

ENVIRONMENT & ENERGY BULLETIN



VOLUME 8, ISSUE 3, JULY 2016

AN UPDATED LOOK AT BRITISH COLUMBIA'S PARKS, PROTECTED AREAS AND CONSERVATION EFFORTS

HIGHLIGHTS

- Conservation of land and marine areas is an important part of recognizing natural, ecological, and/or cultural values of biodiversity. British Columbia is a world leader in this regard.
- There has been a sixfold increase in the quantum of land managed for non-industrial or development values since the early 1990s in British Columbia. The quantum of land protected now stands at a minimum 37% or 349,551 square kilometers, an area slightly smaller than the entire land mass for Germany at 357,168 square kilometers.
- While only 20% of BC GDP is derived directly from natural resource based industries (mining, energy, forestry, energy, agriculture, etc.), 70% of the province's merchandisable exports depend on access to the land. About half of these exports are from the forest sector.
- The Convention of Biological Diversity notes the importance of conserved areas for climate change adaptation and mitigation. Both BC and Canada have not fully integrated the benefits of land use in their plans for managing greenhouse gas emissions. A significant missed opportunity.
- The risk of losing sensitive, unique, or undisturbed regions appears low, particularly in light of BC's rigorous project permitting processes. Any next steps to expand and make more of the province off limits for economic activity should be done with caution, with consideration of quality over quantum as a primary criterion.
- There is growing global demand for high-quality resource-based products, especially from jurisdictions who manage their resources in an effective manner. This bodes well for British Columbia as long as we do not further impede access to the land.

GLOBAL GOAL



Target 11¹ of the [Convention on Biological Diversity](#) (the Convention), commonly referred to as the Aichi Biodiversity Agreement, and adopted by Canada in 1993,² pinpoints a global

aspirational goal that by 2020:

"...at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative

and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes."

As of 2014, the world collectively had managed to protect ~15% of land and about 2% of marine areas,³ with an

¹<https://www.cbd.int/sp/targets/rationale/target-11/>.

² Canada ratified the agreement in December 1993, <https://www.cbd.int/countries/?country=ca>.

additional 1% classified as “no-take” ocean fishing zones.

Notably, nowhere does the Convention say it is necessary for each country individually to achieve the Aichi target. In fact, sovereign rights to use resources and protect the environment as determined by each nation are critical to the effective and durable governance of these kinds of international agreements (see Article 3). Nevertheless, the common practice is to measure performance by looking at whether and to what extent a given country has achieved Target 11 of the Aichi goals.

Naturally, this leads to criticism of countries perceived to be punching below their weight, yet we see little celebration by environmentalists of those that do reach the Aichi targets. Unfortunately, protecting a particular percentage of a jurisdiction’s land mass says nothing about the quality of the land conserved. The main positive aspect of converting an absolute global goal into specific national targets is that it is easy to track. However, protecting land for the sake of satisfying a target does not necessarily address the fundamental objectives of conservation.

CANADA AND GLOBAL GOALS

If the 17% Aichi target is applicable to each country, Canada does not fare well. Although we have submitted five progress reports⁴ and almost doubled the amount of protected

TABLE 1: JURISDICTION RANKINGS BY AMOUNT OF PROTECTED AREA (TO THE NEAREST PERCENT)

	Country/Region	2014	
1	New Caledonia	54%	1
2	Venezuela	54%	2
3	Slovenia	54%	
4	Monaco	53%	3
5	Bhutan	47%	4
6	Turks and Caicos Islands	44%	5
7	Liechtenstein	44%	
8	Brunei Darussalam	44%	
9	Seychelles	42%	6
10	Hong Kong	42%	
11	Greenland	41%	7
12	Bulgaria	41%	
13	Namibia	38%	8
14	Zambia	38%	
15	Croatia	38%	
16	Germany	37%	9
17	Nicaragua	37%	
18	Belize	37%	
19	Slovak Republic	37%	
20	British Columbia	37%	

land since 1990, Canada’s 2014 results show ~10% of land and ~1% of oceans protected in some fashion. On this metric, Canada ranks 134th out of 221 countries.⁵ Adding the Great Bear Rainforest⁶ bumps us up to ~11% of protected land in 2016 — into a similar conservation group with Switzerland, Macedonia, and Puerto Rico. Of course, Canada is the second largest country in the world and vast areas of our nation, while not officially protected, are unpopulated and undeveloped. So just looking at the officially designated protected areas

understates the amount of pristine and essentially undisturbed territory. Achieving the 2020 goal would equate to an additional ~611,000 km² of land set aside within the next three years — 9.5 times greater than the geographic size of the Great Bear. Clearly, there is room to add more conserved spaces in Canada; but as noted in the technical material accompanying the Convention, countries also should consider wider land- and seascape factors, and relevant sectors, bearing in mind the importance of complementarity and spatial configuration.

³ <http://www.mpatlas.org/>.

⁴ <https://www.cbd.int/doc/world/ca/ca-nr-05-en.pdf>.

⁵ <http://data.worldbank.org/indicator/ER.LND.PTLD.ZS>.

⁶ 64,000 square kilometers <http://www.naturallywood.com/sustainable-forests/british-columbia-s-great-bear-rainforest>.

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BRITISH COLUMBIA AND GLOBAL GOALS

On the other hand, if British Columbia were a country, it would be among the world leaders in the quantum of land protected. The Ministry of Environment estimates that 37%⁷ of BC's land base is under some form of conservation designation, including wildlife habitat areas,⁸ old growth management areas,⁹ parks, conservancies, and protected areas.¹⁰ The total protected land mass stands at 349,551 square kilometers,¹¹ and includes national parks, national wildlife areas, and migratory bird sanctuaries; it does not include municipal parks and recreation areas. Consequently, almost 40% of BC is "off-limits" to human/ industrial development and managed principally in pursuit of social and environmental values. At more than two times the global Aichi goal, BC ranks in the top 8 or 9 jurisdictions (See Table 1), depending on whether decimal places are important – with decimals, BC ranks 20th but we move up to 14th if a handful of tiny small jurisdictions are eliminated (see footnote).¹²

HOW BIG IS 37%?

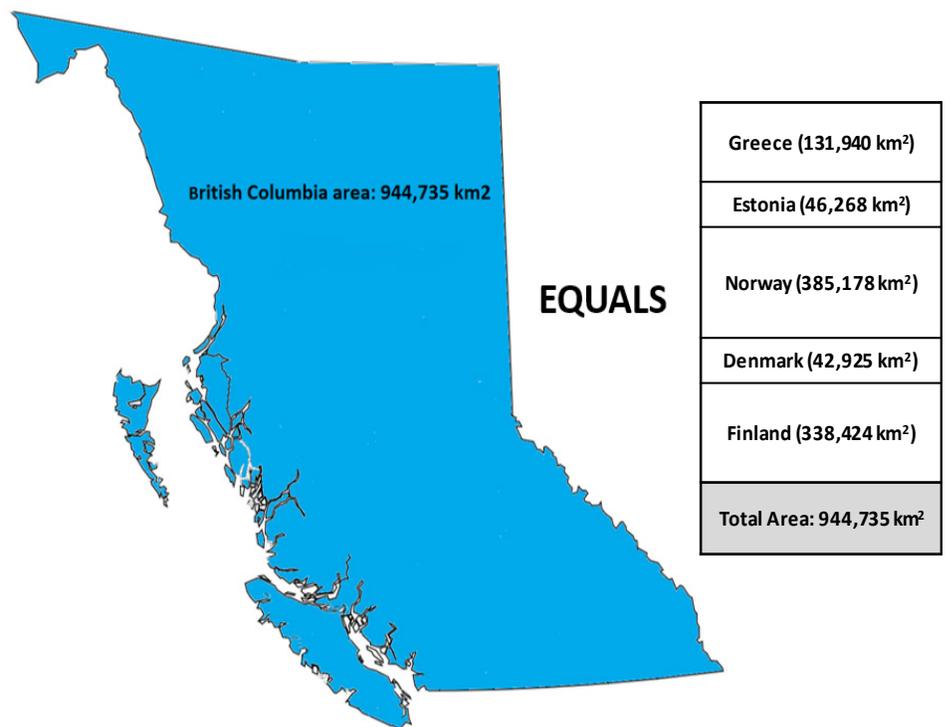
The land mass of BC is challenging to visualize, as is understanding the area already under protection. Figure 1 shows that BC's total land mass equals the sum of the areas of Greece, Estonia, Norway, Denmark and Finland – 944,735 km².

The size of BC's protected areas is slightly smaller in scale than the entire land mass of Germany¹³ – 357,168 km². Of interest, Germany's protected area as percentage of its

land mass is roughly the same as British Columbia's at ~37%, but in quantum (about 132,000 km²) it is 1/3 the size of our protected territory. BC's total protected area is almost equal to the sum of the land mass of five US northeast states – New York, Vermont, Maine, New Hampshire, Pennsylvania – where about 36 million people currently live.

It is also possible to compare BC to places with similar land areas and gross domestic products. Figures 2 and 3 make these visual

FIGURE 1: BC'S TOTAL LAND MASS EQUALS THAT OF GREECE, ESTONIA, NORWAY, DENMARK AND FINLAND COMBINED



⁷ https://news.gov.bc.ca/releases/2016ENVO013-000412?WT.cg_n=Hootsuite.

⁸ Wildlife Habitat Areas (WHA) designate critical habitats in which activities are managed to limit their impact on the Identified Wildlife element for which the area was established. The purpose of WHAs is to conserve those habitats considered most limiting to a given Identified Wildlife element.

⁹ Defined areas that contain, or are managed to attain, specific structural old-growth attributes and that are delineated and mapped as fixed areas.

¹⁰ Include Class A to C parks, recreation areas, conservancies, Designations under the Environment and Land Use Act, and ecological reserves. Follow the link for definitions http://www.env.gov.bc.ca/bcparks/aboutBCParks/prk_desig.html#elua.

¹¹ Total area of BC is 944,735 square kilometers.

¹² The rank of 14th assumes New Caledonia, Sechelles, Turks and Caicos (tourism island communities), Monaco (a city-state), and Brunei, are not counted as they are islands, cities, or small nations within a nation.

¹³ Germany is home to 82 million people.

FIGURE 2: **PROTECTED AREA COMPARED BY GDP, 2015**

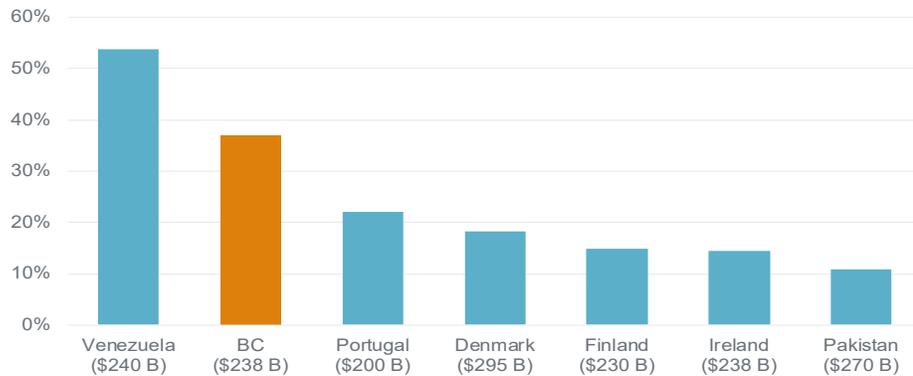
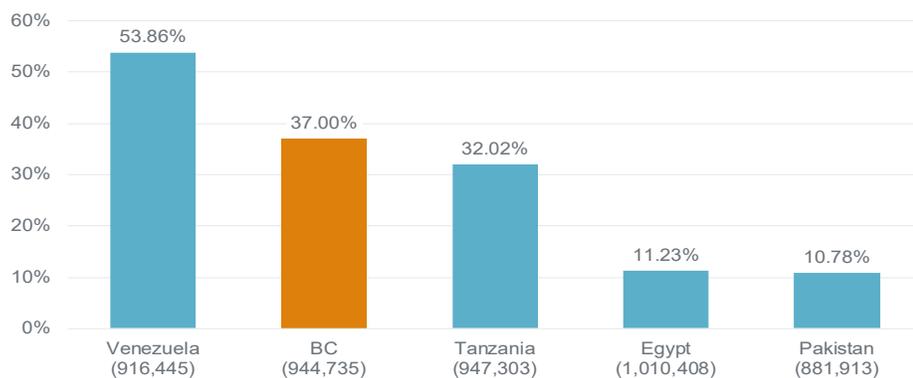


FIGURE 3: **PROTECTED AREA BY LAND AREA**



comparisons. It is important to note the position of Venezuela. World Bank data suggests more than 50% of Venezuela is protected. However, a large portion of this consists of land in the Amazon rainforest.

Figure 4 shows BC relative to the Nordic nations, while Figure 5¹⁴ positions BC in the Canadian context. By any measure, BC is a leader, not only in our contribution to the global target, but also in helping to advance Canada’s national land conservation objectives. Yet, we are reluctant to celebrate this success. From the “war in the woods” 20

years ago, to the extensive land and resource management planning processes and implementation of the Protected Areas Strategy in the mid-1990s, British Columbia has seen a six-fold increase in protected areas.¹⁵ Even so, some environmental groups would have virtually all of the province set aside and betray a limited understanding of what drives our economy. While BC may directly derive only 20% of GDP from the natural resource-based sector — mining, energy, forestry, fisheries, agriculture, etc. — these industries supply ~70% of the province’s merchandise exports

and they all depend on access to the land. Looking ahead, growing global demand for high quality resource-based products, especially from jurisdictions that manage their resources in an effective manner, arguably bodes well for the future of BC’s natural resource industries.

MARINE PROTECTED AREAS (MPAs)

For a perspective on MPAs, see the Business Council’s March 2016 Environment and Energy Bulletin, *A New Marine Regulatory Regime on BC’s North and Central Coast?* Since this publication, Canada has announced a plan¹⁶ to increase the size of marine protected areas to 5% by 2017, rising to 10% by 2020. If we assume that all provinces and territories with coastlines also adopt 10% marine targets, then according to the Ministry of Environment data, BC to date has protected a little over 3% of the marine environment. The addition of 400 km from the Great Bear Rainforest coastal region increases this further. New candidates for expansion of MPAs in BC include the Hecate

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¹⁴ <https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=BOC62685-1>.

¹⁵ 1991 baseline was 6.1% protected.

¹⁶ <http://news.gc.ca/web/article-en.do?mthd=tp&crtr.page=1&nid=1081789>.

Straight and Georgia Straight glass sponge reefs, both of which are heavily used shipping routes. The potential expansion of MPAs will pose interesting policy issues given maritime shipping's role as the preferred mode of transportation (90%) in global trade.¹⁷ Shipping routes pass through all of these protected and potentially protected marine areas.

INDUSTRY AND PROTECTED LAND

In BC, when we talk about protecting land, we are usually referring to forested land, which covers about 60% of the province (55 million hectares). In the past, conflicts over old growth timber harvesting, particularly along the coast, led to the designation of some protected areas. The forest industry today is modern, efficient, and innovative. Forestry not only directly accounts for about 5.5% (~\$12B) of the province's GDP, but it also supplies 35-36% of our merchandise exports and provides 1 in 16 jobs. Forestry is also the largest manufacturing sector in BC.¹⁸ All of this economic value derives from the annual harvesting of about 1% of the total harvestable timber in the province.

At this point, we should be careful about next steps — the quality of protected areas, not the quantum, arguably is the most significant factor to consider.

FIGURE 4: PROTECTED AREA COMPARED TO NORDIC COUNTRIES, 2014

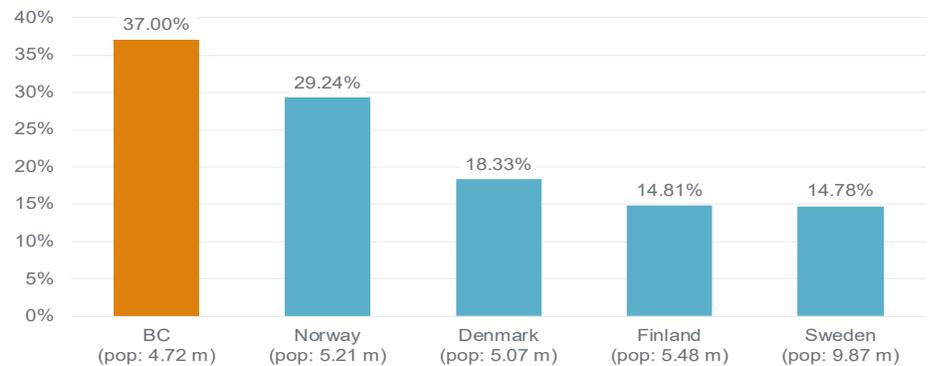
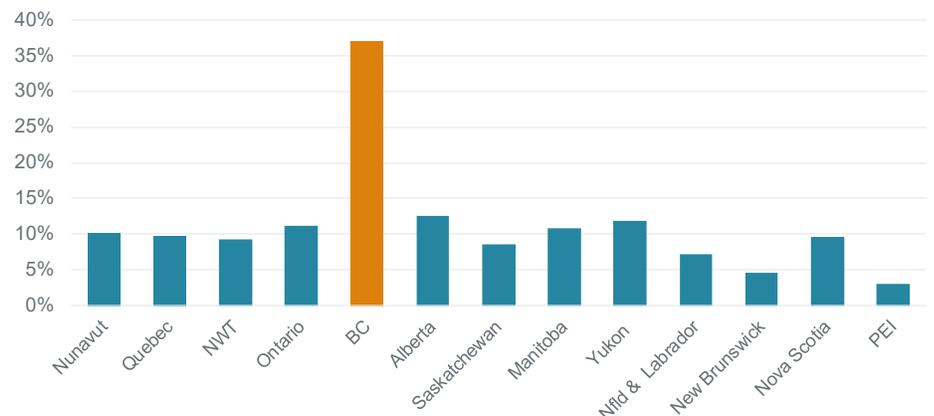


FIGURE 5: TOTAL % OF LAND PROTECTED BY PROVINCE, 2015



(See Forest Facts [here](#) and [here](#).) Importantly, 55% of the coastal old growth temperate rain forest is now conserved — this is ~3 times the Aichi goal.

Going forward, while the BC forest industry has been a leader in conservation (e.g., Great Bear Rainforest), it will also push for science, solid policy rationales, and efficient regulations in the implementation of new management ideas and any additions to the current quantum of protected areas.

There is room for a healthy dialogue on the extent to which BC should be adding to our already extensive conserved spaces.

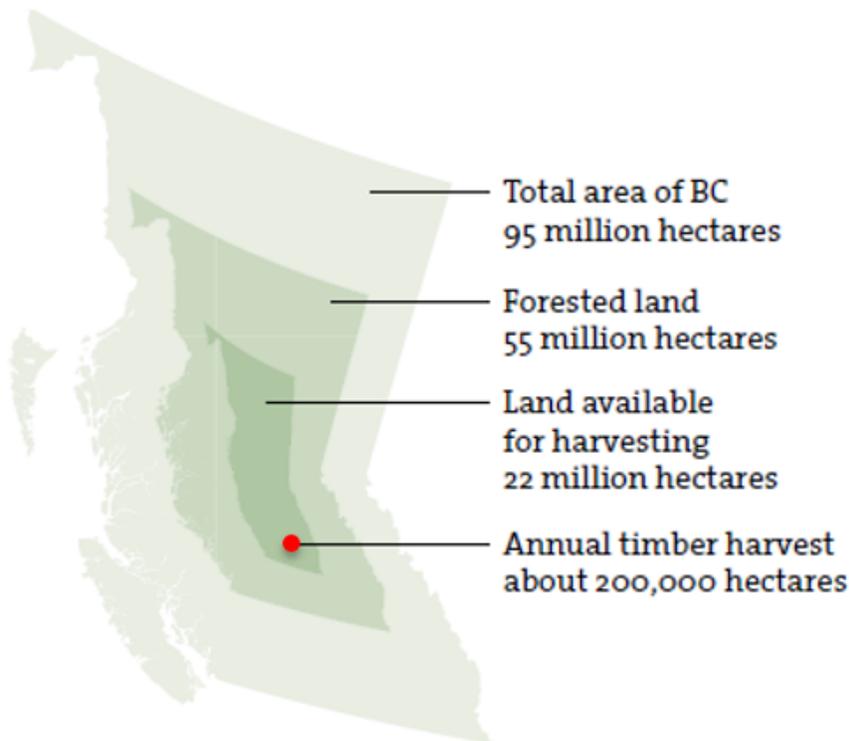
CLIMATE CHANGE AND PROTECTED AREAS

In terms of climate change, the Convention on Biological Diversity notes that protected areas can be a prominent part of ongoing adaptation and mitigation strategies. If this is indeed the case, there may

¹⁷ <http://www.ics-shipping.org/shipping-facts/shipping-and-world-trade>.

¹⁸ BC Forest Industry Economic Impact Study January 2015 http://www.coastforest.org/wp-content/uploads/2015/02/bc_industry_impact_01-2015.pdf.

FIGURE 6: **ANNUAL TIMBER HARVEST COMPARED TO TOTAL AREA, TOTAL FORESTED LAND AND TOTAL LAND AVAILABLE FOR HARVEST**



Source: Forestry Innovation Investment.

to consider. British Columbia already has a reputation as a very difficult place to build natural resource and infrastructure projects. Classifying ever more the province as off-limits for all forms of economic activity will further constrain access to the resources that remain fundamental to our economic and social well-being while doing little to advance many of the key biodiversity issues identified in the Convention.

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be an opportunity for Canada to set aside additional land and get international credit for this under the Land Use, Land-Use Change and Forestry (LULUCF) account, as well as increase the 11% of designated protected land to something greater. Current forecasts of greenhouse gas emissions do not include LULUCF sink credits,¹⁹ although they should. It appears Canada's huge land mass has benefits that are not yet fully integrated into governments' plans for managing emissions — a significant missed opportunity given the country's size and low population density per square kilometer.

CONCLUSION

British Columbia's land base today enjoys a high degree of protection. In fact, BC has set aside a larger portion of land than any other province, and we can stand proudly among global leaders. Overall, given the amount of land protected since the 1990s, the risk of losing sensitive, unique, or undisturbed regions appears low, particularly in light of BC's rigorous environmental assessment and project permitting processes.

At this point, we should be careful about next steps — the quality of protected areas, not the quantum, arguably is the most significant factor

¹⁹ <https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=CCED3397-1>.