GLOBAL WARMING effects skiing

The ski industry is taking climate change seriously and looking for solutions

Global warming is no joke. We have already seen some effects on our ski areas and if the trend continues, it will force many ski areas to close. Many of the ski areas at risk may not close today or even in our lifetime, but if the trend isn't reversed more resorts will be at risk.

So far, the affected ski areas are mostly smaller ones that cannot afford snowmaking equipment. Rising snowlines means fewer days a resort is open and less affordable it is to keep the resort open.

Snowmaking will not ultimately be the answer. Water needed for increased snowmaking may be harder to come by and higher temperatures may not even allow for snowmaking.

According to a recent 2012 report from the Natural Resources Defense Council (NRDC), if current levels of greenhouse gas emissions continue, temperatures on the already warming planet might rise by anywhere between 4ºF and 10ºF. Ski seasons will get shorter, snow levels will move higher, and the 38 U.S. states with ski industries will lose $1 billion in revenue and 27,000 jobs because of decreasing snow.

Aspen has been a leader in protecting the environment. They recently invested $5.5 million to develop the first large coalmine methane-to-electricity project in the U.S. They developed the ski industry's first climate policy and committed to reducing their carbon dioxide emissions by 25% by 2020 from their 2000 levels.

Mammoth Mountain, California, has embarked on an energy revamp in recent years. Since 2000, the ski area has reduced electricity needs by 9 percent and cut propane use by 70,000 gallons per year, thus using less energy than it did in the past.

Sundance on December 6, 2012 waiting for snow so they could open. Photo by Steve Griffin / The Salt Lake Tribune.

The ski industry is taking climate change seriously, and is looking for solutions. National Ski Areas Association (NSAA) adopted a climate change policy in 2002, pushing member resorts to inventory their emissions of greenhouse gases, retrofit buildings to be more energy efficient and promote mass transit use by guests and employees.

During 2012, more than 100 resorts sent letters to Congress in support of clean-energy legislation, power plant carbon emissions standards and the wind energy production tax credit.

As a skier, you can make a difference—Write letters to Congress, carpool to the mountains and do whatever it takes to reduce your personal carbon footprint. ◆

RESORTS at risk

This is what the science is telling us: By 2039, the East Coast ski season will be a full two weeks shorter. The chance of resorts being open for Christmas will be below 75%.

Mountains will be increasingly dependent on snowmaking to get the season up and running, meaning less skiing in the trees, steepening ticket prices as snowmaking costs increase and more hills going out of business.

Out West, high-altitude snowpacks have been in a steady decline, and, like this past season, seasons will shorten, more precipitation will fall as rain and spring melt-off will come earlier.

Chris Daly, director of OSU's Spatial Climate Analysis Service, said a study found that more than half of the ski areas area in the Western Oregon Cascades are at risk. That's because winters in this part of the Northwest would take only a small amount of warming to tip the scales from snow to rain.

Precipitation that falls on the west slope of the cascades as snow (today) is falling near the freezing point. If you increase the temperature just a little bit, you turn that snow to rain.

Among the larger ski areas in the United States, the most at risk are Aspen, CO, and Park City, UT.

By 2100, the snowline at both Aspen and Park City will move up 2,400 feet higher, unless the greenhouse gas emissions such as carbon-dioxide are reduced from current levels. ◆