



Summer • 2014

CANADIAN PARKS AND WILDERNESS SOCIETY
SOUTHERN ALBERTA CHAPTER

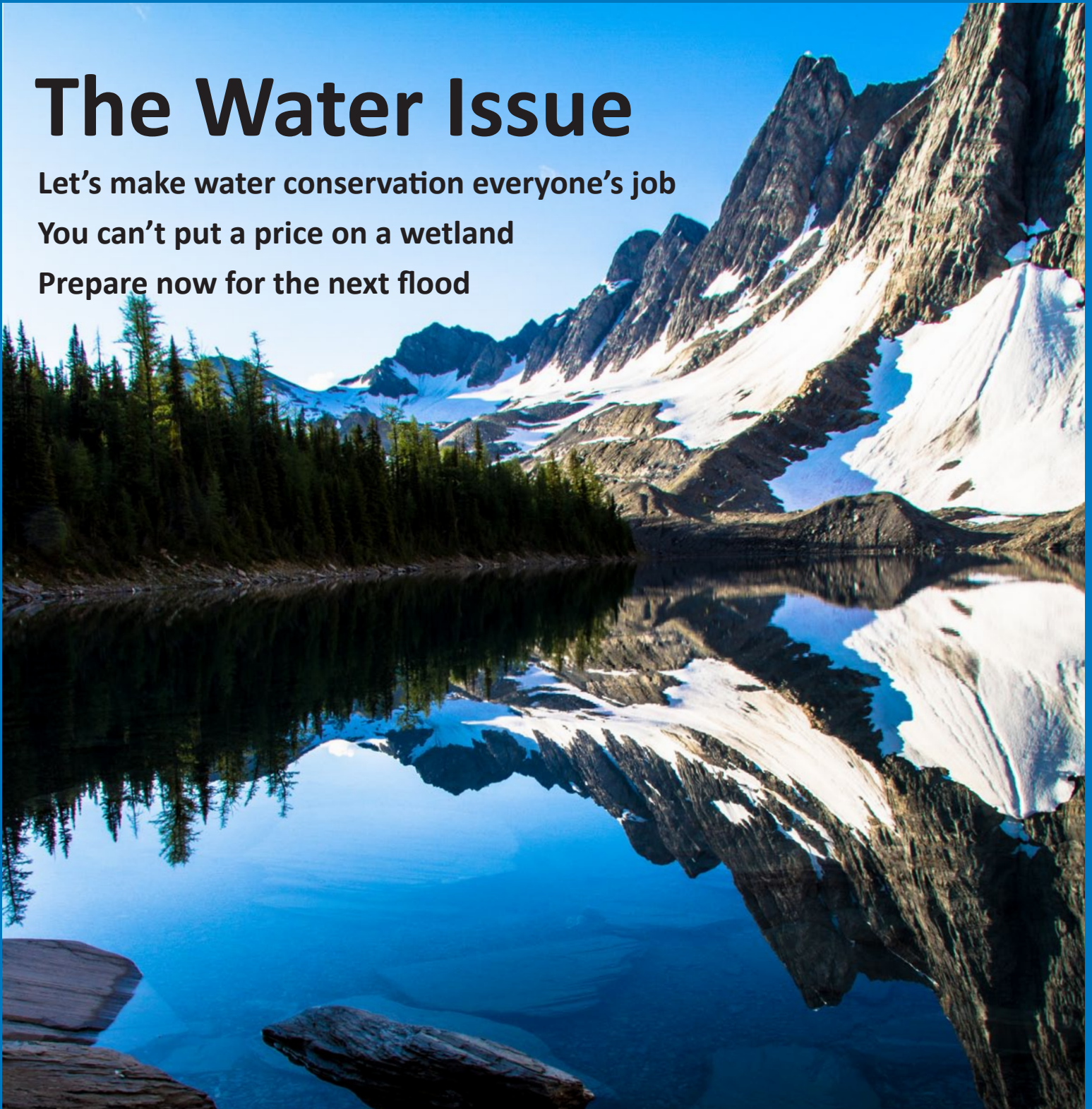
GREEN NOTES NEWSLETTER

The Water Issue

Let's make water conservation everyone's job

You can't put a price on a wetland

Prepare now for the next flood



Chapter Team

Anne-Marie Syslak, Executive Director
Katie Morrison, Conservation Director
Greg McDougall, Education Director
Kate Semrau, Communications &
Outreach Coordinator
Kirsten Olson, Office and Fund Administrator
Carly Johansson, Summer Outreach Coordinator
Alex Mowat, Lead Hiking Guide
Julie Walker, Hiking Guide
Edita Sakarova, Bookkeeper

Chapter Board of Directors

Gord James (Chair)
Liana McCreadie (Treasurer)
Susan Eaton (Chair, Conservation Committee)
David McIntyre
Daryl Beatty
Phil Nykyforuk
Doug Firby
James Early
Joe Vipond

Editor and Design

Doug Firby and Kate Semrau
A special thanks to Doug Firby for lending his
time and editorial expertise in developing this
newsletter.

Contact Information

CPAWS Southern Alberta Chapter
c/o Canada Olympic Park
88 Canada Olympic Road SW
Calgary, AB T3B 5R5
Tel: (403) 232-6686
Fax: (403) 232-6988
Email: infosab@cpaws.org
www.cpaws-southernalberta.org



If you would prefer to receive electronic versions
of our newsletter please send your request to infosab@cpaws.org



Green Notes is printed on paper that is FSC certified, guaranteeing that in the supply of fibre raw materials the standards of the Forest Stewardship Council are respected, and that the pulp the paper is made of consists of mixtures of fibres from certified forests, post-consumer recycling processes, and controlled sources.

CPAWS is Canada's voice for wilderness. For 50 years, we've played a lead role in creating over two-thirds of Canada's protected areas.

Cover Photo: Kim Wells, 2014

In this Issue

Executive Director's Message • 3

Let's make water conservation
everyone's job

By Anne-Marie Syslak

CPAWS NEWS

CONSERVATION UPDATE

Iconic lake faces development threat • 4

By Jill Sturdy, CPAWS National

Grizzly bears get spending boost from government • 4

By Katie Morrison

You have spoken on land use planning • 5

By Katie Morrison

OUTREACH UPDATE

2014 Capture the Wild photo contest winners • 8

By Kate Semrau

OUR CPAWS NEIGHBOURS

Partners join forces to keep the Flathead watershed pristine • 13

By Jessie Corey, CPAWS BC

FEATURES

You can't put a price on a wetland • 6

By Lorne Fitch

Prepare now for the next flood • 10

By Robert Sandford

Solar now an affordable choice for Albertans • 12

By Skyfire Energy

Volunteers put Heart into trail restoration • 14

By Jill Sawyer

Photo: Chad McMahon

Let's make water conservation everyone's job



By Anne-Marie Syslak
Executive Director, CPAWS SAB

Water is our most precious resource. More than two-thirds of the earth's surface is covered by it and about 60 per cent of the human body is made up of it. Yet it is easy to take it for granted and underestimate its power.

Albertans were all touched in some way by the flood of 2013 and many of us watched anxiously this year as the rains fell. The flooding in the southern end of the province this spring warns us these events may no longer be once every 100 years. It also reminds us that what happens upstream affects those downstream.

We are fortunate that the headwaters to the Bow River Basin are housed in a protected area, a national park. Yet, outside of Banff National Park, our population is growing at an unprecedented rate. Many of these other headwaters are not protected. Logging, development, recreational use – everything we do on the land affects our watersheds and its ability to produce clean water and reduce the effects of floods.

Forests, riparian areas and wetlands all provide natural ways to slow down and filter water as it moves in our watersheds. Without these natural protective features, floods would be far worse and our waters less clean.

Protecting natural areas makes economic sense; they provide us with ecological goods and services.

Despite recent flooding in southern Alberta, water use, supply and allocation are growing issues of critical concern, especially since 40 per cent of Alberta's population is dependent on the Bow River Basin. The amount of water use per person in Calgary is greater than it is in many North American and European cities. We need to protect our watersheds and educate everyone about the importance of water conservation, management, use and quality.

CPAWS works towards large landscape conservation. By protecting and connecting with the land, we protect our watersheds and help to ensure the health of our water in the future. We hope the Alberta government considers the values of watershed health and protected areas as critical to our region's future in the land-use planning.

The Southern Alberta chapter has a Water Rangers education program that focuses on watershed education and encourages youth to engage in water conservation. Such education provides students with the tools to appreciate the importance of this resource and take ownership.

It is important to understand water issues in our region. Ripple by ripple, we will cause a wave of change.

Yours in conservation,
Anne-Marie

MEC BIG WILD CHALLENGE

Photo: Sam Lawn, 2012

**Find out about DIY Challenges and Planned Events
at thebigwildchallenge.ca**



Iconic lake faces development threat

By Jill Sturdy, CPAWS National

Yet another threat to the integrity of our national parks has emerged – a proposed resort development at iconic Maligne Lake in Jasper National Park.

Maligne Tours Ltd., which operates a day lodge and boat tours at Maligne Lake, has proposed the development of overnight accommodation, including 15 cabin tents and a 66-room hotel.

This development directly contravenes Parks Canada's policy prohibiting new commercial accommodation outside park town sites. The policy was put in place specifically to limit commercial development pressures in the parks.

The resort proposal also poses a serious threat to park wildlife, like grizzly bears and caribou. A tiny herd of five mountain caribou is struggling to survive in the Maligne Valley, part of a caribou population that has just been recently designated endangered.

This latest proposal comes on the heels of the Glacier Skywalk, a massive concrete, steel and glass commercial structure on the Icefields Parkway developed by the multinational Brewster Travel Canada. Allowing the Maligne Lake hotel to proceed would be one more step toward uncontrolled development in the mountain national parks.

CPAWS is not alone in expressing our opposition to this troubling development. More than 5,000 Canadians have sent letters and signed petitions opposing the hotel. In April, three former Parks Canada senior managers sent a strongly worded letter of opposition to Leona Aglukkaq, the federal Minister of the Environment.

Our national parks are places where nature comes first, by law. Policies have been put in place to ensure that these most treasured natural places are protected for our grandchildren and their grandchildren to enjoy. In the case of Maligne Lake, upholding the law and policy and protecting the park means saying no to overnight accommodation.

Find out more and take action at StandupforJasper.ca

Grizzly bears get spending boost from government



By Katie Morrison
Conservation Director, CPAWS SAB

Alberta appears poised to redouble its efforts to help the province's grizzly bear population recover.

The grizzly bear recovery plan, released in 2008, is being updated this year, setting the direction and implementation for grizzly bear recovery until 2019. And this year's government budget for education and conflict mitigation is more than double last year's.

Alberta's grizzly bears are becoming increasingly fragmented into ever-smaller population units, many of which are fewer than 100 individuals. Mortality rates are unsustainably high in many areas of the province.

The Government of Alberta's 2010 Status of the Grizzly Bear in Alberta report estimates there are 700 grizzly bears on public lands in Alberta. Although grizzly bear populations in some areas appear to be doing well, they are still disconnected from adjacent populations, and populations in many areas of the province are at risk from human-caused mortality.



Photo: Brian Miller

Recovery plans are a summary of the government's commitment to coordinate and implement conservation actions necessary to restore or maintain threatened or endangered species.

In March, CPAWS Southern Alberta was involved in the government's Grizzly Bear Plan Revision Workshop where we provided feedback on the outline of the plan. Overall, we are pleased with its direction, but want to ensure the plan recognizes the importance of a connected grizzly bear population. We also want to ensure it provides concrete actions for reducing the numbers of roads, trails and other linear features on the landscape which put grizzly bears at risk.

We will work with the Government of Alberta as the new plan is drafted, and work to ensure adequate resources are put in plan to implement it. Resources are also needed for reducing linear features.

Alberta's wildlife is world famous, and Albertans are proud of it. Grizzly bears in particular symbolize the wild and free spaces that Albertans and visitors value.

There is room in Alberta for recreation, ranching and resource development, but we also need to conserve and connect our best wildlife habitat as we manage our resources. That means using the best science for protecting the habitat which grizzly bears, elk, bighorn sheep, trout and other wildlife need to survive.

You have spoken on land use planning

By Katie Morrison

Finding a balance between environmental, economic and cultural well-being across a landscape that encompasses a diversity of land-uses is an ambitious challenge. Unfortunately, an initiative by the Government of Alberta is falling short of these goals.

The Government of Alberta is developing a Land Use Framework and associated South Saskatchewan Regional Plan (SSRP) – which covers southern Alberta. The draft plan released in October fails to make the necessary tradeoffs to create appropriate protected areas and care for our valuable headwaters. Without these, we cannot truly protect our important ecological and cultural heritage.

The SSRP region provides habitat for a suite of species at risk, provides clean water, regulates for floods and droughts, provides a diversity of recreational opportunities and supports our Alberta way of life. Yet, the draft plan contained very few on-the-ground changes to ensure we maintain these important natural functions.

Government consultations asking for feedback from the public on the draft SSRP took place from November 2013 to February of this year. Over this time, CPAWS SAB visited many communities and groups to talk about the weaknesses in the draft plan, and additionally made recommendations



CPAWS staff member Kirsten Olson in the Castle Special Place
Photo: Kate Semrau

to improve conservation outcomes and encourage people to participate in the consultation process. This important work was funded in part by a grant from Mountain Equipment Co-op.

Thanks to CPAWS Southern Alberta members and other concerned citizens, we have heard that the government received a lot of feedback on the plan, including: the need to protect the entire Castle wilderness; specific changes and standards to forest management to protect headwaters and wildlife habitat; new protected areas in grasslands, foothills, and mountain natural areas; and limitations on off-highway vehicle use.

The draft is under revision and the final version should be released this summer or fall. We have yet to see how many citizen recommendations will be incorporated into the final plan.

Until its release, CPAWS Southern Alberta is continuing to work with government and stakeholders on including stronger conservation outcomes in the final SSRP – including the legislated protection of the entire Castle wilderness. We are also encouraging people like you to call, email or meet with your MLA and contact Robin Campbell, the Minister of Environment and Sustainable Resource Development, to encourage the government to protect the Castle and implement stronger protection for wildlife, headwaters and grasslands. Every voice is important.

Meanwhile, the North Saskatchewan Regional Plan (NSRP) process is just getting started. The government is selecting members for the Regional Advisory Council and will hold the first consultations on this plan in June.

Visit www.landuse.alberta.ca to find out how to participate in the consultations



HELP KEEP CANADA WILD WITH A GIFT TO



Yes, I want to keep Canada WILD!
Here is my supporting donation: \$ _____
First Name: _____
Last Name: _____
Email: _____
Telephone: _____
Address: _____
Postal Code: _____
City: _____ Prov: _____

Four easy options to provide your gift:

- Please find my cheque enclosed
- Please make cheque payable to the Canadian Parks and Wilderness Society.
 - If you are making a monthly contribution, please write "VOID" across the front of a personalized cheque to allow us to process your gift.

- Credit Card: MasterCard Visa Amex
(Please circle one)

Card Number: _____
Expiry Date: _____ (mm/yy)
Name on Card: _____

For the above two options, please mail this form to:

Canadian Parks and Wilderness Society
Southern Alberta Chapter
c/o Canada Olympic Park
88 Canada Olympic Road S.W.
Calgary, AB T3B 5R5

- Donate securely online at:
www.cpaws-southernalberta.org
- Call our office at (403)232-6686 with your credit card in hand to make your donation over the phone.

At your request, you can receive a tax receipt for your donation. More importantly, you'll receive our sincerest thanks for helping make CPAWS a strong voice for the wilderness.

- Check here if you do not want to be included on our list serve.



You can't put a price on a wetland

Photo: Lorne Fitch



By Lorne Fitch, P. Biol.

It wasn't much of a pond; a puddle in some minds. Most called it a slough.

It filled in the spring and slowly receded into a sea of foxtail by late summer. Runoff from a small watershed of aspen forest, pasture and farmland fed the pond. Once the pond had an outlet, but road ditches diverted much of the flow

to other routes.

I remember as summer progressed a patina of duckweed and algae developed. Mosquitoes swarmed out of it, to be met with ferocious dragonflies, the helicopter gun ships of the insect world.

There was an olfactory aura surrounding it, rich, earthy and often breathtaking. No cropland was harmed by its spreading waters; the loss of pasture was offset by a shorter walk for the cows to water and a band of lush, tall grass ringing the pond where the hidden water reached out to their roots.

Willows surrounded the pond in a near perfect doughnut, putting their roots into the saturated soil. Aspen flanked them in

the drier upland. The dead aspen were light enough for a boy to move and assemble into a raft. Dead aspen is a sponge, so the voyages were short and always culminated in wet feet, if not other body parts. I yearned for more buoyant material to undertake longer voyages of discovery.

Much of the human body is made of water, about 65 per cent. The rest is just framing, plumbing and wiring. It is said that people born on coasts are subject to an irresistible pull back

to water: "The ocean has an old allure to draw her exiles back." Since all life began in the primordial soup of ancient oceans, it is not surprising we have some sort of genetic hard wiring to that allure.

"We know now that riparian areas harbor a disproportionately large share of Canada's wildlife and that is part of their allure."

Even prairie born and raised people display an attraction to water. Whether it was hard wiring, desperation or intrigue, the pond drew me as a kid like no other part of the farm. It also drew the first wave of ducks, mostly mallard drakes, with the unmistakable metallic sheen to their heads. Every so often, in the early mists of morning, one could catch a glimpse of a deer drinking at its margins. A garter snake, surging out of the grass beneath one's feet, generally got the pulse racing.

Swallows collected mud for their nests built under the eaves of the barn. There was a cacophony of bird song; wrens scolding, warblers proclaiming their perch was the best and a red tail hawk pair that vocally resented each intrusion into their neighborhood. Yellow birds, grey birds, brown birds and multi colored birds. I wasn't to learn the theory until much later, but I knew if I wanted to see wildlife, the pond was the place. We know now that riparian areas harbor a disproportionately large share of Canada's wildlife and that is part of their allure.

“Even prairie born and raised people display an attraction to water.” Someone with a strong arm could throw a rock across my wetland and at its deepest

a person of medium height could have waded with impunity. However, to a small boy, its size, depth and workings were unfathomable.

It provided the auditory signal of spring, brought by chorus frogs. At our place, it wasn't spring until their trills were heard. Stealth and patience were required to observe the males with their impossibly inflated sac. An occasional great blue heron taught me those attributes. The transformation of egg clumps to tailed larvae to adults was an independent lesson in

biology, but where did they go when the pond dried up? And what creatures made those other swamp noises?

Investigation, tinged with a bit of fear showed the pond also had leopard and wood frogs. As I crouched at twilight to observe these other creatures, an orange sunset, reflected and framed in the water, found a permanent home in my memory.

So what is a wetland like that worth? Economically it's hard to put a price tag on it, although we are getting better at valuing the significant ecological goods and services wetlands provide.

Could we do without wetlands? No! Beyond all the things we now know that wetlands contribute, that pond provided me with an education, experiences, risks, inspiration, entertainment, connections and appreciation. Sadly, most of the thousands of such ponds scattered across the prairies are now gone.

How many do we need? Climate change has begun to sensitize us to wetland values. Wetlands hold and store water against drought and dampen the effect of floods. Their potential to filter, buffer and improve water quality is impressive. Maintaining, restoring and appreciating wetlands should be the path we diligently follow. My pond is still there, and it is priceless.

CPAWS
CANADIAN PARKS AND WILDERNESS SOCIETY
SOUTHERN ALBERTA CHAPTER

Photo: David Wirzba

**Canadian Parks and Wilderness Society
Southern Alberta Chapter
ANNUAL GENERAL MEETING**

Tuesday, September 9th, 2014
6:30PM - 8:30pm, reception to follow
Lougheed House
707 - 13 Ave SW Calgary, AB
Light Refreshments will be served

With Guest Speaker Robert Sandford
**EPCOR Chair of the Canadian Partnership Initiative in
support of United Nations Water for Life Decade**

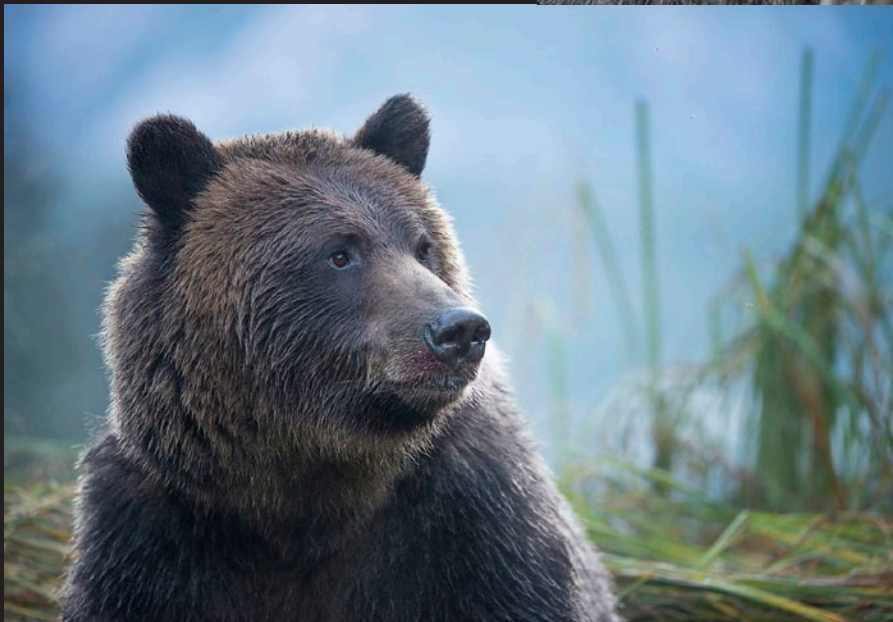
2014 Capture the Wild Photo Contest Winners

OVERALL WINNER

Rebel Rams

By James Anderson

“Every year dozens of Bighorn Rams gather in and around Radium Hot Springs near the border of Kootenay National Park for the yearly rut and head crashing festival! I found these two big Rams pushing and shoving each other around and they briefly gave me a quick intense look.”



WINNER, WILD FACES

Grizzly in the Great Bear Rainforest

By Bill Cubitt

“This past September, I was part of a six person photography trip into Canada’s Great Bear Rainforest on the west coast of British Columbia. With the early morning light shining on us, our zodiac of photographers drifted towards the Grizzly. As he ate fresh salmon that were at his feet we had a fantastic experience of watching this beautiful animal in his natural environment. Our captain of the boat spoke softly to the bear as he ate and we were rewarded with many great photographs.”

WINNER, PEOPLE IN NATURE

Riding in the Light

By Victor Liu

“On my last day in Acadia National Park, fog arrived at sunset, and formed beautiful rays of light through trees. At this moment, a cyclist was riding uphill towards me, dressed with golden fall colours.”



WINNER, NATURE UP CLOSE

Cycle of Life

By Nigel Roberts

"I stumbled across this feather on the forest floor and was intrigued by the patterns. On further observation I noticed a seed pod lodged in the feather. It reminded me of the biological cycle of life."



WINNER, WILD PLACES

Wolf on Evening Beach Walk

By Beverly Jay

"While returning in early evening to Tofino, Vancouver Island, British Columbia, on a boat tour, two wolves were spotted along the woods/beach area on Vargas Island. This wolf walked along the beach crest and was beautifully bathed in light. Photo was made from the deck of the small tour boat."

WINNER, YOUTH

Prowling Fox

By Justin Bagga

"Pictured is a red fox seen on Prince Edward Island."



Prepare now for the next flood



The following is a condensed version of a recent presentation from Bob Sandford, EPCOR Chair of the Canadian Partnership Initiative in support of United Nations Water for Life Decade.

The 2011 flooding in Manitoba showed us that there is a region right in the centre of North America that, in hydrological terms, may be changing as quickly as the Arctic.

Warming is causing the post-glacial hydrological wealth of Canada to change. Sea ice is vanishing, snow cover is diminishing, and some 300 glaciers have disappeared from the Canadian Rockies.

Water does not disappear. However, it moves to a different place in the hydrosphere where it may not be available for our use when we want it, as in the case of extreme drought. Under certain circumstances it can also cause a lot of damage through flooding.

We have also discovered the presence of atmospheric rivers. These corridors of intense winds and moist air can be 400-500 kilometres across and thousands of kilometres long. They can carry the equivalent of 10 times the average daily discharge of the St. Lawrence River.

“Warming is causing the post-glacial hydrological wealth of Canada to change. Sea ice is vanishing, snow cover is diminishing, and some 300 glaciers have disappeared from the Canadian Rockies.”

Photo: Audrey Parnell, 2012



All of this was very much on our minds when, on the evening of June 19, 2013, 150 millimetres of rain began falling in Canmore. Dr. John Pomeroy and members of his University of Saskatchewan research team happened to be there at the time.

Eighteen years earlier, in 1996, Dr. Pomeroy prepared a report for Environment Canada warning of changes in hydrology that would likely increase the potential for flooding, particularly on the Canadian prairies. In the report, Dr. Pomeroy observed

that fresh water is both a mediator and a transmitter of climate change effects.

Water should be viewed not just as a substance but as a mass, energy and biochemical constituents that flow through ecosystems and between the land surface and the atmosphere. Liquid water, water vapour, snow and ice transmit climate change impacts across ecological and political boundaries.

At a recent international conference in Canmore, it was demonstrated that many recent floods involved rotating low pressure systems that remained in the same place for an unusual period of time bringing continuous precipitation up from the south. This resulted in long, heavy rainfall events that covered very large areas. This behaviour is more typical of the tropical region in which the storm originated than local temperate conditions. There is also concern that the kinds of storms we will have in the future may be fundamentally different in character than what we are used to experiencing.

Civilizations that existed long before the widespread use of fossil fuels experienced the consequences of sweeping land-use changes. Since Alberta became a province in 1905, its landscape has been dramatically altered.

The region's hydrology has largely been altered through the construction of storage dams, engineering works and extensive irrigation systems. Careful control of water combined with a period of relative hydro-climatic stability has permitted ever more extensive and expensive developments to be built in southern Alberta's floodplains.

Alberta's vulnerability to extreme weather events has also been growing in step with its economic activities. Alberta is the highest greenhouse gas emitter in Canada and amongst the highest per-capita in the world. So we see that Alberta has made itself vulnerable to flooding in two ways: the location of communities in floodplains and through contribution to changes in the composition of the global atmosphere that result in greater floodplain activity.

Think of Alberta as a pot of water on a stove. We are turning the heat up under the pot by constraining where water goes through structural mitigation to protect developments in floodplains; and we are putting a loose lid over the pot by way of climate change. Expect the pot to boil over.

Warmer temperatures are causing changes in the rate and manner in which water moves through the global hydrological cycle. Simple atmospheric physics decrees that a warming atmosphere can hold more water vapour which can serve as fuel for larger-scale rainfall events of longer duration.



Cougar Creek flows over the Trans-Canada highway in Canmore, June 2013
Photo: Alpine Helicopters

In a May 26, 2013, Calgary Herald article, John Pomeroy was quoted as saying, "There are areas like the Cougar Creek subdivision in Canmore that are especially vulnerable." Three weeks later, on June 19, at 7 p.m., the Town of Canmore recorded the rising creek waters. By midnight, water was backing up into streets and homes.

Cougar Creek quickly breached the Trans-Canada Highway and Bow Valley Trail in Canmore. Within a few minutes of closing the Trans-Canada in both directions, the RCMP began knocking on doors in the Cougar Creek subdivision.

At 6:45 a.m., June 20, 23 truckers and an RCMP officer were trapped by flood waters on the Trans-Canada highway and had to be rescued by helicopter.

At 8:45 a.m., almost six hours after a local state of emergency had been declared; Alberta Environment issued an official Flood Warning for Canmore.

During the night, a spectacularly swollen pulse of floodwater flowed downstream from the mountains into Calgary. Twenty neighbourhoods were evacuated and more than 100,000 people forced from their homes.

South of Calgary, flood waters had risen so quickly in High River that residents were trapped in cars and in their homes and had to be rescued from their roofs. Two-thirds of the community flooded and 5,000 residents were forced from their homes.

It was immediately clear that the right systems were not in place to predict and manage an event of this magnitude and that many of our provincial flood maps are not accurate. This was not a 1-in-1000 or 1-in-500-year event. The flood was later proven

to be a 1-in-42-year event. But, with changes in our hydrology, one must question just what such statistics mean anymore. The economic implications of a more dynamic flood plain are being re-calculated.

Alberta also learned that the growing threat of extreme weather events will demand very expensive infrastructure designed to handle greater extremes. Many Canadian towns and cities are located on flood plains in river valleys. Defending or evacuating these areas will be very expensive.

The floods of 2013 showed our global hydrology is clearly changing faster than our economies, markets and environment can adjust. The loss of hydrological stability is cascading through our climate system, undermining the stability upon which our economic system depends.

Simply managing water at a local scale will no longer be enough. We have to keep an eye on changes in the larger global hydrological cycle and, where possible, try to manage and adapt to them. It is going to take time to get our heads around this concept, not just environmentally but economically.

Predicted rises in temperatures between 2°C and 6°C would result in further amplification of the hydrological cycle by 15 to 40 per cent or more. Sooner or later, we will have to confront the fact that we are rapidly altering the composition of our planet's atmosphere with significant effects on hydrology – a subject not many want to talk about, even now.

Structural engineering solutions are going to be necessary, but they are not going to be enough. We cannot ignore the local value of natural ecosystem processes. Critical aquatic ecosystems must be protected and land and soil degradation must be reversed.

Although this is a societal game changer, now is not the time to panic and throw up our hands in despair. This is a time for courageous and relentless citizenship and heroic leadership.

We owe it to those who have suffered so much from last year's flooding - and those in Saskatchewan and Manitoba who suffered catastrophic flooding again this past summer - to start getting it right for the next time for there will be a next time – and a time after that. Public awareness of water issues is on the rise. There is room to move. We should get moving while that room still exists.

Article condensed by Kirsten Olson with permission from Bob Sandford.

Solar now an affordable choice for Albertans

By Vilasini P. Pillay, Skyfire Energy Inc.

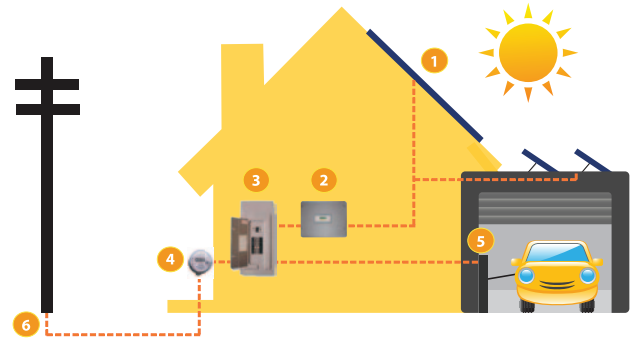
In January of 2009, Alberta's Micro-Generation Regulation came into effect allowing Albertans to generate their own environmentally friendly electricity and receive credit for excess energy exported to the grid. The Micro-Generation regulation allows quick and simple access to the grid with no connection fees. As of May 1st, more than 850 Albertan homeowners and businesses have connected solar PV systems to the grid.

Driven by the dramatic drop in the cost of solar panels, grid tied solar electric systems now, in many cases, offer the lowest option for the purchase of electricity for home and business owners when taking a 20 or 25-year outlook. Today, a typical residential solar installation is about half the price it was in 2008, and about 100 times lower than what it was forty years ago.

Solar PV technology celebrated its 60th birthday on April 25th of this year and is now a highly commercialized product stocked in Alberta. Solar modules are extremely durable and have 25 year warranties. Solar is not only an affordable investment now but a reliable one as well.

When are you going to walk over to the sunny side?

HOW SOLAR WORKS



- 1 Solar panels are made up of photovoltaic cells which convert sunlight into direct current (DC) power.
- 2 The inverter(s) convert DC electricity from the solar array to the AC electricity which is required to power electrical items within the home/building.
- 3 The inverter feeds electricity into the electrical distribution system.
- 4 The bidirectional meter which is supplied free of charge by the utility, keeps track of both the energy imported from the grid and the energy exported to the grid. Savings and export credits are reflected on your electricity bill.
- 5 If you own an electric car, you can charge it up with solar power generated on your own home.
- 6 Your home remains connected to the utility grid to supply you with electricity when you need more power than your system is producing, such as at night.

SkyFireEnergy

Solar Energy Systems

Switch to Solar.
It's cheaper than you think!
Our solar packages start from as low as \$5,400, inclusive of installation.

1-87-SKYFIRE-1 | 403-251-0668 | 780-474-8992 | info@SkyFireEnergy.com | www.SkyFireEnergy.com

Partners join forces to keep the Flathead watershed pristine



Photo: Harvey Locke

By Jessie Corey, CPAWS BC



The campaign to secure the integrity of the Flathead River watershed is decades old, but more urgent than ever because of ongoing development pressure.

Nestled in a far southeast corner of British Columbia, the trans-

boundary Flathead watershed is home to one of the world's greatest concentrations of biodiversity and some of the world's cleanest water.

The water in the Flathead is so pure, in fact, that it's been used by scientists as an international benchmark for water quality. The Flathead is a critical part of a larger regional ecosystem which extends into Alberta to the east, protected in Waterton National Park, and into Montana to the south, where it is protected in Glacier National Park.

The B.C. portion of the Flathead – which encompasses nearly 40 per cent of the watershed – remains unprotected. Because the river's headwaters are located in B.C., this means that, regardless of the level of protection further downstream in the U.S., the entire ecosystem – and particularly the clean water and healthy riparian habitats it sustains – remains vulnerable to the effects of industrial pressures upstream.

The rich mineral deposits and high-quality forests are assets which have in the past led to some very real threats from

logging and mining operations. Thankfully, in 2011, the B.C. government declared a ban on energy and mining development in the Flathead, which has kept the clean water flowing and mining interests mostly at bay. In 2013, the federal govern-

“The water in the Flathead is so pure, in fact, that it's been used by scientists as an international benchmark for water quality.”

ment committed to conserving coal blocks that it owns in the watershed.

However, logging and associated road construction still threatens the

integrity of the Flathead and the remarkable diversity of wildlife that call it home.

For decades, the need to protect this special place has been discussed amongst conservation groups, governments, communities and First Nations. With our partners in Flathead Wild, we've been working to secure protection in the form of a national park and wildlife management area to maintain the integrity of its ecosystems and wildlife, and to keep the waters of the Flathead running clean and wild forever.

For campaign updates, visit www.cpaws.org/campaigns/flathead.



Heart Creek shown post-flood and during the restoration process
Photos: Alberta Parks



Volunteers put Heart into trail restoration



By Jill Sawyer
*Regional Communications Officer,
Alberta Parks*

The Heart Creek Trail, just a few kilometres in from the eastern edge of the Rocky Mountains, was fundamentally altered by the June 2013 floods.

The rocks, boulders, trees and gravel that came rushing down the canyon with the floodwaters scoured the landscape, turning what was once a winding, gentle, well-forested interpretive trail into a tangled, open-air wilderness experience that weaves several times across the radically altered creek.

The Heart Creek Interpretive Trail is just off the TransCanada Highway at Lac des Arcs. It's a popular access point to Heart Mountain hiking and scrambling trails, as well as a beloved climbing crag.

It begins with a gentle upslope parallel to the highway, less than a kilometre walk from the parking lot to the creek. Hikers and climbers who have come this way before will recognize this part of the trail. It's clearly marked, surrounded by trees and bushes, and quickly climbs to a view across the highway to the lake.

“The provincial parks most affected by the 2013 flooding – Kananaskis, Fish Creek, Wyndham Carseland – all have countless fans. It’s clear that nature has carved new pathways, and left the landscape reconfigured and renewed.”

Pass through a small meadow to where the creek tumbles down toward Lac des Arcs, and the trail begins to look less familiar.

Things are much different from pre-flood conditions. Shortly after the water receded, work began on clearing access to the trail, cleaning up the parking lot and armouring the banks of Heart Creek (similar work was being done at trailheads, picnic areas, campgrounds, and other sites throughout Kananaskis Country).

Over the fall, and with hundreds of hours of help from Friends of Kananaskis Country volunteers, Alberta Parks trail crew began making Heart Creek accessible again, rebuilding trail bridges and clearing debris, trimming downed trees and marking the

hiking path. In time, even the interpretive trail signs will be replaced so they can tell the story of the 2013 flood.

What was done at Heart Creek will be repeated at popular

trails, front-country and back-country, through the summer and beyond, restoring access to flood-damaged parks. It's part of the Government of Alberta's \$81-million investment in parks flood recovery over the next three years.

By October 2013, Alberta Parks staff had flown over, driven to and walked through hundreds of sites, assessing the damage.

A flood recovery task force was put in place and projects were prioritized – restoring access to popular picnic sites, opening campgrounds and beginning the tough work of strengthening creek beds and assessing safety hazards.

By mid-autumn 2013, more than 80 per cent of front-country campgrounds in Kananaskis Country were back up and running, along with 50 per cent of back-country campgrounds, more than 70 per cent of the day-use sites, and almost 90 per cent of Kananaskis trails. Like Heart Creek, not all the trails or facilities look the way they once did, and some rough patches remain, but restoring this basic access meant people could get out to Kananaskis Country again.

After the first round of planning, assessment and recovery, the focus turned to winter trail systems, with work completed to open the Canmore Nordic Centre on time for the ski season. Popular ski trails in Peter Lougheed Provincial Park were re-routed and rebuilt to open in time for the season, and the Peter Lougheed Visitor Information Centre, damaged by a new temporary lake created by the flood, was reopened in December after the foundation was reinforced.

Funding for flood recovery has allowed Alberta Parks to bring on additional resources, including an ecologist, a flood recovery volunteer co-ordinator, a recovery planner, project managers, and a dozen additional trail crew members.

The trail crews, split between three districts in Kananaskis

Region, are restoring trails – including clearing debris from the Buller Pass trail, rebuilding footbridges on the Galatea trail, and planning for renewed access to the Fullerton Loop trails in Elbow Valley. Back-country hikers and campers will be able to get into several popular back-country campgrounds again, though some sites like Lillian Lake and Ribbon Falls remain inaccessible, and backpackers should check with Alberta Parks before planning their trips.

Once the heavy equipment work is done, Alberta Parks will call on the hundreds of volunteers who signed up for flood recovery projects over the past 12 months. They'll clear access, place signage, assist with ecological research and beautify facilities and trails.

The provincial parks most affected by the 2013 flooding – Kananaskis, Fish Creek, Wyndham Carseland – all have countless fans. It's clear that nature has carved new pathways, and left the landscape reconfigured and renewed.

On a sunny weekday in June, the Heart Creek trail is well-used: a seniors' hiking group, a group of college-age friends, a couple with a small child. Access up the canyon is well-marked, and the new landscape allows the sun to warm much of the gravel path. The trail crew has left a few of the easy hops across the creek unbridged so hikers can explore its rocky bed as the cold water rushes underfoot. Heart Mountain towers above the trail as always, more easily viewed now. The landscape has completely changed, but the destination is the same.

Coming this fall . . .

DISCOVER PARKS!

A new CPAWS environmental education program for Grades 7 & 9

Generously funded by TD
Friends of the Environment
Foundation


Explore different types of parks within southern Alberta, interactions and ecosystems, the relationship between humans and the environment, and how parks promote conservation. Go to cpaws-southernalberta.org/campaigns/education

LOVE YOUR PARKS



Join CPAWS in protecting these
valuable places.

cpaws-southernalberta.org

 **CPAWS**
CANADIAN PARKS AND WILDERNESS SOCIETY
SOUTHERN ALBERTA CHAPTER

Contact Information

Canadian Parks and Wilderness Society Southern Alberta Chapter
c/o Canada Olympic Park
88 Canada Olympic Road SW
Calgary, AB T3B 5R5
Tel: (403) 232-6686
Email: infosab@cpaws.org
www.cpaws-southernalberta.org
PM Agreement 40043929