FREE MAGAZINE

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Tread Lightly and Listen to the Land

THE FOOTPRINT PRESS

Passages from Silverdale, Mission, Abbotsford and beyond.

Message from the Editorial Committee

Tracy Lyster, Phyllis Young, Val Pack, Catherine McDonald, Bruce Klassen, Nik Cuff, Don Mair, Mike Diener
Cover photo: Silverdale Fawn, Bruce Klassen

Nature's sacred elements- earth, air, fire and water, sustain all life. We cannot exist without them. These sacred elements of life form the fundamental substrate from which we are all made.

The soil from our earth nourishes us. All of our food, crops and the animals that feed on them, ultimately come from the soil.

We are earth

We breathe the air from the moment we are born until our last moments of life and cannot live for more than a few minutes without it. The air is within us, all around us. It is continuous with others and with the environment.

We are air

We consume food and transform it into heat to fuel our metabolism and energy. Energy to move, energy to think.

We are fire

We require water every day. Our bodies are mostly made of water. Water is in each of our cells, our blood, our tissues.

We are water

But the sacred balance of nature that sustains us has been broken. Our air and water have been polluted. The precious soil has been contaminated with chemical pesticides, and fertilizers. Thousands of species are disappearing forever each year.

Despite the profound importance of the sacred elements to our very existence, we have allowed a fabrication, a false economy, to trump all decisions about how we live and how we use the land. A false economy, based largely on sprawl, where growth can have no limits. A false economy, fueled by the lie of progress and prosperity, but leaves instead a legacy of debt, waste and destruction. We have created a false god, born of the worst of human nature, greed and indifference, and reduced all that is sacred to a dollar value.

We must harness the fire within us to reverse these harms and find a way to regain our life-giving balance with the sacred elements. We must plan not just for today, but also for the next generations, and recognize that a world without owls, frogs, snails, or salmon diminishes us all. Only then, will the sacred life giving abundance of nature, which sustains us all, continue to be there for our grandchildren and for their grandchildren. As we move forward, we must all learn to tread lightly.

The Deer in the Neighbourhood

Ken Macquisten D.V.M.

Few wildlife species, except perhaps bear, evoke more emotion and controversy in BC than the urban deer. As it seems with all wildlife these days, human society judges their intrinsic worth based on whether they are beneficial or harmful to human interests – we are a species that evaluates the world from very selfish perspectives.

Since there is a wide variation in how people interpret their own self-interest, it is no surprise that the controversies about what should or should not be done with deer in our communities covers a wide spectrum of attitudes.

The Columbian Black-tailed deer (Odocoileus hemionus columbianus) is the one we encounter in the Fraser Valley and along the Pacific Slope of BC. Another BC deer, the same species but different subspecies, the Mule deer (Odocoileus hemionus hemionus), lives further inland in the dry valleys and plateaus of the Southern Interior. Interestingly, it is speculated that Mule deer may have originated as a hybrid of Black-tailed deer and White-tailed deer (Odocoileus virginianus) which are found even further east.

Why are there deer in our neighborhood? Well, in most cases they were here first, and despite considerable challenges, some have chosen to stay and cope with our presence. Others have in fact been attracted to where we live.

Deer live where they can find sustenance and security. Our gardens and orchards, greenways and parks provide sources

Leucilstic deer, Abbotsford, **Cheryl Maddalozzo**

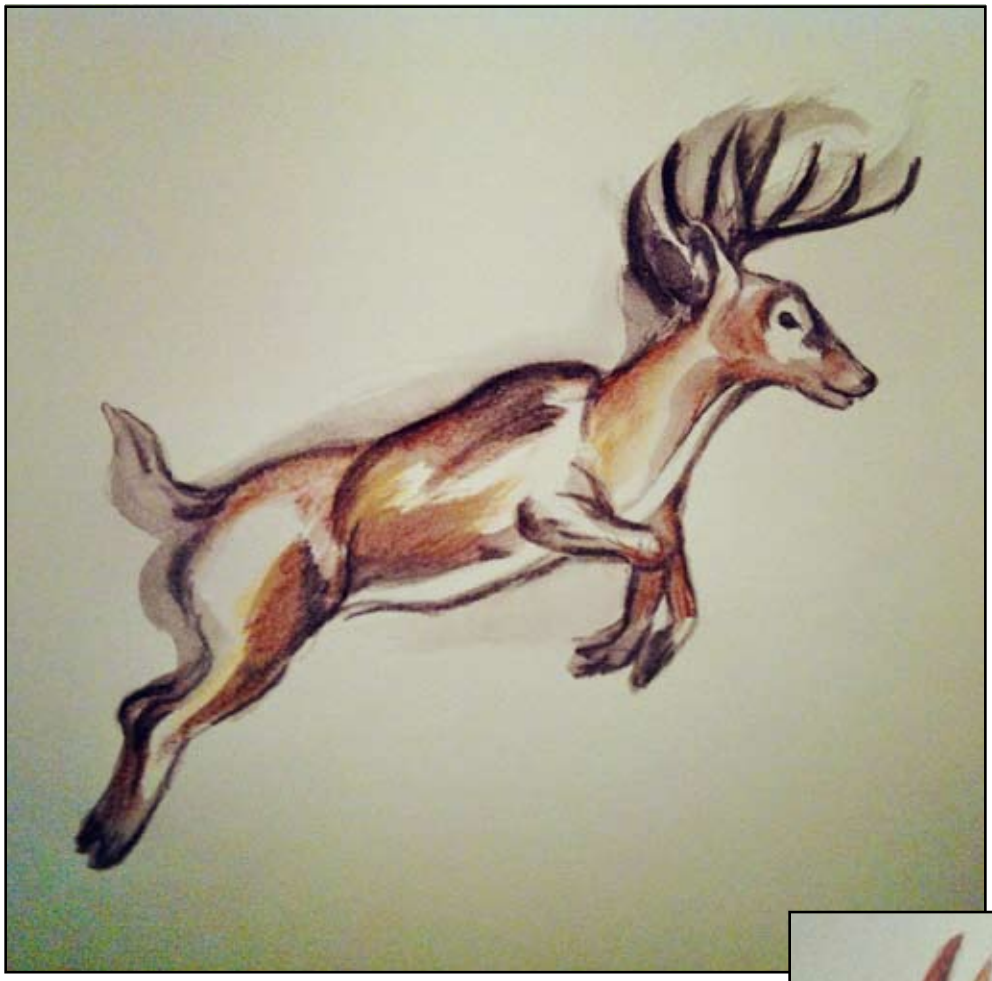
of food to these herbivores. The urban neighborhood provides a degree of protection from natural predators who may be more intimidated by human presence. Leash laws and dog control, bylaws that prohibit the discharge of firearms and, in some cases, deliberate feeding, allows the deer population to endure, and occasionally thrive, in our communities.

Many people love sharing the community with deer. They are graceful, beautiful animals that are interesting to watch and fun to report sightings of over conversations at the dinner table. Other people feel that the only good place for the deer to be is on the dinner table.

One of the characteristics that get deer in trouble in our neighborhoods is their size. They can eat 2-5 kilograms of forage per day, and vehicle collisions with deer can result in significant damage and even death. According to a Ministry of Environment BC urban ungulate conflict analysis, in a typical year in BC about 5 people are killed in wildlife vehicle collisions and a further 382 people are injured. Deer comprise about 76% of wildlife collisions provincially. What proportion of these deer in collisions are "urban deer" and what are "rural deer" is not clear.

Proponents of less deer in the community will cite deer damage to property, vehicle collisions, disease, and aggressive behavior as reasons for controlling, reducing or eliminating urban deer. These reactions to the presence of deer are motivated by the usual things that drive human action – money and fear.

It can take either a great deal of tolerance, or a great deal of money, to share the community with deer. Many communities are now advocating a little of both. Conflict reduction strategies of hazing, repellents, landscape



Deer study Paintings by **Megan Sjogren UFV**

alternatives, fencing and ungulate vehicle collision mitigation have been proposed and implemented in various communities to various degrees of success.

More aggressive strategies proposed are capture and relocation programs, capture and kill programs, controlled public or government authority hunting, and birth control through drugs, vaccines or sterilization.

Government often initiates action or not, and interprets success, based on the superficial evaluation of the number of complaints received. So, it is often how deer are perceived in the community that dictates whether complaints are lodged and action taken.

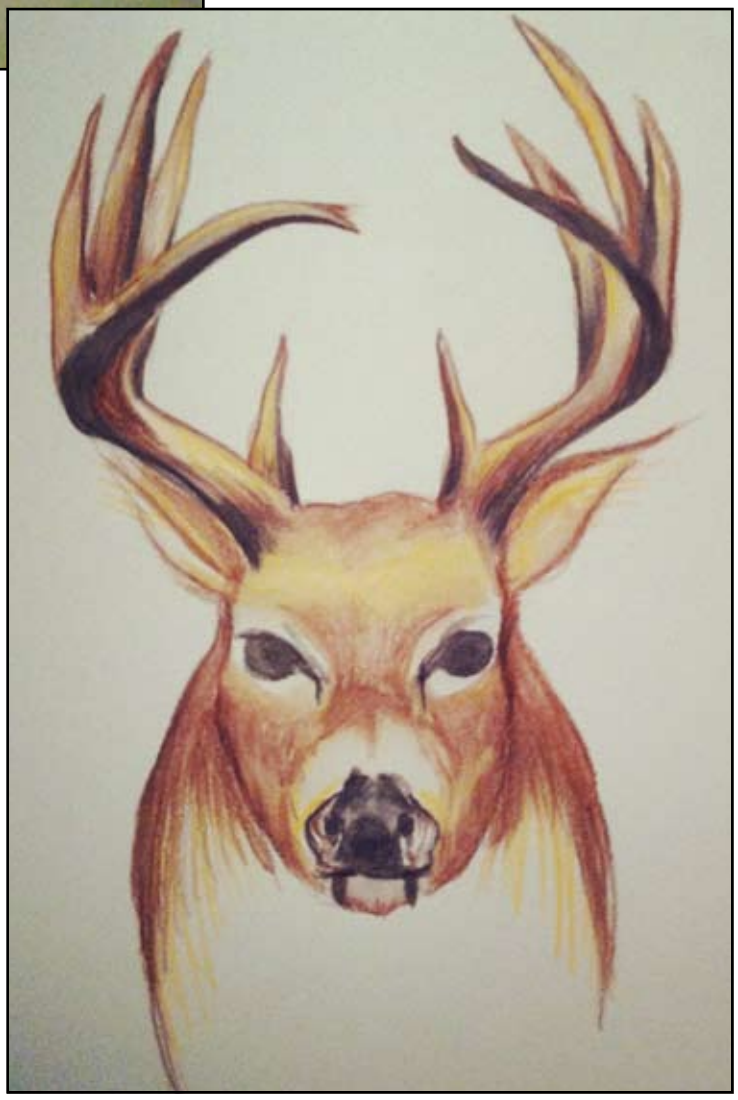
While damage to property can be measurable and real, and vehicle collisions are dangerous, what can drive some people to the breaking point in their tolerance for deer is when they fear aggressive behavior towards people or their pets. It is possible to call up Youtube videos of people being attacked by deer, usually a buck with antlers, so presumably in rut. However, the reality is it is exceedingly rare for deer to attack people, and the ones you see doing it on video are almost without exception hand raised orphan deer males that see people as competition during the rut. Now, as they say, you know the rest of the story.

For a short time of the year deer can act aggressively. Deer will react to a perceived threat to their young while the babies are in the hiding stage in the first few weeks of their life, typically in June. The rest of the year the babies follow their mothers and avoiding people at all costs is the norm. Males and females will turn on dogs in self-defense, but fleeing is the normal response there too.

Disease transmission from deer to humans is virtually a non-issue. We generally do not share the same diseases or parasites. The risk of transmission of deer ticks and subsequently Lyme disease to people is considered to be low.

What is most dangerous to urban deer is how we perceive them. Whether as a food item, a pest, or a beautiful enhancement to our enjoyment of life, it is my hope we make all our selfish decisions regarding the urban deer's fate on sound facts, and not imagined threats.

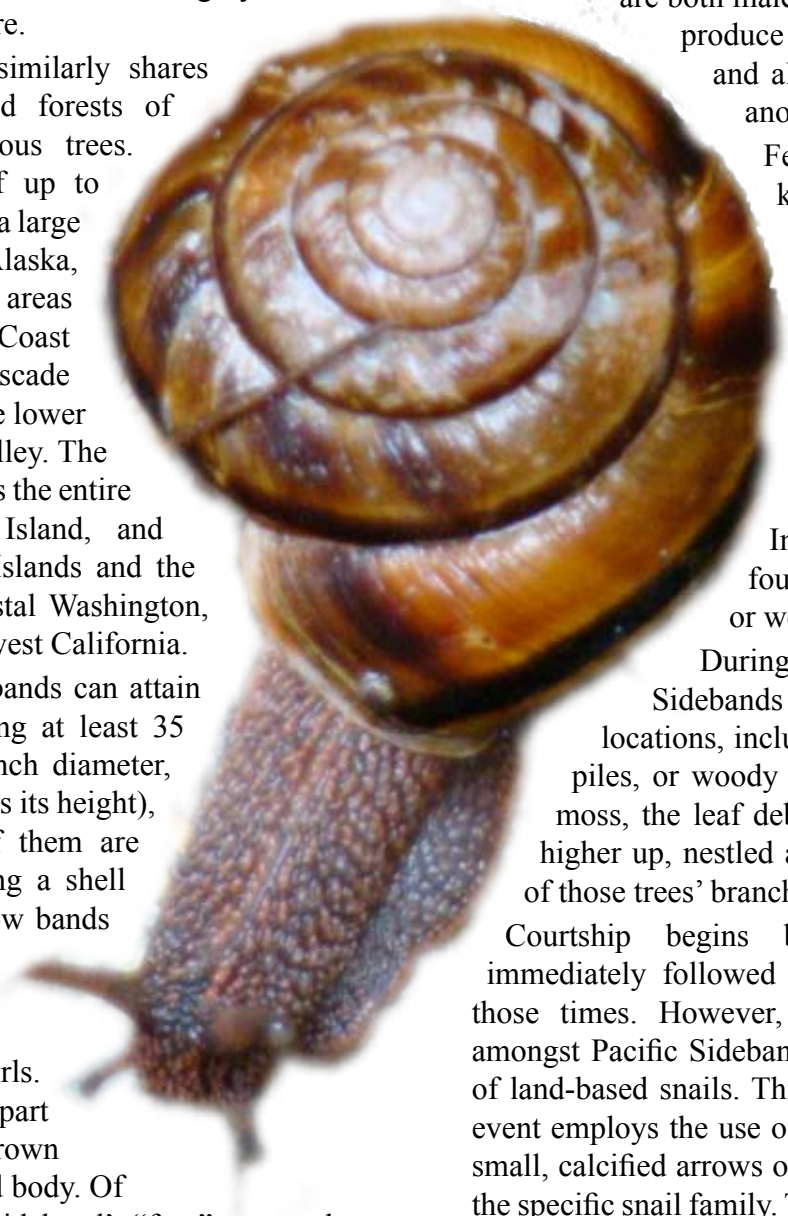
Dr. Ken Macquisten
Abbotsford



Getting to know our local Species at Risk: Pacific Sideband snails

Val Pack

Large, and similarly sized to its cousin, the Oregon Forestsnail, the Pacific Sideband snail, scientically known as Monadenia fidelis, is also native to British Columbia. The Pacific Sideband presently appears in the blue listed category of the BC Conservation Data Centre.



The Pacific Sideband similarly shares a preference for mixed forests of deciduous and coniferous trees. Found in elevations of up to 1220 metres, it occupies a large range, from Sitka, Alaska, and south through the areas of B.C., between the Coast Mountains east to the Cascade Mountains, including the lower reaches of the Fraser Valley. The Pacific Sideband inhabits the entire length of Vancouver Island, and is present in the Gulf Islands and the Sunshine Coast, to coastal Washington, Oregon, and into Northwest California.

The larger Pacific Sidebands can attain a shell diameter reaching at least 35 mm., (or up to a 1.5 inch diameter, and about 1.3 to 1.5 times its height), though the majority of them are smaller. Typically having a shell with dark, light or yellow bands encircling the orange to reddish-burgundy brown outside area, its shell also has 6.5 to 7 whorls. The shells cover the soft part of the "pebbled" rosy-brown coloured, black speckled body. Of interest, the length of a Sideband's "foot" can reach over 2 inches.

Pacific Sidebands, considered not only the most beautiful native land snails, are also the most conspicuous snails in B. C. and share characteristics general to all terrestrial snails. On either sides of their heads, they sport two sets of tentacles, one set for seeing, and the other to aid in smelling and feeling around objects. Inside their mouths are radulas, muscular eating structures, covered by thousands of very tiny "teeth", comparative to a "rough tongue". They all have a need for moisture, and calcium requirements for healthy shell strength. Noteworthy, is the creeping, muscular flat "foot", containing an internal mucous-producing gland. The "foot" pushes the snail along, while the gland provides a slimy track to travel on. Lungs allow breathing through one opening on the bodies' right sides. All land snails are considered edible by the same predators, including birds, and poultry, beetles, snakes, turtles and toads. As with other snails, Pacific Sidebands are also hermaphrodites, that is, they are both male and female, with the ability to produce sperm and eggs, simultaneously, and also to fertilize the eggs of one another.

Feeding on a varied diet of all kinds of vegetation and fungi, the Sideband described as an energetic climber, can also be observed foraging in heights of up to 6.5 metres amongst trees. As an active snail, it is often seen emerging in open areas during Spring's latter days, through to early Summer. In the warmer weather, refuge is found beneath rock piles, and leafy or woody materials.

During the Winter months, the Sidebands choose a variety of hibernation locations, including protection under the rock piles, or woody matter, and also beneath thick moss, the leaf debris of Bigleaf Maple trees, or higher up, nestled amongst the moss, in the forks of those trees' branches.

Courtship begins between March and June, immediately followed by mating somewhere during those times. However, courtship activity is unique amongst Pacific Sideband snails, and 16 other families of land-based snails. This somewhat comical sounding event employs the use of gyposobelum or "love darts," small, calcified arrows of different shapes, according to the specific snail family. These lances are "fired" directly into the flesh of the mating partner. The sharp, mucous-covered, hormone spears, are created within individual snails, and are stored in bursa-telae, (dart sacs). Each harpoon, fairly large in comparison to the snails' size, is essential, particularly the first one fired, to enhance positive reproductive efforts.

Following mating, the Sidebands lay opaque white-coloured eggs, about 5 mm. in diameter, in soft soil. The

hatched juveniles, dispersing shortly after they emerge from their eggshells, reach maturity in 2 years, and have a lifespan of up to 6 years.

As with the Oregon Forestsnail, (see FPP issue 5, 2011), or for that matter, many snail species, the Pacific Sidebands also face many threats to their survival. These dangers, such as habitat loss, and fragmentation, (which negatively affects mating possibilities), is caused by development of all types in its range. Other described threats like recreational activities, including ATV, mountain biking, and hiking, also negatively impact forage vegetation, and cause direct mortality to the snails, and other life forms, in their paths. This loss and fragmentation, caused by the various human activities in the entire Fraser Valley including the Mission area, has devastating effects on these vulnerable members of the Gastropod family.

In Mission, a large, proposed mall and housing development bordering Wren Street and the Lougheed Highway, will cause deleterious effects to the Pacific Sideband, and sadly to all the other wildlife sharing life in the ravines. Knowledge must be widely improved about the need for respecting the value of these and other endangered species, and the impact of human activities on their continued existence.

Under the B. C. Wildlife Act, only 4 (0.26%) of our province's endangered species, are protected! It is critical that immediate action is taken to protect the species that remain. We must develop a principle over profit attitude, and practice good stewardship towards our natural environment.

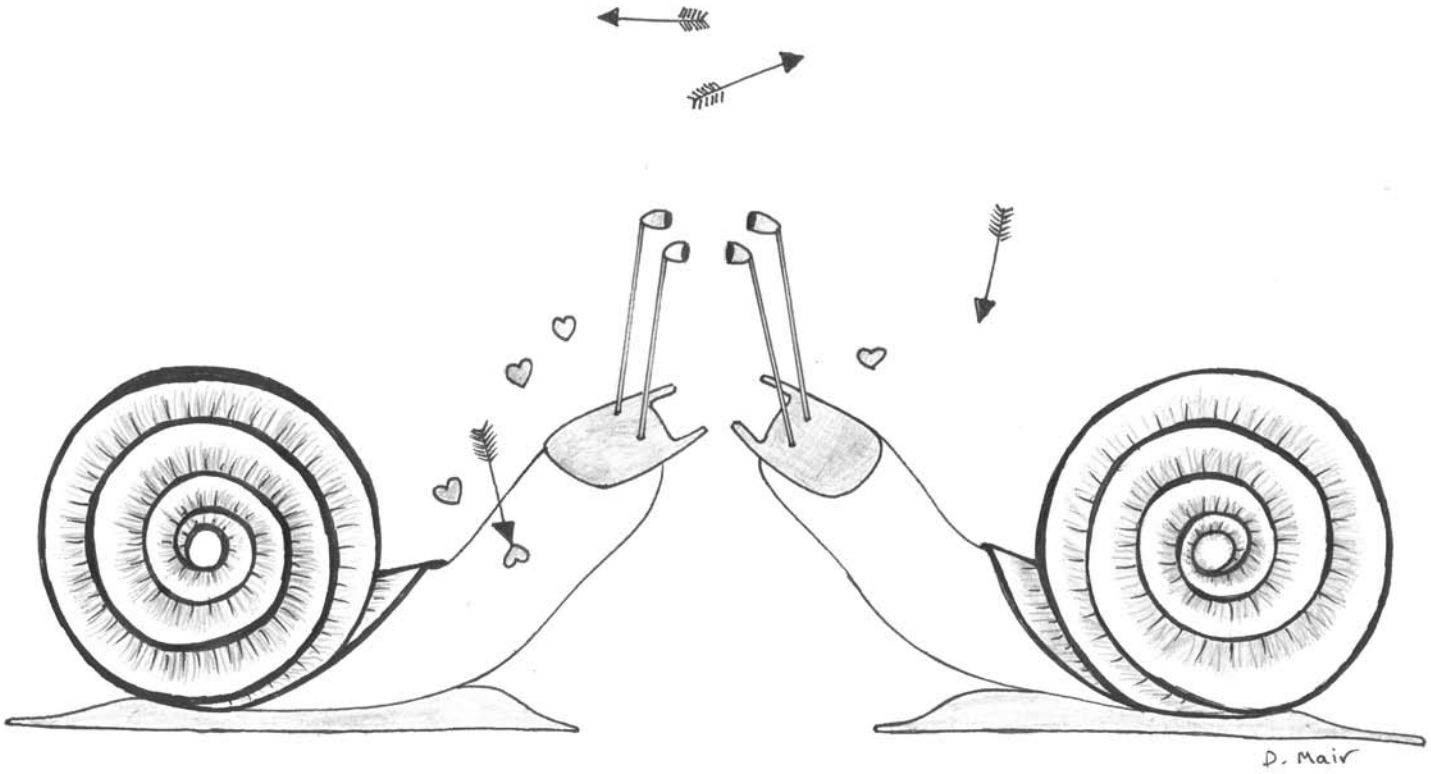
Snails and slugs, a bane of gardeners, can be very effectively prevented from chewing up gardens, through simple means. By placing copper strips around your garden or by stapling copper wire on your garden boxes, the Gastropods will circumvent these areas in order to avoid being shocked by that metal!

Please refer to Species at Risk & Local Government, where you will learn some interesting facts, such as how your local government can help Species at Risk. If you would like further information on the Oregon Forestsnail, the Pacific Sideband, or on other snail groups, please refer to the references listed below.

Val Pack
Mission

Pacific Sideband references:

-BC's Coast Region, Species & Ecosystem of Conservation Concerns, biodiversity fact sheet, UBC Department of Geography
-Committee on the Status of Endangered Wildlife in Canada
-E-Fauna BC, North America Land Snail links
-Terrestrial Gastropods of the Upper Fraser Basin of British Columbia
-Land Snails of British Columbia
-Pacific Sideband Snails, Island Nature
-Pacific Sideband Snail/Slugyard-Snail on the Trail
-Provincially Red and Blue listed species in the Fraser Valley Regional District and Metro Vancouver
-Snails and Slugs of the Pacific Lowlands.



Massive development Footprint at Wren Creek threatens Endangered wildlife species in Mission

Tracy Lyster, CAUSS

Many people assume that the beautiful cherished greenbelt near their homes will be protected "forever" only to discover that almost any land can be developed regardless of whether it contains a stream, fish habitat, or even endangered species. The Fraser Valley has already lost over 85% of its historical wetlands with the remaining 15% threatened by urban sprawl and agricultural development. Today, more than 1,600 wildlife species are at risk of disappearing from our province. From Peregrine falcons to Oregon Forestsnails, endangered species are left to fend for themselves, because B.C., along with Alberta, has no Endangered Species legislation.

In fact, in B.C., only land containing a stream is even required to undergo an environmental assessment while land which may be home for endangered wildlife can be developed without ever assessing the importance for their survival.

Case in point is a proposal to build a massive commercial-residential development on a sensitive ravine ecosystem in Mission. The 13-hectare (33 acre, Junction sized) development site spans from Wren Street west to the Silvercreek Wetlands, deemed by the District as the most

Western screech owl

(SARA listed special concern, provincially blue listed)

environmentally sensitive area in all of Mission. Silvercreek is one of only 12 designated "Sensitive Streams" in all of BC. All 5 species of wild salmon use the wetland during rearing and over wintering periods and an estimated 100-200 waterfowl use the wetlands every day (Ducks Unlimited, Sept.25/05).

Because there are streams on the site, a Canadian Federal Environmental screening assessment process (CEAA) was undertaken, led by Fisheries and Oceans Canada with advice provided by Environment Canada and other stakeholder groups. According to the CEAA report, the proposed development will permanently eliminate all trees, vegetation, streams and all existing terrestrial habitat values including federal and provincial listed wildlife species. The vegetation provides an important filtering function which improves the water quality of water entering the wetlands. Juvenile Coho salmon have been found rearing downstream of the proposed development area, indicating the health of the habitat (CEAA posted March 12/12).

Green heron (provincially blue listed)

Residents of the area are also very worried that removal of all the trees and changing the hydrology of the steep hillside could threaten the slope stability of their homes.

Field surveys reported that the site provides habitat for several federally listed Species at Risk (SARA) and 10 provincially blue and red listed species. Six Blue-listed species, considered to be vulnerable in their locale, included Red-legged frog (SARA listed special concern), Dun skipper (SARA listed threatened), Western Screech owl (SARA listed special concern), Trowbridge's shrew, Green heron and Pacific Sideband snail.

Red-legged frog
(SARA listed special concern, provincially blue listed)

The ravines were also found to provide habitat for 4 Red-listed species. Red listed species are considered to be extirpated, endangered, or threatened in their locale. Threatened species are likely to become endangered if limiting factors are not reversed. Endangered species are facing imminent extirpation or extinction. Extirpated species no longer exist in the wild in the locale in which they are listed (i.e., are locally extinct). Red listed species included Oregon Forestsnails (SARA listed endangered), Pacific Water shrew (SARA listed endangered), Northern Water-meal, and Snowshoe hare.

On June 17/11, the provincial environment ministry, Ministry of Forests, Lands and Natural Resource Operations (FLNR) wrote a report strongly urging avoiding development on this and similar sites and instead recommended the project site be managed and restored to ensure the persistence of Species at Risk on site. Environment Canada also recommended that endangered Oregon Forestsnails and habitat be protected through the use of "Avoidance" (i.e., no disturbance).

The developer proposes instead to compensate for the loss of habitat by enhancing the nearby Sun Valley Trout Park. In response to the developer's plan to relocate the Forest snails to the trout park, Environment Canada advised that such "habitat restoration techniques had not been

Oregon forest snail
(SARA listed endangered, provincially red listed)

Pacific sideband
(provincially blue listed)

Pacific water shrew
(SARA listed endangered, provincially red listed)

Trowbridge's shrew
(provincially blue listed)

Snowshoe hare
(provincially red listed).

tested or evaluated" and "best management practices do not recommend salvages for this species". In addition, it is expected that "overall net losses for the other listed wildlife species may also occur as a result of this project". Environment Canada recommended constraining the development to the disturbed portions of the site (CEAA report posted March12/12).

The final 32-page CEAA decision report from the Federal environment ministries listed numerous environmental concerns about the development, yet concluded with Fisheries and Oceans Canada issuing a conditional acceptance of the project from a fisheries point of view. Astonishingly, despite the concerns from Environment Canada, Fisheries and Oceans Canada concluded that "the project is not likely to cause significant adverse environmental effects" (see CEAA decision (http://www.ceaa.gc.ca/050/details-eng.cfm?evaluation=58069).

Dun skipper
(SARA listed threatened, provincially blue listed)

Northern water-meal
(provincially red listed)

CAUSS opposes this development in its current form on the grounds that it will result in the permanent loss of endangered species habitat in Mission, when less destructive alternatives could meet the District's employment and economic/taxation needs. Mission's economic development officer argues that the proposal is necessary to supply employment, tax revenue and one-time development cost charges. However, the eastern 10 acres of the site have already been disturbed and could accommodate a development as large as the nearby Smart Center/Wal-mart development without destroying the ravines. Further, Mission's own Employment Lands Strategy report identifies sufficient designated and undesignated lands within Mission capable of supplying sufficient commercial and retail space until 2057 (Employment Lands Strategy, April 7, 2010). Of the 16-acre target of highway commercial development, 10 acres are currently under construction for the new Smart Center development. Constraining the Project to the 10-acre disturbed portions of the Wren Creek site would yield 20 acres of highway commercial development, exceeding the 16-acre target by 4 acres (CEAA, posted March 12/12). Furthermore, redesigning the development such that it has increased density (i.e., multilevel buildings with parking under the buildings within a smaller footprint), would be consistent with recommendations of the District's Employment Lands Strategy and would avoid destruction of endangered species habitat. Thus, there may be alternative means of designing this project which have the potential to be economically viable and would significantly reduce direct onsite and potential offsite adverse environmental effects. CAUSS feels that designing a higher density development within a smaller footprint would be a win-win scenario from an economic, environmental and social sustainability perspective.

Tracy Lyster, CAUSS

Mission council will decide on the fate of this sensitive ecosystem following a public hearing April 16/12. Concerned citizens can:

1. Write Mission Mayor and Council and tell them whether you prefer the full sized or a scaled down option which respects endangered species habitat.
Email: info@mission.ca.

2. Contact Fisheries and Oceans Canada and tell them how you feel about the Wren Creek proposal. Corino Solomi 604 666 8712 or email SolomiC@pac.dfo-mpo-gc.ca and SciankowyC@pac.dfo-mpo.gc.ca.

3. Attend the public hearing April 16/12 and tell council how you feel.

Zero mile diet: Local nettles

Skye Brooks

Harvesting stinging nettles is something I look forward to every spring. I have been harvesting them in the same forest near my house in Silverdale for over 15 years and the thrill of tromping into the wet woods to pick some of the young plants for dinner never wears off. As an avid gardener, I appreciate the fact that nettles arrive in late February or early March, just when the garden kale is about finished; thus supplying fresh nutritious greens for about a month and a half when little else is growing.

This herbaceous perennial grows in a variety of settings, but I choose patches that I find in the woods under maple trees, where they often grow in great abundance. Once you learn to identify them, they are unmistakable. If you are uncertain, consult a field guide or bring someone with you who can identify them.

To harvest, you'll need heavy work gloves (to avoid being stung by the plants), a sharp knife, and a cloth or plastic grocery bag. Simply take the young plant with one gloved hand and cut it at about 2 inches above the soil while taking care not to disturb the roots. Do not over harvest one area. Nettles are best eaten as a green when they are young and tender (10 inches high or less). The taller the plant gets, the tougher the stem becomes. Later in the season, when they become more mature, they can be picked and dried for tea, but once they begin to flower it's time to stop picking and let them do their thing.

The flavour of nettles may not be for everyone, but I loved them from the start. Cooking takes the sting away. When I was a kid, my dad used to steam them in the spring and serve them with butter, lemon, salt and pepper. This is still my favourite way to eat them, as the simplicity lets their rustic, earthy flavour shine through. Another favourite at our house is creamy nettle-potato soup. We first wash the nettles as we would any greens. Next sauté onion, garlic, and celery in butter, then add chopped potato, thyme and bay leaf cooking over medium heat for 10 minutes. At this point we add a few handfuls of chopped nettles and cook for another 5 minutes. (Be sure to wear a rubber glove or baggie over your hand when handling the nettles!) Then add homemade chicken broth to cover the vegetables, salt and pepper to taste, and simmer on low until the potatoes are fully cooked. Lastly, blend with a hand blender until smooth.

The possibilities are endless! I have an amazing recipe in an Italian cookbook for homemade ravioli stuffed with nettle and ricotta. Nettle pesto, nettle frittata, sautéed shiitake with onions and nettles..

Skye Brooks, Silverdale

What's in a Name?

Sylvia D. Pincott

What's in a name? Different references to the same thing sometimes seem to convey quite a different sense of understanding and appreciation.

One of my favorite examples is use of the word "bush" as compared to "woodland". The former seems to convey the message of something with little value – trees and a tangle of undergrowth. To the more discerning, that "bush" will be observed as a "woodland", rich with life. The overhead canopy will be home to a diversity of invertebrates, and they, together with a harvest of seeds, nuts and berries, will provide sustenance for many. Understorey vegetation provides shelter and food for other species that stay closer to the ground.

Interspersed in a healthy woodland will be trees in decline, wildlife trees, providing nooks, crannies, mossy boughs and secret cavities for safe shelter and a place for wildlife to rear their young. The eventual fallen logs and woody debris are rich with other life – amphibians, reptiles, invertertebrates such as centipedes, millipedes, beetles, ants, and countless others making up the chain of woodland life. Below the ground, vast networks of fungal mycellium form essential nutrient exchanges with plant life above.

The moist woodland may include Alders, that some consider "weed trees". Weeds, perhaps because commercial harvest is not important, but far from weeds for the health of the woodland community. Though short-lived themselves, Alders build the soil, through nitrogen fixation, for a succession of life to follow.

Insects may feast on Alder catkins and cones, and birds may feast on the insects and seeds. A close look at the cones may also reveal tiny galls – unusual wee chamber-like growths by the plant that will provide shelter for the metamorphosis of a particular insect. These growths are the plant's response to eggs of the insect being deposited into the plant tissue. Galls are surely one of my favorite of insect phenomena!

Woodpeckers will create other larger and abundant chambers in Alders – nesting and roosting cavities for themselves and eventually for others.

Woodpeckers spend their days in search of insects – "bugs" to some! Often reference to insects is restricted to the "pest" viewpoint when, in fact, the invertebrate world is nothing less than wonder-filled in its richness and diversity. There seems to be a specialized insect for every niche imaginable – each essential in the fascinating picture of biodiversity.

And then there are the references to "swamps" rather than "marshes" or "wetlands". A "swamp" often connotates merely a wasteland to be filled. When we understand the value of a healthy "wetland", however, we recognize it as one of the richest of natural areas, teeming with life, and essential habitat for many - waterfowl to fish, shorebirds to amphibians, dragonflies and pond striders.

What may be just a "ditch" to some, invariably feeds into wetlands, streams and rivers - part of the river of life. Ditches are ultimately important to the health of our waterways, and surely need our care and respect.

And, my final puzzlement for the day. Why is the label "environmentalist" often referred to with less than respect? "Conservationist" is a little safer, but still may be considered disparagingly.

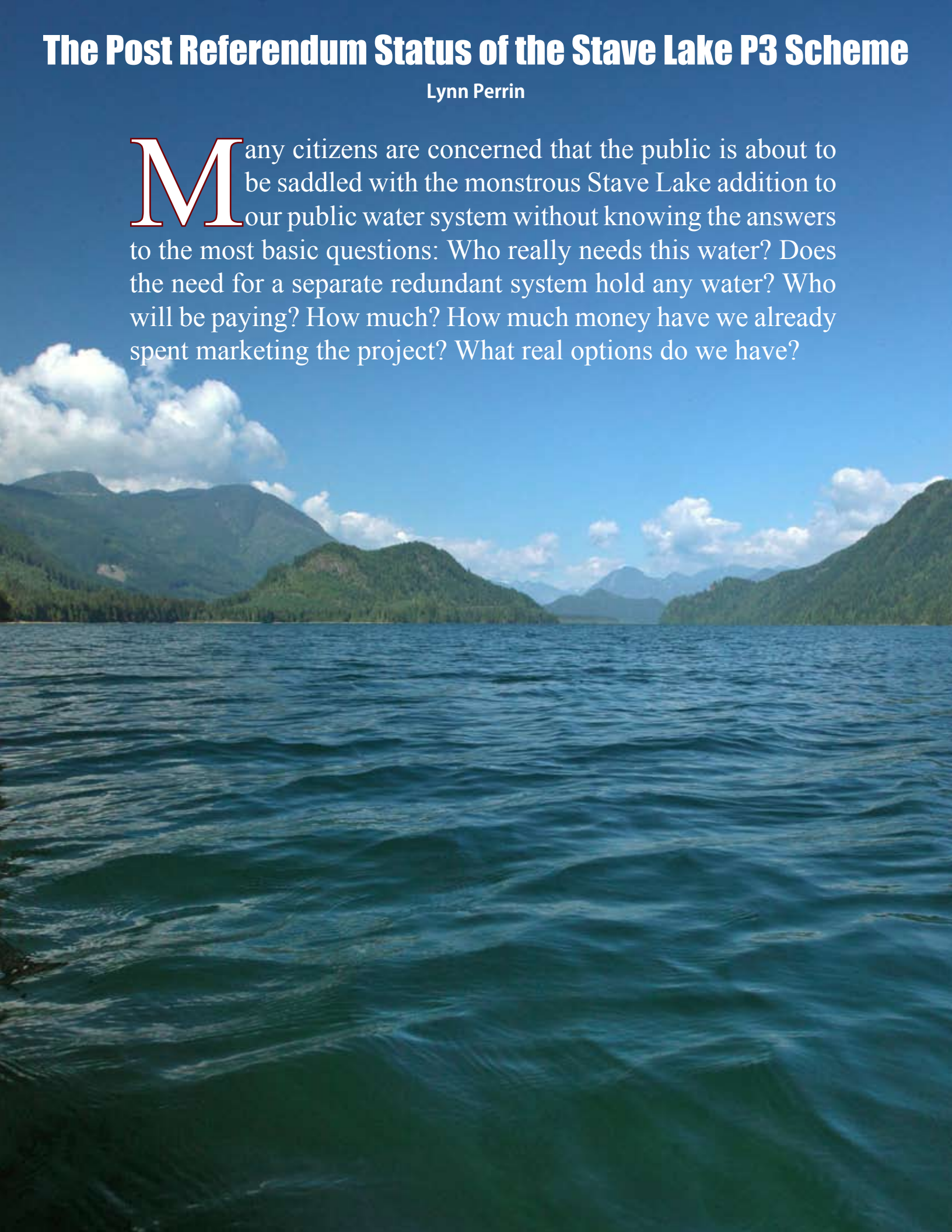
Should we not all be environmentalists / conservationists / stewards of the land, working together for the health of our planet? After all, as they say, "What part of the environment is not our thing?" - the air we breathe, the water we drink, or the food that the land provides?

I guess it all boils down to a matter of caring – for our woodlands, our wetlands, our planet – and the life they hold that is in our hands.

The Post Referendum Status of the Stave Lake P3 Scheme

Lynn Perrin

Many citizens are concerned that the public is about to be saddled with the monstrous Stave Lake addition to our public water system without knowing the answers to the most basic questions: Who really needs this water? Does the need for a separate redundant system hold any water? Who will be paying? How much? How much money have we already spent marketing the project? What real options do we have?



Using a sustainability lens, the following are some facts Water Watch Mission-Abbotsford researchers have uncovered since first becoming aware of the Stave Lake scheme in March 2011. Obtaining facts such as relevant engineering reports has in itself been challenging even with federal and provincial legislation to access government information/ documents.

Two Water Master Plans completed by consultants were used by staff when making recommendations to the Abbotsford-Mission Water and Sewer Commission (AMWSC). Both the 2006 and 2010 reports concluded that if growth and current water consumption continued at the rate experienced between 2000 and 2009, a new water system would be required. However, the projections for both growth and consumption were significantly higher than reality when using data from numerous sources including the AMWSC monthly usage reports, building permits, and the 2011 Census. The firm which did the 2010 report advised the AMWSC that it would be interested in being one of the firms contracted under a Public Private Partnership (P3). This leads to skepticism when this firm was the first to suggest a P3 option for the Stave Lake system. One more fact which questions the purported "urgent" need for the Stave Lake addition by 2016 is that it was one of a list of 30 projects and was not scheduled for completion until 2020. The total to be drawn was 100Ml/D or 25% of what was proposed in the 2011 scheme. Other options were an assertive conservation policy, optimizing current sources, and increasing storage for use in a hot, dry, summer when usage was at a peak and the maximum supply of the system was consumed.

Even Abbotsford City Manager, Pizutto, cautioned against peak usage as the basis for a new water system: "On a typical day, the Abbotsford and Mission systems consume about 75 million litres per-day (MLD), while our system can supply and distribute about 143 MLD. Consumption in previous years has come very close to capacity during peak water use periods – one or two days per year over the hot-summer months. Designing our water system for double capacity for one or two days of the year is neither financially or environmentally responsible." (eConnections Aug. 2010). The following statement from the Stave Lake P3 referendum debrief is close to acknowledging the real purpose of the $300 million scheme: "Although the unique opportunity to provide a cost effective long term water solution through the Stave Lake P3 Project is lost, Council and the AMWSC will need to move forward with a solution, or series of solutions, to ensure water supply for Abbotsford and Mission. Communication of the solution will be imperative to ensure business confidence remains and Abbotsford's economic base continues to expand" (ENG 10-2012).

The term "redundancy" is rarely found in the 2006 or 2010 Water Master Plans or the initial Deloitte-Touche business plan, yet 50% of the $300 million cost was attributed to ensuring that there would be water for current users if any source failed due to a natural disaster. This is actually a subsidy to the bottom line for developers as they would be off of the hook for their share for growth. Initially growth was accountable for 80% of the original $200 million cost estimate. Therefore, developers should have been paying for 80% of the $300 million price tag. However, the Stave Lake scheme had 90% of the cost coming from the pockets of already overtaxed consumers. Is it a stretch to think that this whole project was a direct transfer of $100s of millions from taxpayers to developers once all of the costs including interest were paid? This scheme was certainly not sustainable, taking into consideration that the cost to operate this part of the system was going to be $30 million or 100% more than a public operation, and the private borrowing costs would mean an extra $55 million (Deloitte-Touche Business Plan).

The Stave Lake P3 scheme has cost the taxpayers of Abbotsford and Mission jointly $1.1 million and the taxpayers of Abbotsford separately $2.55 million, of which $326,965 was spent on a 6-week pro Stave Lake P3 marketing campaign prior to the referendum. A small amount of this could be recovered if Stave Lake was eventually the water source used by the AMWSC in the future, even though a significant sum was paid to design engineers CH2M Hill for detailed plans (ENG 10-2012). Since the 74.4% NO P3 vote Nov. 19, 2011, Abbotsford Council and the AMWSC have required the same staff that promoted the Stave Lake P3 to bring forward options for the consumers of water in our communities.

<u>These options are what are recommended</u>:

- Increased conservation efforts with quantifiable results linked to future water use projections
- Continued use of tiered water rates for peak usage reductions
- Increased system optimization efforts such as the Mission to Maclure Supply Main twinning and well rehabilitations
- Further development and approval of temporary flow increases from Cannell Lake to augment emergency peak flows
- Update of the Emergency Response Plan (ERP) to compensate for reduced redundancy should the Norrish Creek supply be temporarily lost. The ERP should include steps for rapid reinstatement of roadways and pipes along the Norrish Creek system
- Possible extension of the Bevan Wells approvals; although this will require a new environmental review through the Provincial Environmental Assessment Office

• Review of options to bring small amounts of water on-line from Miracle Valley, Stave Lake or other sources

I have attended the most recent AMWSC meetings and there are now options on the agenda such as conservation and system optimization that I sincerely doubt would have been considered as priorities if the Stave Lake P3 would have been approved by the voters.

On March 13/12, less than three months after the 74.4% NO P3 vote, CKNW reported that "Abbotsford is still looking for a source of new water, but they aren't running out anytime soon." When it comes to the state of water in Abbotsford it is a tale of two mayors spinning two opposite stories. Prior to last year's civic election and prior to the referendum on a P3 water project, then Mayor George Peary said the city would run out of water in five years. Current Mayor Bruce Banman said while securing a new source of water is a priority, any talk of running out is simply not true. "We have tons of water. Abbotsford is one of the fifth wettest cities in North America. Clearly water isn't an issue; there are lakes full of it; it is just getting the water from the lakes and rivers." Abbotsford is still looking for a new supply of water months after overwhelmingly voting out the Stave Lake P-3 project in a referendum (CKNW Mar 13, 2012).

One year after the discovery of the Stave Lake P3 scheme, 100s of hours of community engagement by dedicated activists and 23,649 voters who support the option of Water for Life, Not for Profit, has the promise of a sustainable future for our public water system. One last ingredient will ensure that this unsustainable scheme is not repeated – ongoing public vigilance of Mission and Abbotsford Councils and the Abbotsford-Mission Water and Sewer Commission.

Lynn Perrin,
Abbotsford Spokesperson,
Water Watch Mission-Abbotsford

Poetry by Angela Zimmerling

Abbotsford

The Fawn
in the shadow's light
sheltered by fern and pine
breath in-drawn -- she waits

Coyote sings
his voice carries on the wind
the night skies listen

a reflection caught there
in the rivers shallows,
a black bear pauses

Bruce Klassen accepts the Mission Muse award for his Silverdale wildlife photography.

THE FOOTPRINT PRESS

The Footprint press is published as a non-profit community newspaper. Articles are submitted by dedicated residents wishing to share their vision of a more sustainable and just society and who seek to live harmoniously with nature. Circulation is 2000+ on recycled paper. The paper can also be viewed on-line at **FootprintPress.ca** or call us at 604 820-7592. Your support is appreciated and your participation is very welcome. The opinions expressed in this publication are those of the authors and do not necessarily reflect the publishers as a whole or individually.

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