

DEAR MEMBERS AND SUPPORTERS,

The long-time focus of the Valhalla Wilderness Society (VWS) has been the creation of large wilderness parks. It takes years, and there are always discouraging setbacks. But VWS has spearheaded successful campaigns for half a million hectares of large BC parks, and has been a major supporter of many others. Before a large park can be created, energies of support have to come from many directions and pour into one powerful stream of public will.

We are pleased to tell you that this is now happening for the Selkirk Mountain Caribou Park Proposal, sparked by the

release of the film we created in 2015: *Primeval–Enter the Incomappleux*, by Damien Gillis, the BC filmmaker whose documentary *Fractured Land* has won several awards.

It took a volunteer VWS crew over a month of hard labour in sweltering summer heat to clear a path through the overgrown logging road. This enabled VWS directors Craig Pettitt and Wayne McCrory; Gillis; biologists Toby Spribille, Piotr Lukasik, and Veera Tuovinen; and explorers Simon Shave, Sean Elink, and Gary Diers to hike 7 kms with a week's supplies and camera gear to our

base camp. Meanwhile, public-spirited funders injected critical funds.

We wondered if it was possible to bring to the public the peace, beauty, and majesty of the primeval Incomappleux forest, along with the science and the tragedy that only 6,300 ha remain, after the clearcutting of the rest of this huge valley.

The result far exceeded our hopes. We had wanted a film that would speak eloquently for all old-growth in BC, and that is what Gillis and his film subjects produced. (Full disclosure: My eyes filled with tears when I first saw the opening frames.) You can see Gillis's moving teaser from the film on our website at www.vws.org.

VWS received valuable assistance from Gillis in building a communication strategy around the film. Dr. Spribille

showed up for the premiere in Nelson, BC on Nov 9. Speaking with directors Craig and Wayne, the screening was a powerful public presentation on the issue of logging old-growth forest.

The coastal premiere was on Nov 23 at the Vancouver International Mountain Film Festival, then it was shown at the UBC School of Forestry. There, our team of presenters was joined by Professor Suzanne Simard, known for her ground-breaking research on the ecological interconnections in forests. The tour continued to Mountain Equipment Co-op for a screening. Tours with the film will continue across BC in the

new year.

Meanwhile, Gillis contacted the online petition NGO, Change.org, which adopted the park proposal for special treatment. The new petition has 25,000 signatures after only a week. Gillis and Spribille also worked Twitter and Facebook. The paper petition to the BC government is garnering thousands of signatures.

Throughout these events, VWS researchers/writers Louise Taylor and Anne Sherrod laboured with meticulous details of promotional materials and networking.

So, with what spirit do we come to you with our report at the end of

2016? Only one word will do: gratitude. I'm aware that the world is growing dark in many corners, but there is yet a vast sea of optimism and co-operation capable of picking up our campaign and carrying it toward its destination. Must we not each be part of it, and know in the end that we contributed some part of our lives to a great purpose: to the survival and well-being of life on Earth?

Each of you must have asked yourselves that question. Now, only you can do your part, and it's the most crucial part going forward. We urge every one of you to write a single letter to the government in support of this important park proposal. You will find background information in this newsletter. Drop by drop, we must add our voices to make a towering wave if we wish to live in a better world.



Damien Gillis, Craig Pettitt, Toby Spribille. Mari Omori photo.

THE DISMAL FAILURE OF THE BC GOVERNMENT'S MOUNTAIN CARIBOU RECOVERY PLAN

BC's Mountain Caribou Recovery Implementation Plan (MCRIP) is an utter failure, as the southern mountain caribou population continues to nosedive from the estimated 1,356 animals in 2014 to about 1,000 in 2016. Over the last nine years that the MCRIP has been in place, the BC government admits that there has been no population increase in any of the 15 provincially red-listed mountain

caribou herds. Instead, two herds have been wiped out and three more are on the verge of extirpation. As we witness the extinction of this iconic species, both the BC and federal governments turn a blind eye to habitat protection, preferring to issue permits for industrial projects in critical mountain caribou habitat.

Logging of old growth in the Central Selkirk herd's habitat continues. In November 2016, VWS director Craig Pettitt documented new logging roads being built by BC Timber Sales near Duncan Lake within VWS' Selkirk Mountain Caribou Park Proposal. This herd has declined 61% since 2012 and now only numbers 35 animals. As logging continues in the Revelstoke area, the caribou of threatened

Columbia-North herd are captured and penned in the Revelstoke Caribou Rearing the Wild (RCRW) maternity pen, where eight calves have died in the last two years.

The RCRW maternity pen experiment has been run for the past three years, adding approximately nine calves to the wild population. These calves have only served to stabilize – not increase – this herd while attracting predators, resulting in the death of four caribou.

The threatened Wells Gray and North Thomson herds in VWS' Quesnel Wilderness Proposal have declined 35% since 2008 and now only number 318 animals. Caribou here are subject to logging and widespread motorized winter recreation with little enforcement of snowmobile closures by the government.

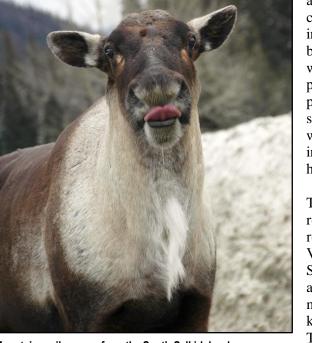
Rather than protect adequate winter habitat in all mountain caribou habitats, the BC government favours expensive, unscientific programs that create ecosystem imbalances by slaughtering top predators. BC taxpayers funded the use of sharpshooters to kill wolves under the pretext of "saving" the mountain caribou. Nine wolves were shot from helicopters in the South Selkirks, and 154 in the South Peace region – almost double the 84 wolves killed in

2015. In addition, First Nations and a rancher reportedly killed 46 wolves in the vicinity of the Klinse-Za maternity pen near Chetwynd.

Other government experiments to "compensate" for failure to protect caribou habitat include a supplemental feeding program north of Prince George, where the endangered Kennedy Siding herd has been fed pellets for the past two

winters. The feeding troughs risk attracting predators and habituating caribou to humans while not increasing the number of calves born. Liberalizing moose and white-tail deer hunts to reduce predators' main prey is another program that could backfire. A severe winter could cause the white-tail deer population to crash, increasing predation of caribou, as happened in the 1990s.

Anne Sherrod and Louise Taylor conducted extensive research to support a judicial review, by Pacific Wild and VWS, of the process by which the South Peace wolf cull was approved. As the court action moved slowly, the wolves were killed before the case was heard. The research turned up significant information that will be used to strengthen the case



Mountain caribou cow from the South Selkirk herd.

Jim Lawrence photo.

against the wolf cull and highlight the urgent need for habitat protection.

In-depth research by VWS' Anne Sherrod and Louise Taylor into BC government claims that it has "protected" 400,000 hectares of mountain caribou habitat in the South Peace revealed that only existing parks are truly protected there, and most of them are tiny. No new habitat has been fully protected since the Peace Northern Caribou Plan (PNCP) was announced in 2012.

Louise Taylor is monitoring the federal government for the release of critical habitat maps for public comment, which should have been released this summer, and whether government will determine that the proposed Murray River coal mine near Tumbler Ridge, already approved by the BC government, should not proceed given the significant adverse cumulative environmental effects, particularly on the Quintette herd's low-elevation habitat, should it recover.

Louise Taylor is also working with UVic's Environmental Law Clinic to research possible legal remedies for increased habitat protection under existing laws.

by Louise Taylor

VWS CONTINUES TO PLAY A KEY ROLE IN RESEARCH AND CONSERVATION OF THE WESTERN TOAD—A MAJOR SPECIES AT RISK—IN THE WEST KOOTENAYS

Why are toads important? All small species interconnect to support the whole food web of the planet. Research shows that when one species is lost, others may be lost due to the resulting imbalances, and the damage can go all the way to the top of the food chain. The Western Toad is a prolific breeder, producing hundreds of thousands of toadlets every year. Only a tiny percent survive at the end of the year, which means that much of that huge amount of biomass has gone into feeding other animals: reptiles, birds, and mammals. And because the toads migrate from the lakes into the surrounding forest, much of that nutrient input is carried into the forest.

For many species, we don't yet have any idea what is being lost when we destroy them.

Fish Lake Toad Project

by Wayne McCrory

Research at Fish Lake between New Denver and Kaslo has so far indicated that nearby logging is avoiding toad habitat around the lake. This has left the research project free to document the lifecycle and migration of the toads, and to experiment on reducing the major highway mortalities as the toads cross the road to and from their breeding, rearing, and hibernating habitats.

VWS biologists have completed the second field season of a 4-year study at Fish Lake, with advice from consulting toad biologists at Summit Lake. This year's Fish Lake study was funded by Columbia Basin Trust, Kootenay Lake Local Conservation Fund, Yellowstone-to-Yukon Conservation Initiative, and VWS donors. The study has a high level of co-operation with adjacent private land owners, the Kaslo-Sandon Rail-to-Trail Society, and the Ministry of Transportation and Infrastructure (MoTI).

As elsewhere, Fish Lake toads, unlike frogs, live mostly on land, and have three migration events each year: In spring, adults make nightly movements down the mountains from winter hibernation sites to breed at Fish Lake as soon as the ice melts. After breeding, a second migration occurs when many adults return to the surrounding mountainsides. Each female can lay up to 12,000 eggs. As a result, hundreds of thousands of blackish tadpoles are hatched from egg masses deposited in shallow water near the lake shore.

By mid-late summer, the dramatic transition from water to land involves tadpoles metamorphosing into baby toads (toadlets). Hundreds of thousands of toadlets then stage along the shore at the breeding areas. Summer rain usually triggers the third migration event when the toadlets start to move *en masse* to the surrounding hillsides in preparation for winter hibernation. Unlike adults, toadlets migrate during the day. Their migration continues into late fall.

VWS has been active in the conservation of Western Toads (Anaxyrus boreas, aka Bufo boreas) at two key areas in the West Kootenays: Fish Lake and Summit Lake, where highway mortality of migrating toads and toadlets is of increasing concern. The Western Toad has been extirpated from a good portion of its historic range in the US, is blue-listed in BC, and is considered a species at risk federally. Although an overall inventory of these toads in the West Kootenays has not been done, several studies show that the area still has a population of Western Toads of regional and provincial significance. Summit Lake and Bear-Fish Lakes have now become important focal areas for research efforts to conserve Western Toads, to which VWS is making an important contribution.

All three annual migrations were found to sustain considerable mortality from vehicles on Highway 31A. This poses a serious long-term conservation risk. VWS researchers found an average of 2-3 adult toads per night killed on the highway. Although researchers helped hundreds of migrating adults off the highway, the loss of even one pregnant female carrying 12,000 eggs is significant. While many toadlets don't migrate across the highway, three highway crossing areas were mapped where thousands of toadlets are killed crossing at a peak time of day for tourism traffic. VWS organized a number of sessions to "bucket" toadlets across the highway, and people with children just came on their own to bucket toadlets.



Tourists watching migrating toadlets using directional fence at Fish Lake Rest Stop. W. McCrory photo.

Faced with the possibility that Hwy 31A may be re-paved in spring 2017, VWS biologists began looking more closely at how to mitigate traffic mortality, such as where to best install 1-2 new toad-friendly but costly underpasses. An experiment to get migrating toadlets to cross through an existing dry culvert under the road lit with LED lights (toadlets appear not to like dark places) met with limited success.



Public education on toad conservation, including school classes, are an integral part of VWS western toad conservation program at Fish Lake. W. McCrory photo

MoTI gave VWS a permit to construct an experimental temporary toadlet migration deflection fence. This successfully re-directed tens of thousands of migrating toadlets away from their normal and often fatal migration across the highway to a riparian underpass built under a nearby highway bridge. More work will be done to improve this design next year.

The section of wooden fence through the popular rest stop, combined with our large interpretive sign and brochure, provided an

opportunity for hundreds of visitors to view the toadlet migration. Besides field classes for schools and the public, VWS researchers spent considerable time educating visitors at the rest stop. Public support has been overwhelming.

This project and the one at Summit Lake were carried out with the indispensable aid of Isaac Carter, who made amazing films of the toads' life cycle. (For 2015 research report and 2-page flyer see www.vws.org under Projects).

Summit Lake: A Toad Battle Royal

by Craig Pettitt

In 2016, the Nakusp and Area Community Forest (NAC-FOR) created huge controversy and an environmental crisis when it began preparations to log square in the middle of Western Toad habitat above Summit Lake between New Denver and Nakusp.

The government has had an approved expansion to Summit Lake provincial park on the books for well over a decade. All it would take to protect all Summit Lake core toad habitat and end this crisis would be to expand the proposed park by a mere 670 ha. Unfortunately, despite hundreds of people speaking out and writing letters to the Village of Nakusp and the provincial government, VWS' proposal for this solution has been ignored.

The brunt of this crisis fell hard upon local residents in the two communities and around the lake. In early February 2016, amidst freezing temperatures and snow, local residents set up an information camp at the base of the logging road after hearing of NACFOR's imminent plan to log. They maintained the camp day and night for two weeks until they were informed by the RCMP that NACFOR would be allowed to enter the area with their logging equipment to start logging.

At this point, VWS director Craig Pettitt began to monitor the logging activities. He and volunteers found that out of the seven cutblocks, only two had adequate snow cover to prevent ground damage to toad hibernation habitat from heavy machinery. VWS submitted complaints to the government and NACFOR, and eventually forced NACFOR to confine its work to drier sites.

By mid-April, thousands of toadlets began appearing on the lower stretches of the logging road within 2 km of Summit Lake as they migrated from the lake to their future homes in the forest. In mid-May, without any notification, NACFOR began grading the road with complete disregard to the masses of toadlets present, killing many. Contrary to all public commitments NACFOR had made to only log in the winter, it brought in a feller-buncher and grapple-skidder to start logging a cutblock.



Tiny toadlet (shown in circle at bottom of photo) squares off with huge machine. ICandy Films photo.

The Vancouver-based Wilderness Committee (WC) was on site filming *Toad People*. VWS participated with ICandy Films in filming the toad activity around the logging equipment, on the main access road, and on the landings where logs were going to be decked. Filmmaker Isaac Carter kept up a steady stream of film documentation on the Internet (see the video at https://youtu.be/peK91E8YrWo).

Under public pressure by local residents, VWS and WC, the MFLNRO, and NACFOR finally carried out their own field inspection on May 31, finding numerous yearling toads from km 0 to km 7 on the Forest Service Road and side roads throughout the proposed cutting permit area. This finding lead to a multi-disciplinary staff meeting with NACFOR on June 1. On the same day, NACFOR informed the ministry that it would not proceed with its summer logging program and would likely reschedule for the winter of 2016-17. The 2016 toadlet migration from Summit Lake started in September. It was heartening to see travellers pull over and get out of their cars to ferry toadlets across the highway.

The BC government had previously spent about \$1 million on toad research and mortality mitigation projects around Highway 6 bordering Summit Lake, but refuses to protect even one hectare of forested terrestrial habitat for the Western Toad.

BREAKING NEWS

NEW DASIQOX TRIBAL PARK IN BC CHILCOTIN UNDER THREAT!

Mining Company and BC Government Attempting to Undercut Federal Government's Two Previous Rejections of Taseko's Large Open Pit Mine at Teztan Biny (Fish Lake)

As our newsletter was going to press, the media exposed that the BC Environmental Assessment Office (EAO) was secretly amending an environmental certificate for Taseko Mines Ltd. that would enable the giant New Prosperity open pit mine project to go ahead through a small loophole in the provincial environmental review process without another full

BC environmental impact assessment. A harsh letter from Taseko Mines to the Premier reminding government of their lawsuit for millions in compensation before the BC Supreme Court likely prompted this amendment.

Allowing the more narrow review flies in the face of the mine project twice being rejected by Ottawa based on the negative findings of two rigorous panel reviews by the Environmental Canadian Assessment Agency (CEAA). The second panel review was undertaken after Taseko Mines had to revise its first mine tailings development plan so that Teztan Biny would not be drained.

Many of the public, First Nations, and conservation group participants were exhausted after having to review and make submissions to a second panel, but were jubilant when the CEAA panel and Ottawa rejected the mine for a second time in 2014. The conclusions that there were significant adverse environmental and other impacts by the two rigorous review panels revealed just how flawed was the province's environmental impact assessment process that approved the mine project in 2010.

An 80-page submission to the 2013 panel by biologist Wayne McCrory on behalf of Friends of Nemaiah Valley (FONV), with help from VWS, concluded that if approved, the mine would push the already threatened Chilcotin grizzly bear over the edge into extinction. In 2014, VWS, FONV, and the Xeni Gwet'in commissioned a major scientific inventory of the Taseko/Dasiqox Watershed, including Teztan Biny that found a very large, intact wilderness with high conservation and First Nations cultural/heritage values. The study recommended the whole area be a legislated tribal park resulting in the Xeni Gwet'in and Yunesit'in First

Nations declaring protection of the 321,300 ha Dasiqox Tribal Park 'Nexwagwez?an' in fall 2014. The park's name means "It is there for us" (http://dasiqox.org). Although VWS only supports tribal parks legislated by the province similar to the Stein Valley Provincial Tribal Park, the declaration was a big step in the right direction.



Xeni Gwe'tin children at Teztan Biny (Fish Lake). Their ancestral home here has been occupied by First Nations for 5,000 years. Protection of Teztan Biny from Canada's largest open pit mine has been a rallying point for many First Nations to preserve their homeland as a Tribal Park. Marilyn Baptiste photo.

February 2016, Taseko Mines filed a financial compensation claim against the federal government in the BC Supreme Court that is still pending. In May 2016, concerned about Taseko's attempts to revise the twice-rejected mine, VWS, with some funding from the Stewart Foundation, conducted further field surveys with the Xeni Gwet'in at Teztan Biny. The study confirmed high grizzly bear use of the proposed mine area and extensive potential breeding habitats for the western toad; both are considered species-at-risk in the area.

This information will be useful if Taseko succeeds in getting an amended environmental certificate for the New Prosperity mine to proceed.

The province's recent move is a huge betrayal of the democratic process and the public trust as well as the federal government's environmental assessment process and Ottawa's role in decision-making on issues of national concern. It is also indicative of a blatant disregard for both the BC and Canadian Supreme Courts' recognition of the Xeni Gwet'in aboriginal rights in the proposed mine area and makes a mockery of the premier's recent agreement for the province to consult and work more cooperatively with the Tsilhqot'in First Nations on land use issues. Massive public and First Nations opposition, legal challenges, and protests will be the predictable outcome if the company is successful in using the loophole in the province's weak environmental certification process to proceed with the mine. See http://www.theglobeandmail.com/news/britishcolumbia/bc-gives-taseko-mine-a-second-chance-afterletter-to-christy-clark/article32999715/.

PROGRESS REPORT ON VWS' BEAR SMART PROGRAM IN THE SLOCAN VALLEY

Human Negligence and Slack Enforcement by Conservation Officers (COs) Cause Bears To Help Themselves To Slocan Residents' Garbage and Fruit Trees

Locally and provincially, VWS bear experts and coordinators continue to help prevent bears becoming conditioned to human food. VWS again supported the Slocan Valley Bear Smart program and Evelyn Kirkaldy as coordinator, thanks to VWS donors and a \$3,000 grant from the Regional District through the BC Conservation Foundation. Evelyn carried out excellent public education and hands-on troubleshooting through her VWS Bear Smart Hotline and social media. VWS also funded Gillian Sanders to cover half the cost of bear-proof electric fencing in the Slocan Valley, as well as contribute to the costs of four electric fence systems in New Denver and Silverton. Several outdoor bear safety courses and school talks were also sponsored. VWS bear biologist Wayne McCrory continued to train residents on proper bear aversion techniques on private land, including the use of rubber bullets and bear-bags on adult bears in good condition.

As in 2011, when COs killed 11 black bears in New Denver, there was another low huckleberry crop in the West Kootenays this year, causing bears to expand their home ranges to include increased food-seeking behaviours in residential and rural areas. Although huckleberries are one of the mainstays of both grizzly and black bear species for up to 20% of their diet, VWS field surveys showed there were still plenty of other berry species and other natural foods available and that bears in the wild were in good condition. Despite tens of thousands of dollars spent over the last decade on public education and bear-proofing in the Slocan Valley, the bears again found plenty of fruit, garbage, and other human food around farms and in villages this year. In New Denver, ironically now a Bear Smart designated community, about a dozen black bears found enough food to become permanent residents for several months, some sleeping in big fir trees near the school and creating public safety concerns for children.

In 2012, VWS obtained Bear Smart funding from the province to hire biologists to study the underlying causes of bear-human conflicts in the upper Slocan Valley. The priority recommendation of their report, "Upper Slocan Valley Bear Hazard Assessment and Bear-People Conflict Management Plan," was that local governments must pass bylaws and enforce strong measures to make human garbage, fruit, and other attractants unavailable to bears. This has been done successfully in our mountain national parks and in towns like Canmore, Alberta. It was also recommended that the COs need to enforce the BC Wildlife Act and levy fines on people who fail to remove wildlife attractants. While presentations to local politicians and public education have led to more bear-proofing, the low huckleberry crop and community bear

invasions in 2016 demonstrated that too many loopholes still exist. Some residents even wrongly believed that the bears were starving out in the wilds so they should be allowed to eat the fruit and garbage in their yards.

For many Slocan Valley residents and other British Columbians who spend considerable time and funding to bear-proof their own properties in compliance with the Wildlife Act, 2016 again proved to be a very frustrating experience as bears accessed easily available foods on neighboring properties where attractants had not been removed in violation of the law.



One of New Denver's resident black bears. Jorg Becker photo.

Although residents showed a greater tolerance of bears becoming habituated to residential areas and conditioned to human foods, resulting in fewer bears being killed by COs, VWS feels such unsafe situations will continue unless much stronger measures are implemented by local politicians and the COs. VWS feels someone could be injured by a bear if no more action is taken. Firstly, residents and visitors need to understand that bears are not starving in the wild and should not be allowed access to human food. During poor huckleberry years, at least a dozen other berry-producing plants and a variety of native foods provide the food the bears need. Secondly, people who fail to adhere to the Wildlife Act should be fined. Villages need to adopt—and enforce strict bylaws regarding attractants and adopt fully bearproof garbage systems. Thirdly, the COs need to stop relying on "public education" and instead enforce the Wildlife Act to ensure better compliance with the attractant law. The COs along the Sea-to-Sky corridor and in Whistler issue hundreds of compliance warnings and tickets a year. What happened to the COs in the West Kootenays? The COs also need to do more bear aversion work and translocations, rather than killing bears.

NOTES FROM THE GREAT BEAR RAINFOREST IS THE GREAT BEAR RAINFOREST REALLY PROTECTED?

The February 2016 BC Government and First Nations Final Conservation Plan for the Great Bear Rainforest (GBR)

It has taken ten years since "protection" of the GBR was announced in 2006 for the parties to finally reach agreement on improved protection. The interim has been filled with endless meetings and negotiations between First Nations, logging companies, and "Rainforest Solutions" (Sierra Club of BC, Forest Ethics Solutions, and Greenpeace).

Under close scrutiny, the complicated agreement, legally called the "Great Bear Rainforest Order," is a mix of good news and numerous shortcomings (www.for.gov.bc.ca/TASB/SLRP/LRMP/Nanaimo/CLUDI/GBR/Orders/GBR_LUO_Signed _29Jan2016.pdf).

In our 2015 newsletter, we provided a detailed review of the proposed draft agreement, much of which applies to the final agreement announced last February. There is not enough space in this newsletter to provide a comprehensive review, but for those who wish more details, some can be found on our VWS web home page

(www.vws.org). We wish to thank everyone, including our friends among the coastal First Nations, for the significant progress made.

Some noteworthy improvements have been made in coastal logging guidelines and in adding 10 new partially protected areas to the list of 108 new conservancies that were designated in 2006. Hopefully, one of the most beautiful and biologically important watersheds, the magnificent Green fiord and salmon-bear ecosystem, will now be protected as a legislated tribal park in an agreement between the Kitasoo Xai'xais First Nation and the province. Of course, with negotiation still pending, the outcome remains uncertain, but Kitasoo Chief Councillor Douglas Neasloss has assured us that as a tribal park, the Green will receive much stronger protection than the weak designation originally proposed.

Unfortunately, despite VWS' final efforts to convince the Gitga'at First Nation and the province to protect small Gribbell Island – the mother island of the white spirit bears – this did not occur. We consider it an international travesty that Gribbell will remain unprotected and under continued threat from further clearcut logging, which both the Gitga'at and the province are defending. This failure to protect Gribbell is in spite of two VWS conservation reports and a



VWS researcher Wayne McCrory at giant Sitka spruce along the Green River in 1997. This large stand of salt-tolerant ancient spruce is likely the most extensive surviving on BC's central coast. W. McCrory photo.

petition signed by 88 scientists world wide (see www.vws.org) asking for full protection. VWS will continue to work to see Gribbell protected.

The 2016 GBR Order brings the grand total of parks, conservancies, and partial protection designations to 38% overall. This goes well beyond the 18% ceiling for full protection that the BC government tried to foist onto their initial coastal land use planning (LUP) tables when these negotiations began.

The new ecosystem-based management (EBM) logging guidelines, 20 years in the making, are a big improvement over the past, but still make too many concessions to the logging companies. For example, buffers will be increased along salmon streams and important grizzly habitats, but are still not wide enough to meet scientific criteria. The public should be wary of claims that EBM will protect 70% of the old-growth across the landscape. This must be understood in the context that

many coastal valleys and islands have already lost much of their old-growth to heavy logging and much that remains has been fragmented into patches. The 70% "protection" means that 30% of the little that's left can still be logged. In other words, ecosystem-based management is being used to leverage more logging after most of the old-growth in many areas, such as on the south coast, has already been heavily clearcut under de-regulated industrial clearcutting. We still believe that all old-growth should be protected.

A big worry is that many of the new guidelines may simply not be implemented and enforced. We will continue to keep you posted.

Pressure Mounting to End BC's Grizzly Bear Hunt

For the past 30 years, VWS has been active in trying to stop the BC grizzly bear hunt on both scientific and ethical grounds, and was instrumental behind the scenes in having the grizzly bear hunt moratorium implemented in 2001, only to have it overturned at the next provincial election. Despite ongoing controversy, coastal First Nations banning the grizzly hunt four years ago, economic studies that show far more revenue can be generated from bear-viewing than from killing grizzlies for pelts on a wall, and polls showing 90% of the public opposes trophy hunting of grizzlies, the provincial government refused to end the grizzly bear hunt



Isolated from the Inside Passage by a reversing tidal river, we hope Green Lake and valley will be protected as a legislated Tribal Park. W. McCrory photo.

when they announced protection of the Great Bear Rainforest agreement in February. They did, however, encourage coastal First Nations to end the hunt by raising their own

funds to buy out guide-outfitters' hunting territories. This outrageous proposal completely shirks responsibility for a resource owned by all the people and instead thrusts the responsibility onto First Nations to buy the grizzly bears from guide-outfitters.

Since then, First Nations and public opposition has mounted. Various political parties have said they would end the trophy hunt, but maintain a meat hunt. This is a loophole for bear hunters that you could drive a bulldozer through. We strongly urge you to support VWS' efforts and those of others. including coastal First Nations, to end ALL grizzly bear hunting forever. (See LUSH cosmetics' documentary **TROPHY** www.youtube.com/watch?v= EcYU98e095).



Landslide caused by heli-logging on Gribbell Island. More logging will add to the cumulative effects on the vulnerable Kermode population. W. McCrory photo.

Approval of Two Pipelines Overshadows Victory Over Enbridge

In what should have been a joyously celebrated decision, the federal government rejected the Enbridge pipeline (Northern Gateway) that threatened ecosystems from Alberta to BC's north-central coast. They also promised a legislated ban on tankers on this coast, which is good news for Spirit Bears and the Great Bear Rainforest.

However, at the same time, government approved two giant bitumen pipeline expansions: Kinder Morgan's Trans-Mountain pipeline, and Enbridge's Line 3. These will emit 10 billion tonnes of climate pollution over the next 50 years, making it impossible for Canada to meet its obligation to reduce carbon emissions under the Paris Climate Agreement. These carbon emissions will negate recent reforms, such as a national carbon-pricing plan and the phase-out of coal-fired plants. One of the best news sources for understanding changes in Canada's climate policy is Barry Saxifrage's article in the

National Observer at http://www.nationalobserver.com/2016/12/01/opinion/opinion-trudeaus-co2-scorecard-update.

Kinder Morgan's TransMountain pipeline to Vancouver would cause a 7-fold increase in tanker traffic on the Salish Sea, threatening the endangered southern resident Orca population and the whole south coast marine ecosystem. In the past, VWS submitted a technical report to the hearings on Enbridge's Northern Gateway project, detailing how an Exxon-Valdez type oil spill off BC's north-central coast would threaten vast areas of the marine environment, including the very survival of spirit bears on Gribbell Island and elsewhere [see www.vws.org. A Review of the Threats of an Oil Tanker Spill (38 pages)]. With approval of Kinder Morgan's twinned bitumen pipeline, a similar threat now applies to the south coast.

These decisions followed a recent announcement that the federal government would spend over \$1.5 billion of taxpayer money on a coastal protection plan to deal with the risk of tanker spills. However, according to the US National Academies of Science, Engineering and Medicine, diluted bitumen is virtually impossible to clean up in aquatic

environments.

The risk was emphasized in October when a large tugboat towing an empty fuel barge hit a reef near Bella Bella. The tug sank and leaked over 100,000 litres of diesel fuel into the ocean. Attempts to contain the fuel during high storm weather were largely ineffective, resulting in extensive contamination to the adjacent marine environment and valuable food harvesting area for crabs and clams for the Heiltsuk First Nation. Dead wildlife were

reported, including a humpback whale and a sea otter. The impacts of the fuel spill may last for decades, but bitumen does not act like oil; it is even worse to try to clean up. This underscores the need to oppose the Kinder Morgan expansion project and any other attempts to increase the use of our coast for the international export of tar sands oil.

Apologists for pipelines say that these decisions balance economics and environment. It may sound reasonable to some, but "environmental" impacts means drowning major parts of coastal cities, death to our forests, and death to millions of people from extreme weather, which is already happening. Top climate scientists say that to save the future of life on Earth, we must LEAVE FOSSIL FUEL RESERVES IN THE GROUND. The belief that corporate profits are more important is a "party-now-pay-later" approach that is already having disastrous results on all species. That's not reasonable; it's totally insane.

Wayne McCrory, VWS Director