



In this issue

How Will You Lead the Way? (page 3)

Ideas for Leading the Way (page 8)

Community Group Leads the Way (page 10)

Electric Vehicle Charge Stations (page 12)

Volunteering in Cowichan (page 13)

Twelve months. Twelve big ideas for a strong, resilient community.



Introduction from the **CVRD** **Environment Commission**



Our Region is blessed with incredible natural assets: water to drink, air to breathe, soil to grow food, and a rich and varied landscape. Properly protected, our ecosystems provide the raw materials for an enviable quality of life. As members of the CVRD's Environment Commission, it's our job to keep an eye on which assets are threatened, or in need of repair, and to develop advice for the CVRD Board so that our Region can lead the way in the responsible stewardship of our natural environment. But we also know that real change only happens when we all work together.

This newsletter tells the stories of the many people of our Region and the myriad ways that our communities are working toward a better future. We hope it will also weave and strengthen the social ties that will lead to even more positive change. We hope you enjoy these stories and find helpful information and inspiration along the way.

Janna Jorgensen
Environment Commission



What's in a Commission

We believe we must start right away to strengthen our environment and community by growing in smart ways, repair the damage we have done to our natural assets and preserve them for future generations. And we believe that local government must lead the way in this effort.

We are the Environment Commission, a group of 15 community members and politicians appointed by the Cowichan Valley Regional District (CVRD) Board. We were formed in April 2007 by the CVRD to provide recommendations to the Board on a variety of environmental issues and concerns in an integrated, systematic way across the region. Volunteer members sit on the Commission for a two-year term which can be renewed.

Our mandate is to provide advice on policy, regulations and issues related to the environment and recommend to the CVRD Board adaptive strategies to meet the present and future. We also serve an important community function by monitoring three important plans – our solid waste, central sewage system and our drinking water protection plans.

How will you “LEAD THE WAY” in 2014?

I once read that “it is not just our environment that is in need of repair, but our relationship to the environment that also needs healing.” What an appropriate thought for the New Year as we look ahead and make resolutions for change and improvement. The “Big Idea” topic of this month’s newsletter is “leading the way.” Perhaps being a better environmental steward is part of your commitment this year? If so, one of the most important questions we must ask ourselves is how we can personally and collectively “lead the way” in healing our relationship with the environment.

While there are no easy answers, let’s start with traditional conceptualizations of leadership. Often leadership has been associated with the notion of “winning,” as with

competitions, or an “identity,” as with formal titles, ranks or roles. However, leadership in the workplace and society is an evolving and dimensional concept. Leadership can simultaneously refer to an act, a state of being, and a style. This new language of leadership signals that we are all leaders in some way and at some times. That is good news when it comes to our relationship with the environment and our individual and collective imperatives related to our natural environment. We can now “see” ourselves as an integral part of the process. More importantly, we must accept that we can no longer absent ourselves from the role of leadership.

Another important component of leadership speaks about



...one of the most important questions we must ask ourselves is how we can personally and collectively “lead the way” in healing our relationship with the environment.

change. Sometimes change is led by others. For instance, look around you and you will find many residents, children, politicians, sectors, groups, organizations and governments “leading the way.” They do this in a variety of ways along the proverbial “carrot and the stick” spectrum of environmental stewardship – in other words, adopting, inspiring and requiring behavioural change. Each one of those examples is an act of leading change.

However, sometimes the change called for is internal – in other words, exploring and changing our knowledge, attitudes, beliefs and behaviours. This part of change is usually easier said than done. As a mentor of mine once said, “Generally we humans are invigorated by the prospect of change and improvement. But you know what we really don’t like? Changing!” In our role as leaders this calls for asking ourselves the tough questions that get at the heart of what we are willing to “give up” in pursuit of our higher ideals and collective imperatives. While I have a long way to go in my life before I can personally say that I am living on this planet as a responsible steward, I do thank those leaders (who I often find in the most unexpected places) for inspiring and yes, sometimes even requiring me, to change.

Leading the Way is something that the CVRD’s Environment Commission (EC) takes seriously. In our Region, the EC’s role is to provide policy-level advice to the CVRD Board on our Region’s most pressing environmental concerns. However, one of our greatest challenges is that the necessary information, knowledge and wisdom are collectively held, and that can even apply to the important evidence-based data that our decisions often rely upon. In other words, the act of gathering information, making sense of it, and developing proposed solutions requires more than expertise. It requires collaboration.

Indeed, some of our Region’s and planet’s most promising solutions require the meshing resources and capacities that span individual, organizational and governmental boundaries. These are innovative and extraordinary solutions that cannot be easily controlled using traditional “institutional” channels, but rather rely on a dense web of interconnected relationships. This is why our partnerships and networks are more important than ever. In terms of leadership, what I am describing is called “collaborative leadership.”

Of course collaboration is nothing new – we humans have



been collaborating since the dawn of time. Collaborative leadership brings in the idea that we all share in the responsibility for ensuring the outcomes we collectively desire. Furthermore, collaborative leadership embodies how we consciously and strategically agree to commit to the attendant roles and processes. These can be somewhat difficult concepts that require that we break out of the “us and them” mentalities that keep rigid boundaries that no longer serve us in place. That can be difficult for highly structured institutions, governments, sectors and groups. However, this can also be hard for individuals who are not associated with such entities. The power dynamic in collaborative leadership is more diffuse: We all become accountable. This means that we can no longer excuse ourselves by laying blame solely at the feet of our formally designated leaders, institutions, governments, sectors and groups.

In addition to the current ways leadership is happening, I believe more collaborative leadership is urgently required on the “big issues” that impact, and are impacted by the natural environment. Nevertheless, whether we create stronger formal structures to support this approach what I do know is this: Leadership will still happen just as it always

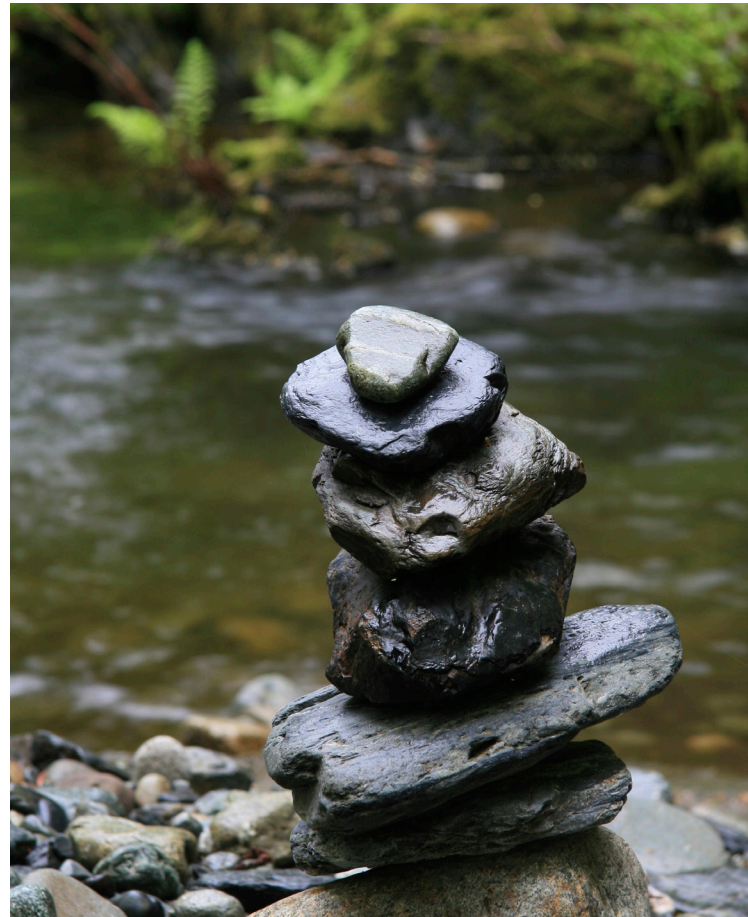
has. That is not to imply complacency will suffice, but I trust there will be those formal and informal leaders who will inspire change in others. They will interpret, negotiate, span and recreate boundaries among individuals, organizations, groups and governments to give rise to decisions that will protect, enhance and restore our environment.

If you are reading this newsletter you are likely one of the leaders I describe. Marilyn Hamilton (www.integralcity.com) refers to you as “meshworkers.” I hope this edition has inspired you to connect with others like you in our Region.

We also invite you to let your knowledge, beliefs, attitudes and actions serve to motivate and inspire others to “mesh up the lead!” Please consider leading the way this year by contributing your story of inspiration and success by sending us an email at: 12things@12things.ca.

Janna Jorgensen
Environment Commission

This new language of leadership signals that we are all leaders in some way and at some times.



12 BIG ideas

If we carry on thinking for today and not thinking about tomorrow, we run the risk of losing some of our natural assets forever. This is why we put together our list of big ideas for making our region more sustainable. This list is made up of small, medium and large decisions we need to make and actions we need to take to build a strong, sustainable Co-

wichan. Here are our 12 big ideas on which to build a sustainability plan for the Cowichan region, and some examples of what our big ideas would look like 'on the ground'. Some of these things you could do personally and some we could do together as a community and through local government.

1 Lead the Way

by making real change at the personal and local government levels.

Lead the Way by making real change at the personal and local government levels. We all have role to play in creating a sustainable Cowichan, including encouraging government to embed a sustainable future in every rule and regulation and supporting them to make real changes. You can help by joining a committee, volunteering or donating toward environmental stewardship, and voicing your concerns and priorities.



2 Be Energy Smart

and conserve wherever possible.

We have to get smarter about how we generate and use energy in our region, in order to ensure that our demand does not outweigh our supply. We can do this by lowering thermostats, shutting off and unplugging electronics, switching to low energy street lights, using industrial and household waste to produce power, supporting geothermal, wind and solar projects and developing a regional energy plan.



3 Audit and Protect our Assets.

We need to figure out what we have so we know what to protect and how quickly we have to act. This means documenting and assessing things like sensitive areas, species at risk, wetlands, watercourses and air and water quality. It also means undertaking a connectivity analysis to ensure we protect and allow for species migrations.



4 Revive Biodiversity

We need to immediately start restoring and protecting valuable habitat and ecosystems. We can do this by getting rid of invasive species, allowing only low impact or restorative development (where no critical habitat is destroyed), acquiring or protecting ecologically significant tracts of land, building birdhouses to support native species, working with and supporting stewardship groups and working with forestry operators to better manage operations in concert with community values and ecology practices.

5 Eat Local

because food security matters.

We have some of the best agricultural land anywhere! Let's maximize this potential and establish food security for our region. We can do this by supporting small-scale agriculture, and our regional agriculture plan as well as developing creative support tools and mechanisms to assist local agriculture production.

6 Get Up to Speed

on the new green economy.

We need to quickly change how we do business in our region by promoting green business development (agro-forestry, alternative energy, eco-tourism), consuming less and applying full cost accounting to determine the true costs of products and services.



7 Don't Hog

the water so there is enough for all, and replenish our groundwater.

We need to make sure there is enough water for everyone and everything, including other species and ecosystems. We can do this by measuring and pricing water accordingly to ensure conservation, locating industry and development away from the aquifer's sensitive areas, using drought resistant landscaping, using low flush toilets, and encouraging 'green infrastructure' development that takes the natural water cycle and rain water into consideration.



8 Get Real

about climate change and the impact it will have on our region.

Some of the ways we can do this are: by planning for the uncertainty ahead; protecting infrastructure and communities from increased winter rains, summer drought and violent winds; and developing a comprehensive drought plan for the region.



9 Be Carbon Neutral

We can achieve carbon neutrality by doing things like ensuring our homes are as efficient as possible (and lowering our costs) increasing the efficiency of our own personal and community transportation systems (light rail, bike lanes, more buses), making recreation carbon free, and reforesting our communities and watersheds to capture carbon and create jobs.

10 Grow Up Not Out

by putting people, jobs, and transportation closer together.

We need to lower our development footprint and live in denser, more compact communities. This means doing things like enforcing urban containment boundaries (no more 'sprawl'), developing creative ways to get added natural values within this boundary (like ecosystem pockets, trees for shade and birds, rain gardens, etc.), and adopting a green building code.



11 Clear the Air

to reduce carbon emissions.

We need to immediately reduce our local carbon emissions by doing things like planting carbon fixing vegetation, upgrading wood burning stoves, reducing our reliance on fossil fuels, passing air quality bylaws, and monitoring and enforcing our air quality.



12 Get Serious

about zero waste.

We need to rethink how we handle our sewage, garbage, and other waste to make use of unused resources and minimize their impact on the environment. We can also do this by saying no to plastic, avoiding excessive packaging and exploring 'cradle to cradle' opportunities.







12 More Ideas to Lead the Way...

...Toward an Environmentally Healthy 2014

Lead the way...

...in our community

-  **1. Buy and shop local.**
Spend your hard-earned money at locally owned businesses and farms. You'll be helping to support families in our community, and contributing toward a more localized economy.
-  **2. Get up and Go!**
Walk or bike to work, school, and shopping whenever possible. It will help reduce air pollution & carbon emissions, and it's a great way to get your daily exercise.
-  **3. Reduce Waste at Work and School!**
Pack garbage-free lunches in reusable containers to reduce waste in our workplaces and schools. Set up a compost bucket in your lunch area at work or class, and take turns bringing it home every week. Lead the way by spreading the "zero waste" message to your work friends and classmates.
-  **4. Take a Hike!**
The Cowichan Valley is an area of outstanding natural beauty. Take advantage of our assets by visiting our amazing playgrounds, trails and beaches on a regular basis. Always respect your parks! Avoid bringing garbage into parks, and always stay on designated trails to reduce disturbance in natural areas.

Lead the way...

...with your home and family

-  **5. Less is Best!**
In your family, resolve to buy and use less of everything in 2014 - including water, electricity, fuel, and everyday "stuff". You can reduce waste in our region, help save our precious resources, and spend less money!
-  **6. You are what you eat!**
Fill your fridge and cupboards with natural whole foods, and buy locally raised & grown food whenever possible. Try to avoid processed foods - they are far less nutritious, use much more energy to produce & package, and create more waste. Lead the way in your kitchen by preparing whole-food meals. You will be helping create healthy eating habits for you and your family.
-  **7. Clean Green!**
Your home is your habitat! Keep it clean by using natural cleaning products, like vinegar. It's healthier for you and your family, better for the environment, and much less expensive!
-  **8. Say NO to NEW!**
If your home needs something "new" - like a piece of furniture, a set of dishes, or a good book - consider buying second hand. Most older items were built to last, and can often outlive a brand new item. Always donate your unwanted items to local thrift stores, so someone else can use them!

Lead the way...

...in your own life

✓ 9. Knowledge is King.

Take the time to learn more about what's happening in our environment. Many community groups and organizations offer workshops and presentations that focus on environmental issues. Your local recreation center will have information on signing up for a wide variety of classes and programs. We also have the privilege of an excellent source of free information available through our public library system.

✓ 10. Speak your mind!

You can speak (politely, of course) to business owners about their environmental concerns, ask questions and share your suggestions.

✓ 11. Vote with your money.

Every time you pay for an item, you are "voting" for that item. Together, we can change the types of products that are made and sold.

✓ 12. Give back!

Donate toward a local environmental initiative, or volunteer some time toward a community clean-up! There are many projects in the region that could use your help. Encourage your kids to volunteer in the community, or to set aside a small percentage of their allowance to donate to their favorite charity.



The CVRD's Environment Commission would like to sincerely thank the many individuals, families, groups, and government agencies that are already leading the way in the Cowichan Valley.

To stay informed about local environmental issues, keep reading our monthly Enewsletter, "12 Months of 12 Big Ideas"! Tell your friends to sign up! It's easy, just go to 12things.ca. In the coming year, we will be hearing more about the people and organizations that are making a difference in our region, and how you can make a difference, too!

Wishing you a happy, environmentally healthy New Year!

Priscilla Brewer
Environment Commission

Community Group Helps Lead the Way

It was an unusual request made to North Cowichan Council by a delegation from the Quamichan Watershed Stewardship Society (QWSS). While the QWSS, like many other delegations, was asking for Council's support – in this case to establish a trout refuge on the lake – it also came with an offer to give over \$15,000 in cash and equipment to the municipality to provide almost all of the capital cost needed. Council responded favourably to the request and directed staff to provide a report on how North Cowichan could assist QWSS to establish a trout refuge.

QWSS was incorporated in 2008 to address the declining health of the lake. This was vividly documented in a report prepared for Ministry of Environment in 2006 which showed that the health of the lake had been declining since 1950 and was in danger of reaching a tipping point (*A Water Quality Assessment of Quamichan Lake: A Summary of Data Collected between 1951 and 2005*. Sherri McPherson, February 2006).

In response to this a community group was formed which, with the help of experts from all three levels of government and NGOs, began to take small steps to help improve the health of the lake. These included:

- Public presentations and workshops, including hosting the B.C. Lake Stewardship Society Conference for nearly 500 people in 2010;
- Developing an access strategy to raise the lake's profile with the community. The strategy includes a map of lake access points and a plan to improve existing access. The QWSS contributed \$7,500 to a partnership with the Municipality of North Cowichan to improve two access points.
- Wetland restoration, including a \$25,000 wetland project on the Garry Oak preserve;
- Education on septic systems and promotion of sewer conversions; and
- Development of a Watershed Management Plan by professionals and community members with the support of the EcoAction Program of Environment Canada.

The Watershed Management Plan, which received a Community Planning Award from North Cowichan in 2010 had five goals intended to improve the health of the lake and the surrounding areas. There are:

1. Inspire the people of the Cowichan Valley to truly value the Quamichan Watershed.
2. Improve the Water Quality of Quamichan Lake and the watershed.
3. Ensure that the water levels of Quamichan Lake support multiple uses within the watershed.
4. Champion ecologically sustainable land use practices within the watershed.
5. Improve habitat in the watershed to support a sustainable fishery and overall biodiversity

At first glance, the annual fishing derby seems to support the first goal and, indeed, Quamichan Lake provides some of the best fishing on Southern Vancouver Island. But it actually plays an important role with Goal #2. The underlying water problem is the result of too much nutrient, in the form of phosphorous, runoff into the lake from residential development, road runoff, older farming practices, and from the build-up that has occurred over the last sixty years on the bottom of the lake. One of the ways to reduce the input of nutrients is the restoration of riparian areas and the establishment of wetlands. This has been done at Sterling Park and on the Garry Oak Preserve where QWSS partnered with the Nature Conservancy of Canada and funding was provided through grants from EcoAction, the Vancouver Foundation, and the Public Conservation Assistance Fund. QWSS has also partnered with the Cowichan Land Trust, North Cowichan and developers to create conservation covenants on new lake front developments.

Fishing for trout, while providing recreation and a fresh supply of locally grown food also has the surprising benefit of reducing the amount of phosphorous in the lake. Current estimates are that Quamichan gets 75 kg of phosphorus entering the lake in a year (*Phosphorus Loading Study for Quamichan Lake*, Meara Crawford, Environmental Protection Division, Ministry of Environment, January 2008). The



Freshwater Hatchery has added approximately 65,500 trout since 2010 and these trout sequester an estimated 300 kg of phosphorous. Since the current rate of fishing is relatively low (despite the lake providing excellent angling) only about 20 kg of phosphorous is removed per year. Simply by increasing the amount of fishing to that of other, more popular, lakes the amount removed could be dramatically increased.

For this reason, the delegation that met with North Cowichan Council proposed establishing a trout refuge. At the end of the summer there is both an increase in water temperatures and an algae die-off (from earlier algae growth caused by too much nutrient) which consumes oxygen. Trout and their food chain (crayfish, protozoa daphnia, etc.) are caught between low oxygen and high temperature water, resulting in unsightly fish kills and a return of the nutrient to the lake.

To combat this, QWSS proposed a trout refuge with fine

bubble aeration which adds oxygen without mixing the water and cools the water as bubbles expand and rise to the surface. This initiative has the support of the DFO, the B.C. Ministry of Forests, Lands and Natural Resources, Timber-West, which owns the bottom of the lake, the Rotary Club of Duncan, which has offered to build a shed to house the compressor, and the Woodmere Strata Council in front of whose property the refuge would be established. The delegation requested North Cowichan to take on the responsibility for the electrical connection and annual operation and maintenance and to ensure that the operation was covered by its existing liability coverage.

From small beginnings, QWSS has demonstrated how community groups can work effectively with local government to produce benefits for the whole community and truly "lead the way".

*Roger Hart
Chair of the Quamichan Watershed Stewardship Society*

Get Charged up!

Electric Vehicle Charge Stations in Cowichan

The Cowichan Valley Regional District has been Leading the Way by installing electric vehicle charge stations at all CVRD recreation centres, thanks to several successful grant applications. Charging stations have been installed at the Kerry Park Recreation Centre, the Cowichan Lake Sports Arena, the Shawnigan Lake Community Centre and the Island Savings Centre. These stations include Point of Sale (POS) equipment which allows drivers to pay with their credit cards. The POS systems also broadcast the location of the charge station to electric vehicle motorists.

Most of the CVRD's electric vehicle charge stations are Level 2 (240 Volt) units, which can fully charge a vehicle in six to eight hours. The CVRD is also host to a Level 3 DC fast charge station at the Island Savings Centre as part of a BC Hydro grant project. This station can provide an 80% charge in less than 30 minutes. The station is one of thirteen Level 3 stations being installed across the province to help build an electric vehicle charging network. On southern Vancouver Island, there are also stations at Uptown Place in Victoria and the parkade below the Coast Bastion Hotel in Nanaimo.



Electric vehicle charge station at the Island Savings Centre

Get Involved!

Volunteering Opportunities in Cowichan

Want to help the environment? Have a few hours, a few days, a few weeks to spare? There is a great variety of things you could do – from helping out in the field, to participating at events, to important behind-the-scenes work. Whether you are a beginner or have many years of experience, volunteering can be an important and wonderful experience.

Take the time to find an organization and situation that is a good fit. Make sure you understand your own needs and expectations, so you can communicate them clearly:

- what kind(s) of work would you prefer? are you willing to do other tasks?
- your motivations and interests – what do you hope to gain from the experience?
- your location, time availability, and how long you think you can commit;
- your skills and experience, if any (if you have one, have your résumé at hand)

Thinking of involving your kids with volunteering?? We (Volunteer Cowichan) have agencies with ideal environments for kids/families to get involved. Kids are great in so many roles: gathering, digging, chattering, and serving. It's amazing how engaged they can be in simple tasks. We have many jobs adults are doing that kids could be doing, utilizing their interests and skills.

Contact us at vc@volunteercowichan.bc.ca or check us out on our Facebook page.

Georg Stratemeyer
Executive Director
Volunteer Cowichan

Volunterr Cowichan Vision:

The diverse communities living in the Cowichan region connect and cooperate to create valuable social capital for future generations.



Ladysmith Leads the Way!

In 2013, the Town of Ladysmith was named one of "Canada's Greenest Employers" for the second year in a row. The award recognizes the Town's organization-wide commitment to reducing its environmental footprint. The "Canada's Greenest Employer's Award" is part of the Canada's Top 100 Employers competition conducted by Mediacorp Canada Inc. For additional information on the survey, please visit www.canadastop100.com/environmental.



Stay Informed

Upcoming meetings

CVRD Environment Commission meetings:

Thursday, January 23, 6:00 pm

Duncan Environment Committee meetings:

Thursday, January 23, 10:00 am - 12:00 pm

Stay Tuned

In the next issue of 12/12:

Be Energy Smart





Sign up for the “12 Months of 12 Big Ideas” e-newsletter
and find more information at:

www.12things.ca

Share your feedback, email 12things@12things.ca

Volume 1, Issue 4

Editors: Roger Hart and Priscilla Brewer

Newsletter Design: Cowichan Green Community