



FACING OUR FUTURE: Outdoor Recreation Adapting to Connecticut's Changing Climate

“Residents and out-of-state visitors enjoy some 8 million recreation days each year in Connecticut’s 171,479 acres of state parks and state forests, generating \$2.4 million in day-use fees. Our state’s public and private campgrounds attract over 900,000 visitors each year, generating \$16 million in user fees. Campground travelers (about 38% are out-of-state visitors) spend some \$296 million in our state each year.”

The Connecticut Statewide Forest Resource Plan 2004-2013

Implications of a Changing Climate on Outdoor Recreation

The changing climate in Connecticut is impacting when and how residents and tourists will enjoy the outdoors. Traditional winter sports will be at risk when the state no longer experiences the depth of ice and longer seasonal snow cover that it once did to support snowmobiling, skiing, skating and ice fishing. Hotter weather will drive more people from our cities to the shore for relief. Greater demand at our shoreline beaches is coming when these same beaches are being eroded away at an accelerated rate. Hikers seeking solace in Connecticut’s beautiful open spaces will need to use more caution to avoid Lyme disease from ticks, West Nile from mosquitoes, and greater exposure to the sun. Yet, getting outside will remain essential to a sense of well being.

According to the *Connecticut Statewide Comprehensive Outdoor Recreation Plan (2005-2010)*, the State of Connecticut and its 169 municipalities are the dominant providers of outdoor recreational opportunities in Connecticut. The Connecticut Department of Environmental Protection (CTDEP) owns 66% of the total recreational acreage, with municipalities owning 17% and other entities owning the remaining 17%. The CTDEP provides major shares of the natural resource based supply of recreation, including 70.5% of

hunting activity and 25-33% of boating access, camping, fishing, and winter sports facilities. Municipalities provide most of the playgrounds, athletic fields and swimming pools. Private clubs and organizations own the majority of golf courses, and provide 25% or more of volleyball facilities, beaches, boating access, swimming pools, camp sites, and hunting and fishing access areas. A few activities such as hunting, fishing, boating, trails, and historic sites receive significant levels of support from all three sources: state, municipal, and private ownership.

Despite, or in some cases because of, the changing climate Connecticut citizens will continue to look to the outdoors to recreate as part of a healthy lifestyle and to appreciate nature’s unique attributes. Connecticut’s State Park and Forest system will need to be managed in a way that accounts for these increased demands at the same time the impacts of a changing climate alter the physical nature of these parks. Short term responses necessary to maintain viable recreation activities will need to be balanced with long term planning that accounts for rising sea level, increased frequency and severity of flooding, drought, and eroding shorelines. (See also the Natural Coastal, Forestry and Wildlife fact sheets for additional factors that need to be taken into consideration as part of the long term planning efforts).

Summer Activities - Projections by the Union of Concerned Scientists say there will be at least 30 or more days with temperatures over 90°F in the northeast by 2040. Hotter weather will begin sooner and last longer. The first heat wave of the summer of 2008 hit Connecticut in early June. Temperatures in the state peaked above 90°F four days in a row. The maximum daily temperature recorded at Bradley Airport during this heat wave was 98°F. On all four days the CTDEP issued Air Quality Alerts for the public and regulated community under the new ozone standard. On June 10th air quality reached “Unhealthy” levels in some portions of the state, with the highest 8-hour ozone level measured in Greenwich. These higher ozone levels may trigger asthma and other respiratory ailments. Associated air quality alerts recommend that those susceptible to respiratory problems refrain from activities involving exertion outside. At the same time others will seek relief from this extreme heat at our shoreline and other parks that offer opportunities for swimming.

Beachgoers - Hammonasset is a very popular, heavily used state park serving more than 1.8 million visitors each year. Along with the other two major shoreline parks, Rocky Neck and Sherwood Island, these three parks host more than 40% of our park visitors each year. As summers become warmer there may be increased demand for beach access. While this is likely to result in increased revenues these revenues are not likely to keep up with the increased demands.

Today existing boardwalks at Hammonasset are under threat from advancing beach erosion and CTDEP is taking significant steps to temporarily stem this tide. As sea level rises and storm surges increase in intensity and frequency, long term solutions must be worked out. Boardwalks may need to be moved further inland reducing parking lots that are adjacent to the beach facilities. The majority of current parking and access for campers could be compromised. Beach related facilities may have to be removed or relocated. The redesign of these shoreline parks will need to consider components of retreat as one option, as the shoreline inevitability moves inland. Right now replenishing the beach annually with more sand is still the optimal position for Connecticut, but in short order the CTDEP will have to turn to

more permanent solutions. Educating the visiting public to the threats of heat stress, sunlight exposure and natural hazards such as lightning and severe weather events will be important to ensuring the safety and health of future park visitors.

Boating – While projections point to more frequent and intense storm events, overall summer time precipitation is not expected to increase. However, with rising temperatures and increased evaporation rates, short-term drought conditions are expected to be more frequent. Coupled with ever increasing demands on the state’s water resources, freshwater paddle sports such as canoeing and kayaking could be impacted.



Hammonasset October 2008

Fishing - Fishing is undergoing many changes due to changes in water temperature and other stresses on our fisheries. Cold water populations are losing ground in Connecticut freshwater and are being replaced by cool and warm water species. Impacts on recreational fishing and lobstering in Long Island Sound are expected as well. (For a much more in depth discussion on the changing climate and fisheries see the Fisheries factsheet).

Camping and Hiking –Flash floods can leave trails washed out or blocked with debris. The CTDEP may be forced to close certain trails and parks due to weather related damage. Heat stress will make some activities less enjoyable, and unsafe for some populations. Tick and mosquito seasons are expanding and will present additional public health challenges.

Winter Activities - Communities that rely on natural snow and ice for recreation are going to have to transition to shorter and shorter seasons and adjust to lack of in-season reliability. Opportunities to enjoy simple pleasures like sledding or playing pond hockey on a cold winter day are becoming harder and harder to find. Skiing at Mohawk Mountain, a winter playground in Connecticut for sixty years, may become less and less viable over the course of the next decade.

Ice fisherman and snowmobilers are impacted by ice depth and strength and ice-in and ice-out dates also reflect a shorter winter season than the recent past. In 2008, the CTDEP had to cancel its ice fishing derby for lack of reliable thick ice on Coventry (Wangunbaug) Lake.

What Connecticut is Doing

Camping - Camping at some state parks, is being extended at one or both ends of the season to meet demands for expanding spring and fall activities. CTDEP is continuing to develop additional campground capacity where it can be done cost effectively. In response to public demand and preferences, State Park Campgrounds will be offering cabins, electrical and utility hookups and WiFi to meet public expectations.

Trails – An emphasis has been placed on improving interconnectivity of state and local trail systems increasing opportunities for access between urban and suburban areas and our parks. Trails continue to be expanded and more emphasis is being placed on additional uses such as biking, letter boxing and geocaching.

Fishing - The CTDEP is stocking warm water and cool water fish in areas that can no longer sustain cold water species. In areas where cold water species are resistant and can thrive they will continue to be stocked. The Connecticut Aquatic Resources Education (CARE)

workshops foster resource stewardship, promote an understanding of aquatic systems and utilization of aquatic resources. Additionally, *City Fishing* summer events have taught 25,000 minority youth on urban waters.

Sherwood Island is reducing impervious surfaces and improving stormwater quality by installing a stone dust parking lot and ditches to catch the first, most critical, hour of run-off. This allows precipitation to infiltrate, attenuating the impacts of stormwater on the natural environment. CTDEP needs to continue to look for opportunities to lead by example in promoting low impact development and green building practices at its facilities. (See the Water Resources and Infrastructure fact sheets for more details on low impact development and responsible growth).

Beachgoers - Increasing access to Long Island Sound will help distribute the demand placed on the shoreline parks. A public beach and boardwalk has been developed at Silver Sands in Milford and a master plan has been completed outlining further opportunities for expansion of facilities.

CT DEP will be monitoring the reduction in parking spaces at shoreline parks and increased demand. At some point Connecticut's shoreline parks could benefit from improved service by mass transit systems. In addition, greater capacity and facilities to accommodate multiple use trails to serve walkers and bikers, who will frequent the parks using alternative forms of transportation, will be important.

This is one of eight documents in the series *Facing our Future* concerning Connecticut's changing climate, www.ct.gov/dep/climatechange

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RESOURCE LINKS

- Check for a state swimming area water quality report before heading to the beach at 1-866-287-2757 or check the website at www.ct.gov/dep/cwp/view.asp?a=2222&q=320786&depNav_GID=1654
- Check the air quality forecast at www.ct.gov/dep/cwp/view.asp?a=2222&q=320646&depNav_GID=1744
- Use shoreline pump-out facilities, before boating visit the DEP pump-out website at www.ct.gov/dep/cwp/view.asp?a=2705&q=323708&depNav_GID=1635
- Check for CARE classes across the state www.ct.gov/dep/cwp/view.asp?a=2696&q=386682&depNav_GID=1630
- Be prepared for extreme weather: see the Ready America link on the Connecticut Department of Emergency Management and Homeland Security website at www.ready.gov/america/makeaplan/index.html