



*New Hampshire Citizens for a  
Responsible Energy Policy*

## **New Hampshire and Carbon Pollution** ***FACT SHEET***

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### **WINTER RECREATION, GLOBAL WARMING AND NEW HAMPSHIRE<sup>1</sup>**

We've always had a hunch that cold, snowy winters produce more North Country tourist dollars than warm, slushier ones. Now, in an October 2006 report, researchers have proven the hunch and put hard numbers on the differences by analyzing historical climate data and several winter recreation economic indicators.

#### **Outdoor winter recreation is a critical economic driver for New Hampshire's four northern counties and is vital to the entire state:**

- During the winter quarter (Dec-Mar) almost 40 percent of our state's total visitor spending goes to the North Country. Almost 80 percent of that is spent on snow-and cold-dependent outdoor recreation: skiing, ice fishing and snowmobiling.
- The Rooms & Meals Tax is New Hampshire's second largest revenue source. During the winter quarter, the North Country generates one-third of visitor Rooms & Meals tax revenues.
- Winter visitors spend almost 20 percent more per visitor day than the average.

#### **Cold, snowy winters bring more visitors and generate more economic activity than warm, slushier winters:**

- Warm, slushy winters mean 6,000 fewer jobs, a loss of 4 percent of North Country winter employment.
- 33 percent fewer skiers visit New Hampshire in low versus high snow years. Alpine ski ticket sales decline by 15 percent, or almost \$12 million dollars. Nordic ski ticket sales drop by almost 30 percent, or \$650,000.
- Snowmobile registration license fees drop by almost 30 percent, a loss of nearly one million dollars.
- Total ski ticket, fishing license and snowmobile registration fees decline by 14 percent, a loss of over \$13 million dollars in warm, slushier winters.

<sup>1</sup> Cameron Wake, Elizabeth Burakowski and Laurence Goss. 2006. [Winter Recreation and Climate Variability in New Hampshire: 1984 – 2006](#). Commissioned by Clean Air-Cool Planet. [www.cleanair-coolplanet.org](http://www.cleanair-coolplanet.org)

### Energy policy choices today will impact the winter economy in the coming decades:

- This 2006 climate-tourism study shows that an overall increase of 5 degrees F marks the difference between a relatively good and relatively poor year for winter recreation.
- A recent study published by the Union of Concerned Scientists projects that, if we continue to burn fossil fuels at present rates, atmospheric concentrations of heat-trapping greenhouse gasses will continue to increase.
- By the middle of this century, winter temperatures in New Hampshire would increase by about 6° F, cutting winter snow cover days in the White Mountains by about 20 percent. By the end of the century, winter temperatures would increase by 10° F and White Mountains snow cover days would drop by one-third. Unless we change to energy policies that limit greenhouse gas emissions, the relatively warm and snow-less winter of 2006 will become the “normal” winter of 2050.

### The Good News:

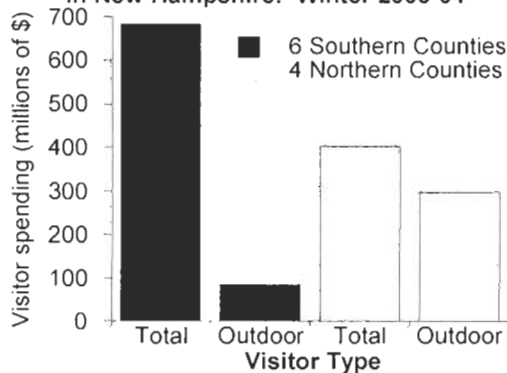
- We can reduce these projected impacts by about half and protect the North Country winter economy ... if we seek aggressive efficiencies and begin to replace fossil fuel combustion with non-polluting energy sources, such as wind, biomass, solar, geothermal and other technologies.
- The energy path we choose today will largely determine whether or not New Hampshire's climate becomes remarkably similar to that of the U.S. south.

### Notes:

Over the past two decades, the North Country continued to attract visitors during warmer winters. While warmer-winter visitors spent similar sums of money on rooms and meals, they engaged in activities that do not rely on cold, snowy conditions: shopping, scenic driving, walking and hiking. **It is not clear that visitors will continue** to travel to the region and spend their dollars on rooms and meals if warmer, slushier winters become more frequent and make the prospect of quality outdoor recreation experiences too uncertain.

Most of the jobs gained or lost as a result of winter climate variation are seasonal full-time and part-time positions at ski areas and stores which rent, sell and repair ski and snowmobiling equipment, and are generally held by people who also depend on seasonal jobs in the region during the rest of the year, such as farmers, forest workers, and landscape and nursery workers.

Total and Outdoor Recreation Visitor Spending in New Hampshire: Winter 2003-04



78 percent of outdoor winter recreation activity spending statewide took place in the northern four counties of New Hampshire, where visitors make up 37 percent of the total spending by all visitors statewide during the four winter months of 2003-4.

Spending by those engaged in outdoor winter recreation activities is a far more important activity in the northern four counties than it is in the balance of the state.

The full report is available on-line at: [www.carboncoalition.org/education/winter.php](http://www.carboncoalition.org/education/winter.php)

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**Table 7.3. Estimated ticket sales and license fees in 2006 dollars for cold, snowy winters vs. warm, less snowy winters.**

Ticket sales and license fees are also compared between cold, snowy winters and the winter of 2006, which science indicates is likely an “analogue” – or typical – for winters in NH for the next 50 years.<sup>1</sup>

Winter Recreation Indicator		Cold Snowy Winters	Warm Less Snowy Winters	Difference	Percent Decrease	“Analogue” winter of 2006	Decrease from cold, snowy winters
Alpine Skier Days							
	North	\$55,812,157	\$49,284,664	\$6,527,494	12%	\$47,858,240	14%
	South	\$28,582,319	\$23,605,970	\$4,976,349	17%	\$28,020,210	2%
	Total	\$84,394,496	\$72,890,634	\$11,503,862	14%	\$75,878,450	10%
Nordic Skier Days							
	North	\$1,721,088	\$1,334,928	\$386,160	22%	\$1,067,584	38%
	South	\$526,736	\$260,834	\$265,902	50%	\$141,946	73%
	Total	\$2,247,824	\$1,595,762	\$652,062	29%	\$1,209,530	46%
Fishing Licenses		\$1,678,545	\$1,605,340	\$73,205	4%	\$1,299,400	23%
Snowmobile Registrations		\$3,534,583	\$2,588,736	\$946,207	27%	\$3,160,989	11%
Revenue (reg. & lic.)		\$5,213,128	\$4,194,076	\$1,019,052	20%	\$4,460,389	14%
<b>Total</b>		<b>\$91,855,448</b>	<b>\$78,580,477</b>	<b>\$13,174,976</b>	<b>14%</b>	<b>\$81,548,369</b>	<b>11%</b>

**Study Authors:**

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- Cameron Wake researches global climate and environmental change at the University of New Hampshire Climate Change Research Center.
- Elizabeth Burakowski is a master’s candidate at the University of New Hampshire, working in the Climate Change Research Center researching changes in winter time climate in the Northeast.

<sup>1</sup> Cameron Wake, Elizabeth Burakowski and Laurence Goss. 2006. Winter Recreation and Climate Variability in New Hampshire: 1984 – 2006. Commissioned by Clean Air-Cool Planet. [www.cleanair-coolplanet.org](http://www.cleanair-coolplanet.org)