disturbed areas – summary report. Prepared for the Canadian Wildlife Service, Delta, B.C.
- Holt, R.F. 2007. Conservation Planning and Targets for the Coastal Douglas-fir Ecosystem. A Science Review and Preliminary Approach. Prepared for ILMB, Nanaimo. Available at [www.veridianecological.ca](http://www.veridianecological.ca)
- McPhee, M., P.Ward, J. Kirkby, L.Wolfe, N. Page, K. Dunster, N. K. Dawe and I. Nykwist. 2000. Sensitive Ecosystems Inventory: East Vancouver Island and Gulf Islands, 1993 - 1997. Volume 2: Conservation Manual. Technical Report Series No. 345, Canadian Wildlife Service, Pacific and Yukon Region, British Columbia.

**ATTACHMENT A**

**CVRD ENVIRONMENT COMMISSION**

**RECOMMENDED TARGETS FOR MAINTENANCE OF ECOSYSTEM  
FUNCTION AND SERVICES IN THE CVRD**

The following targets represent the best estimate of the CVRD Environment Commission on targets necessary to maintain and conserve ecosystem function and services in the CVRD, and thus to preserve the foundation of our prosperity in the region. These targets are based on a review of available information, including the 2010 CVRD SoE report, and conservation strategies developed for southeastern Vancouver Island. We believe that work should be conducted to refine these targets, but also believe that the targets below represent realistic values for their stated objectives. The CVRD Board should be aware that refinement of these targets may change the values set out below, but not likely by much, and that refinement may indicate the need for higher or lower values.

### **Recommended Targets:**

#### **A. Protection of Lands**

**Based on Table 1, above, manage human land-use activities to achieve representative “conservation-focused” lands, including:**

- **A minimum of 50% of each biogeoclimatic zone/subzone (e.g., all remaining Coastal Douglas-Fir [CDF] not under permanent agricultural and residential conversion).**
- **A minimum of 70% of the historic extent of listed Sensitive Ecosystems (e.g., 100% of all current intact Sensitive Ecosystems)<sup>2</sup>.**
- **A minimum of 70% of the historic extent of listed ecological communities at risk, prioritizing “Red-Listed” communities.**

“Conservation-focused” lands would be defined as lands which are managed with the primary goal of maintenance of ecological integrity, and would likely include a mixture of “protected” and “restricted-use” zones. Only activities consistent with the priority goal (e.g. non-motorized recreation, limited motorized corridors in protected areas; human activities that approximate natural disturbance regimes in the “restricted-use” zones) would be permitted on these lands, in order to enable their primary purpose of ecological maintenance.<sup>3</sup>

A more detailed suggestion for achieving these targets would be to secure a minimum of 30% of each biogeoclimatic zone/subzone in permanent, legislatively protected areas, with the remaining minimum 20% in “restricted-use” zoning, where human activities

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<sup>2</sup> Note that the “Older Forest” Sensitive Ecosystem is addressed more appropriately in Section B, below.

must approximate natural disturbance regimes – these activities could likely include some types of selective forest harvest (see below). For Sensitive Ecosystems and at-risk communities, the target for permanent legislative protection would be higher (e.g., 60%), with the remaining area in “restricted-use” zones.

## B. Protection of Old Forest

**Issue:** We know that “old forest” (defined in the SoE 2010 and in this document as intact mature forest with dominant/co-dominant tree ages of >140 years) provides important habitat to many wildlife species (e.g., cavity-nesting birds, Roosevelt elk), as well as providing critical ecosystem functions such as hydrologic attenuation. We also know that historic levels of old forest in our region would have been approximately 50% in the Coastal Douglas-Fir zone, and 70-95% in the wetter Coastal Western Hemlock forests. Today, the proportion of old forest is above 60% in the western and upper-elevation parts of the region, but below 25% in all other zones, including <1% in the Coastal Douglas-Fir zone, indicating very poor forest condition today for the majority of our forested ecosystems.

If we combine the range of protection targets presented in Table 1 with knowledge of typical forest age distributions, we can generate targets for old forest. An example of this approach for the Coastal Douglas-Fir zone is presented in Table 2, where the yellow highlighted row shows targets for a “low-risk” (70%) level of protection for our definition of old forest (>140 years). A similar approach can be applied to the wetter forests in the region.

**Table 2. Cumulative targets for forests of different ages. This approach helps to identify which parts of the landscape require additional effort or restoration in order to meet a low-risk target (from Holt, 2007).**

Age of forest	Estimated proportion of landbase	For example, using a target (at 70%) – low risk
>250 years	29%	20%
>200 years	37%	26%
>140 years	50%	35%
>80 years	67%	45%

If we wish to maintain the ecological integrity of our region’s forest ecosystems, we must protect existing old forests, and develop

strategies to restore levels of those ecosystems that are currently below our target protection thresholds.

**Recommendation:**

**Set old-forest retention targets of:**

- **a minimum of 35% of the CDF and CWHxm zones/subzones; and**
- **a minimum of 50% of all wetter zones.**

**It is further recommended that harvest be deferred on all intact old forest stands in the region until clear strategies are in place to secure the above targets for old-forest retention.**

Note that the target metrics are intended to be calculated on the total historic forest range, not on remaining forest area. As an example, there are approximately 40,000 ha in the Coastal Douglas-Fir zone within the CVRD. Half of these have already been “permanently converted” to agricultural/residential/urban uses. Recommendation 2A sets a target of 50%, or 20,000 ha, for conservation focus, which effectively means achieving conservation/retention of all non-converted lands. Recommendation 2B sets an old forest retention goal of 35%, or 14,000 ha, which is 35% of the entire CDF land base, but would be 70% of the conservation-focused area.

These targets can currently be met for the wetter and high-elevation zones/subzones in the region, which comprise approximately 30% of the regional landbase. All other zones/subzones would require active management and restoration to reach these targets.

**ATTACHMENT B – PARKING-LOT “GREENING” EXAMPLE**

## SOME SIMPLE IDEAS FOR “GREENING” CVRD PARKING LOTS KERRY PARK ARENA EXAMPLE

### PURPOSE AND INTRODUCTION

There are 2 main purposes for modifying the parking lot drainage as suggested below:

1. To reduce the ecological footprint of these facilities; and
2. To demonstrate simple, ecologically appropriate ways of modifying existing paved surfaces to reduce the ecological impact of these facilities.

Paved surfaces modify normal hydrologic processes by transferring rainfall directly to the storm-water drainage system rather than allowing it to infiltrate the soil and recharge groundwater systems. In urban areas this causes unintended consequences on local streams and watercourses (Photograph 1).



**Photograph 1.** Askew Creek in Chemainus has experienced excessive bank erosion due to increases in peak flow associated with paving in the watershed above.

Paved surfaces collect pollutants that without treatment enter our watercourses, our estuaries and eventually our food chains. Providing simple, natural treatment facilities can significantly reduce pollutant loading while creating habitat for a diversity of organisms.



The following example from the Kerry Park Arena parking lot has the added advantage of addressing pollutants that might arise from the recycling bins in the parking lot.

#### KERRY PARK EXAMPLE

One corner of the Kerry Park parking lot drains directly to Shawnigan Creek (Photograph 2). The curbed parking lot edges could be made into vegetated swales while a rain garden could be constructed in the corner of the parking lot with the overflow going to Shawnigan Creek.



**Photograph 2.** Part of the Kerry Park Arena parking lot drains directly to Shawnigan Creek. Construction of vegetated swales leading to a rain garden would be a simple way of treating parking lot drainage.

Vegetated swales could be constructed along the curbed edges of the parking lot to provide the initial treatment of drainage water. They could be about 1.5 m wide and 0.5 m deep with sloping sides. The sides and bottom should be loosened to encourage infiltration and groundwater recharge. Porous “no post” barriers or large old logs (former boom logs) could be used to prevent parking lot users from driving into the swales.

The rain garden could consist of a small basin with an oil trapping outlet (underflow system) in case of a significant oil spill in the parking lot. The basin could be oval shaped 4 or 5 m in length and 3 or 4 m in width. As with the swales, the garden should be about 0.5 m deep with the bottom and sides loosened to allow infiltration. The outlet should be situated to retain 20 to 25 cm of water in the garden at all times,

Emergent aquatic species (Typha, Carex, Sagittaria, etc.) can be transplanted as sods from appropriate donor sites such as roadside ditches where maintenance activities will remove these plants in any case. Planting at a density of 0.5 m spacing will be adequate as many of these species spread by creeping rhizomes, they will quickly fill the available space. Maintenance should not be needed on the swales or garden for many years, although once the vegetation is well established, these areas can act as sources for transplants to new sites.

#### INFORMATION DISPLAYS

Information about the swales and rain gardens could be provided on signs and with pamphlets. This is an opportunity to provide information on green initiatives being undertaken by the CVRD in a location that will be seen by many.

#### OTHER CVRD SITES

There are a variety of CVRD operated parking lots throughout the region. Vegetated swales and rain gardens could be established at many of these. Specific designs would be needed to address the geometry of the site being considered, although the general dimensions presented in the Kerry Park example could be used in most cases.



Environment Commission Meeting  
January 20, 2011

**DATE:** January 13, 2011  
**FROM:** Chris Wood  
**SUBJECT:** Sub-committee Report for Communications

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**Recommendation:**

- 1) that the Environment Commission fund and organize a video-creation contest among CVRD high and middle-school students; see attachment ('Choices' video contest) for concept overview.
- 2) that at the anticipated joint meeting in February of the Economic Development and Environment Commission, the Environment Commission invite the Ec-Dev Commission to co-create a joint sub-committee to develop common language for presenting and pursuing the sustainability and sustainable development agendas.

**Purpose:**

- Rec. 1) To draw wider public attention, through parents and teachers, to the need for more sustainable settlement patterns in the region.
- Rec. 2) a: To minimize friction and push-back over economic implications of addressing settlement extension; b: to align Ec-Dev and EC messages on sustainable prosperity and community well being to the greatest possible extent.

**Financial Implications:**

**Rec. 1) [PROVISIONAL] \$15,000** from EC 2011 communications budget for materials preparation, providing suitable prize, possible outside consulting.

**Rec. 2) None**

**Background Discussion:**

- Rec. 1)** this recommendation follows on earlier EC and communications working group consensus that,
- a: the most important environmental message to convey in 2011 is the urgency of addressing our sprawl footprint,

b: schools and youth are a potentially receptive audience, with high potential leverage in carrying the message home and out into their peer community,

c: engaging students in a contest offers the potential to leverage a small to modest cash and time investment into very large community impact.

Rec. 2) Much discussion at the level of the EC as a whole and at its communications sub-committee has centered on the potential resistance to the sustainability message from commercial interests of various sorts. At the same time, the Ec-Dev Commission is actively addressing the same issue in its Sustainable Development Strategy. The view of your communications sub-committee is that language to address the first concern is most likely to emerge in common dialogue with the commission explicitly charged with economic development.

**How is this recommendation relevant to the environment commission's goals and how does it link with desired outcomes?**

**Rec. 1 and 2)** The proposed contest and enhanced messaging would widen awareness of the environmental choices facing the CVRD among citizens at large, supporting a more fruitful and informed discussion at the Board level, and helping to build consensus around solutions for reversing the negative environmental trends observed in the 2010 SoE.

Submitted by,  
Chris Wood

*Commission Member for Communications Subcommittee*

Jan. 2, 2011: 'Choices' video contest idea

Goal: Engage and leverage CVRD middle and high schools in spreading widely, and to audiences that may not follow 'issues' in the media, the message that we need to grow differently so tomorrow's graduates can enjoy (at least) the quality of life their parents do today.

Essence: raise/budget a suitable prize and then sponsor a contest for school clubs to create YouTube videos that must include one or more factoid on sprawl from the SoE, and in some way convey the message that we need to focus our living space (residential and urban footprint) and leave more for nature.

Advantage: engage students directly, and leverage much wider-ranging impact among parents, teachers and local news media.

A provisional model:

The ultimate prize is an item of some useful significance to the winning school. This could perhaps be leveraged from a community sponsor: eg some computer gear? Smaller runner-up prizes.

Open to every CVRD middle and high school (including privates).

The objective for each school: create a YouTube-type video of under 3 minutes, conveying what uncontrolled sprawl threatens in the CVRD, and how tighter communities are the solution.

Each class or club enrolled gets an info pack drawn from the SoE and 12 Big Ideas. Each entry must include at least 1 factoid about sprawl's negative impact from a set list we provide drawn from the SoE. Each must also somehow convey the idea that we need to pull together, literally, to pull through into a green and prosperous future.

Entries must be submitted by a certain date (end of this spring semester?). On that date, each entry is post to a YouTube account page we create.

The winner(s) are determined by a combination of juried quality and YouTube hits. The last, the hit factor, is what will spread the ripple effect out into the community, as clubs and schools hopefully work to boost their video's hits.