

Smokey Says, “Get Your Ash Off My Beach”: Implementing a Smoke-free Beach Policy at Whiskeytown National Recreation Area

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Introduction

A BEAUTIFUL MOUNTAIN LAKE WITH WHITE SANDY BEACHES serves as a relaxing haven for 800,000 annual visitors at Whiskeytown National Recreation Area. The National Park Service tries to provide a high-quality visitor experience with lifeguards, a crime-free beach environment, clean restrooms, concessionaire services, and a swimming area protected from motor boats. Like any beach area, litter is always an issue and the four large swimming beaches at Whiskeytown Lake have their share. Cigarette butts are common in the sand, but Whiskeytown beaches fall short of being described as ashtrays, unlike some other beaches throughout the United States.

People visiting national park sites generally expect their stay to be a healthy—often a healing—experience for the body and soul. The park’s beach users are mostly mothers with children who find the designated swimming beaches ideal places to recreate throughout the summer season. Secondhand smoke is common in outdoor areas where large crowds of the public congregate. This is especially true in Shasta County, where smoking rates are around 16.8% of the adult population, higher than California’s state average of 13.8%.

During the spring of 2009, the Shasta County Public Health and Human Services department requested park management to consider a smoking ban at Brandy Creek Beach, the most popular public swimming beach at Whiskeytown (Figure 1). At the time, the park’s management team was engaged in making other decisions of public interest and decided it best to put this proposal off for a year. In the fall of 2009, talks began with the Shasta County Tobacco Education Coalition and Shasta County Public Health to introduce the public to the idea of implementing a smoke-free policy at Whiskeytown.

On May 1, 2010, the park superintendent wrote a memorandum to the Park Compendium establishing the four designated swimming beaches at Whiskeytown as “smoke-free.” This included the use of medicinal marijuana, which is prohibited by federal law, as well as smoking tobacco products.

The George Wright Forum, vol. 27, no. 3, pp. 292–302 (2010).

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Figure 1. Brandy Creek Beach at Whiskeytown National Recreation Area.

Secondhand smoke and public health

Tobacco use remains the number one preventable cause of premature death in California and the United States as a whole (CDC 2009b). This is despite decades of research and education on the harmful effects of tobacco use. We now know that significant dangers exist in the 4,000 chemicals that have been identified in tobacco smoke (NCI 2007). At least 250 are known to be harmful, and 50 of these are known to cause cancer (NCI 2007). These dangers are confirmed by the Centers for Disease Control and Prevention (CDC), which estimates that tobacco use is responsible for more than 430,000 deaths per year among adults in the United States (about 20% of all deaths) (CDC 2009b). Furthermore, it is estimated that 53,000 deaths are due to secondhand smoke each year in the United States, approximately 6,000 of which occur in California (HHS 2006).

Involuntary exposure to secondhand smoke has been growing as a public health concern since the connection between smoking and heart disease was documented by the surgeon general in 1983 (CDC 1983). Since that time, decades of research on tobacco use and secondhand smoke have identified a number of additional chronic and acute health consequences. In 2006, a second report from the surgeon general analyzed such findings and found that scientific evidence supports several conclusions, including: secondhand smoke can cause sudden infant death syndrome and other health consequences in infants and children, exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system, secondhand smoke causes coronary heart disease and lung cancer, and

there is no risk-free level of exposure to secondhand smoke since even low levels of secondhand smoke exposure can be harmful (HHS 2006). This report, combined with the growing research on secondhand smoke, led the California Air Resources Board (CARB) to designate secondhand smoke as a toxic air contaminant in 2006 (CEPA 2005). As a Class A carcinogen, CARB acknowledged that secondhand smoke may “cause or contribute to an increase in deaths or in serious illness or pose a hazard to human health, particularly children’s health” (CEPA 2005).

Regularity of exposure to secondhand smoke has become a concern since scientific evidence has confirmed its dangers. In California, 56% of adults, 64% of adolescents, and 38% of children are currently being exposed to secondhand smoke (CEPA 2005). The health consequences of such exposure in California each year have devastating consequences. These include: more than 400 lung cancer deaths, more than 3,600 cardiac deaths, 31,000 episodes of asthma, 21 cases of sudden infant death syndrome, 1,600 cases of low birth weight in newborns, and more than 4,700 cases of pre-term delivery (CEPA 2005). In the United States, the impact of secondhand smoke becomes even more blatant. The CDC has found that an estimated 3,000 non-smoking Americans die of lung cancer, and more than 46,000 die of heart disease primarily because of exposure to secondhand smoke (CDC 2009b). Reducing exposure to secondhand smoke in California, and the rest of the United States, is one of the more effective ways to reduce these negative health outcomes.

California has a strong history of implementing policies and programs to change community norms around tobacco use. These policies and programs, in turn, have a positive impact on exposure to secondhand smoke. In 1989, California voters passed a 25 cent per pack tax on tobacco products and California became the leader in the smoke-free movement nationally and internationally (Fichtenberg and Glantz 2000). This was followed by the California Smoke-free Workplace Law (1995) that prohibited smoking from indoor workplaces, restaurants, and bars. These social norm changes create social pressures that encourage smokers to become nonsmokers, reduce the number of cigarettes smoked, and help former smokers remain smoke-free (Moskowitz et al. 2000).

The success of the tobacco control movement has resulted in measurable public health impacts, such as accelerated declines in cigarette smoking and tobacco related diseases in California (NCPB 2000). While 13.8% of Californian adults are current smokers (CDPH 2010), the CDC estimates that 20.6% of all adults in the United States currently smoke cigarettes (CDC 2009a). In California, this represents a 35% decline in smoking since the inception of the tobacco control program (CDPH 2010).

For those who choose not to quit, the movement has resulted in a significantly greater rate of decline in per capita cigarette consumption in California compared with the rest of the United States (Fichtenberg and Glantz 2000; Gilpin et al. 2006). Per capita reductions in California represent a 61% decline since the inception of the tobacco control movement (Fichtenberg and Glantz 2000). Furthermore, the movement has resulted in significant reductions in age-adjusted mortality from heart disease and lung cancer compared to the rest of the United States (Fichtenberg and Glantz 2000; CDC 2010). The rate at which lung cancer has declined in California is over three times the rate of the United States (CDHS 2007).

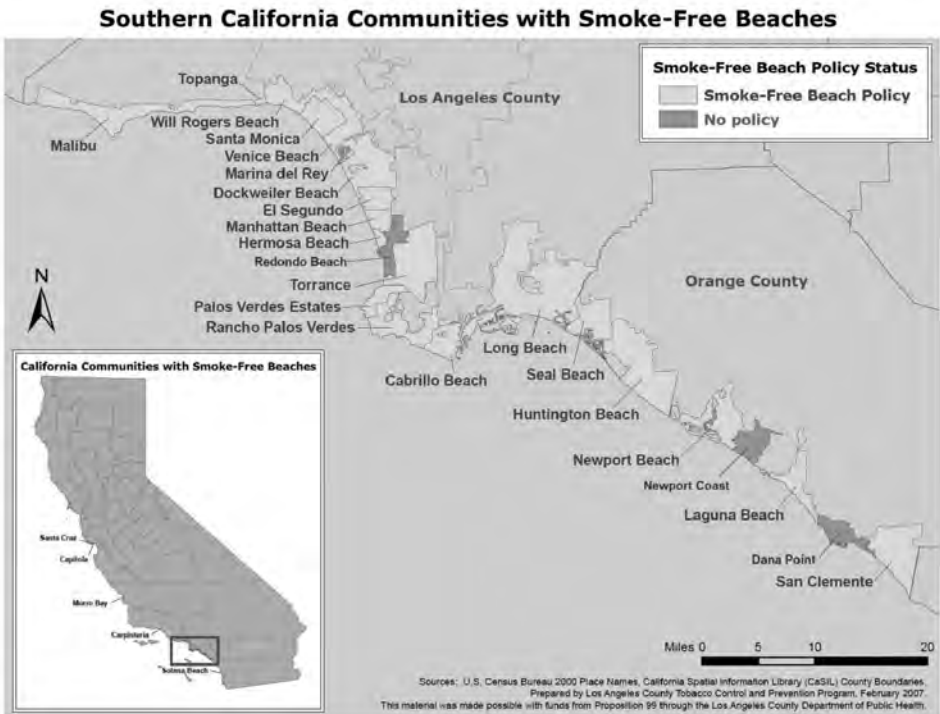
Overall, California residents are smoking less, quitting at a greater rate, and experiencing better health outcomes than much of the United States.

The impacts of declines in cigarette smoking on public health can also be measured in reductions in health care expenditures. Each year, we spend nearly \$96 billion in medical expenditures in the United States to cover the health care costs from tobacco use (CDC 2009b), including \$5 billion from exposure to secondhand smoke (Behan et al. 2005). Since the efforts to change community norms around tobacco use began in California, the state has saved over \$86 billion in health care expenditures (Lightwood et al. 2008).

Tobacco policy trends in recreation areas

Continued research on secondhand smoke has revealed that being outdoors does not mean that secondhand smoke is safer. Levels of exposure to secondhand smoke outdoors are comparable to the levels of exposure indoors. A person near an outdoor smoker might inhale a breath that contains 50 times more toxic materials than if they were breathing near a non-smoker (Stanford University 2010). With this understanding, more than 150 communities in California have taken steps to protect visitors in recreation areas, such as parks, beaches, sports venues, and trails (CCAP 2009). In fact, smoke-free beaches have become the standard in Southern California beach communities, where more than 100 miles of shoreline prohibit smoking (Figure 2).

Figure 2. Southern California beaches with smoke-free policies (Los Angeles County Department of Public Health, 2007).



California legislators have also taken an interest in the growing trend of smoke-free recreation areas. In 2009, a bill was introduced by the state Senate that prohibited smoking in state parks. After a successful campaign through the Senate and Assembly, the bill was vetoed by the governor in 2010, citing differences in political philosophy. It is likely that this bill will be re-introduced given the support it has generated from state and local leaders.

Since the development of policies and programs to change community norms around tobacco use in California, the desire for smoke-free policies has spread across the United States. As of 2010, over 3,100 municipalities in the United States have local laws in effect that restrict where smoking is allowed, including 1,215 that restrict smoking in public outdoor places such as parks and beaches (ANRF 2010). These numbers continue to increase rapidly.

“Premier park experience”

For the past ten years, park management at Whiskeytown National Recreational Area has promoted the park as an ideal place to exercise within a spectacular natural setting. The park promotes the concept that exercising at Whiskeytown is healthy and good for your mind, body and spirit. To further this concept, trails were extended to the park’s four waterfalls, including the newly rediscovered Whiskeytown Falls. The spring runoff makes the falls a premier attraction for children’s hikes during each year’s Waterfall Week. In 2002, Whiskeytown banned the use of personal watercraft on Whiskeytown Lake and the park launched a free ranger-guided kayak program. Since 2002, over 15,000 people have participated in the kayak program, including romantic full-moon kayak tours. Mountain bikes are allowed on most of the park’s backcountry trails, and large racing events draw in race participants from all over the Western states. Equestrian rides and competitions are held annually. Foot races, including the Whiskeytown Relays, attract more than 500 runners from Oregon and Northern California. Open-water swimming competitions and sailing regattas draw in participants from several Western states. Whiskeytown management has positioned the park to be open to friendly, family-oriented sporting events that are compatible with and appropriate to the policies and the mission of the National Park Service. Implementing a policy that discourages smoking and promotes protecting visitors from secondhand smoke is consistent with the park’s promotion of physical exercise.

Collectively, these events create a market niche for Whiskeytown National Recreation Area as a premier location for human-powered recreation. While motorized wake boarding and water skiing are allowed, the park encourages team rowing, sailing, swimming, trail running, and equestrian sports. All of this is complimented by the natural setting of a picturesque lake (a dammed Bureau of Reclamation facility) surrounded by old growth, forest-covered mountains in the shadow of the peak of Shasta Bally (6,200 feet in elevation).

The goal is to provide a “premier park experience” for the visitor who comes to enjoy the natural environment. The beaches provide an immediate opportunity to relax and cool off from the 100-degree summer heat. The concept of smoke-free beaches complements the affinity of park management for athletic recreational opportunities and makes the park a more attractive destination to a larger number of visitors. The concept also furthers Shasta County’s “Healthy Shasta” movement, which park managers support.

Public opinion counts

The Whiskeytown Smoking Policy Survey was administered during the summer of 2009 to gauge public sentiment regarding smoking and the possible institution of smoking restrictions at four popular public beaches. The majority of the surveys (94.3%) were administered at the designated swimming beaches in Whiskeytown National Recreation Area. A total of 435 surveys were completed, but 390 surveys (18+ age consideration) were used in the analysis.

The results of this survey were supportive of the proposed policy. First, the percentage of visitors estimated to be current smokers was small and similar to county statistics on adult smoking prevalence (Figure 3). Over three-quarters (76%) of Whiskeytown respondents did not report being current smokers. Second, a significant majority of the visitors (66.7%) were women with young children. It was apparent that Whiskeytown offered an inexpensive recreation activity for many families, and a smoke-free policy would reduce secondhand smoke exposure to the large numbers of families at the lake. Third, nearly 70% of visitors indicated being bothered by smoking in recreation areas. This was especially true of women, representing two-thirds of Whiskeytown visitors, who were bothered most of the time (77%).

Finally, the responses to the Whiskeytown Smoking Policy Survey demonstrated widespread support for the institution of a smoking ban at all four of Whiskeytown's designated swimming beaches (Figure 4). Support for the proposed ban was evident among both men and women, individuals of all ages, Shasta County residents and non-residents, and among those who visit Whiskeytown both rarely and frequently. Sixty-six percent of those surveyed supported the institution of a smoking ban at all four designated swimming beaches, while only 28% were opposed. More than twice as many people reported that they would visit Whiskeytown more often if there were a smoking ban versus those that reported they would visit less often or never. Additionally, survey participants often commented on cigarette litter.

Policy implementation

On January 20, 2010, park management announced that a public meeting would be held on February 24 at the city hall of Redding, California, to discuss a proposal to establish smoke-free beaches at Whiskeytown. Approximately 25 people attended and a 30-day public comment period followed. At the public meeting, two people opposed implementing the cigarette ban with the argument that this was the start of a pattern towards a "slippery slope of eliminating personal freedoms." The balance of the audience in attendance fully supported establishing smoke-

Whiskeytown Visitors: Have you smoked a cigarette in the past week?

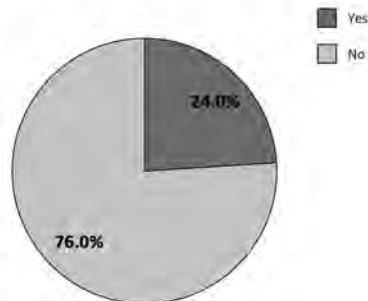


Figure 3. Percentage of current smokers measured by weekly cigarette smoking (Shasta County Public Health, 2009).

Do you favor or oppose a No-Smoking policy at all 4 of the designated swimming beaches at Whiskeytown Lake?

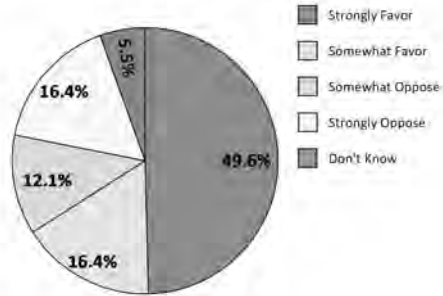


Figure 4. Response to the survey question, “Do you favor or oppose a No Smoking Policy at all 4 of the designated swimming beaches at Whiskeytown Lake?” (Shasta County Public Health, 2009).

free beaches and recognized the health concerns related to secondhand smoke. Local television and newspaper coverage generated an editorial and letters to the editor with mostly favorable support for making the beaches smoke-free. This followed a similar trend within Redding’s city government to make the local public buildings and campuses smoke-free.

Local congressional offices were visited and briefings were prepared on the proposed policy by the superintendent. These briefings went well with general support for the proposal.

Public comments came in following the February public meeting. Most respondents were very supportive. Only a few letters of opposition were received out of some 60 letters regarding the proposed smoking ban. The author of only one of the letters opposing the measure identified themselves as a smoker and stated that “Whiskeytown was beautiful and a great place for a smoke!”

Implementation of smoke-free beaches began in earnest over Memorial Day Weekend in 2010. Signs were posted at each of the four beach entrances and smoking pots for cigarette butts were installed in the parking lots where people were allowed to smoke. Our local county supervisor, who generally supported the ban, requested that the designated smoking areas (parking lot sidewalks) would have a picnic table in a shaded spot so people who wished to smoke could relax and enjoy the park. This request was met and the smoking pots for cigarette butts were installed near picnic tables.

Throughout the summer, lifeguards and rangers occasionally contacted a person smoking on the beach and would ask him or her to either extinguish the cigarette or move to the parking lot area. While the park compendium established a citation of \$50.00 for violators of the smoke-free policy, no citations were issued. This first summer season was primarily used as a season for educating the public that a smoke-free policy had been established. People who were seen by park staff smoking cigarettes were contacted and informed of the new policy. Overall, visitors supported the policy implementation and only a few incidents occurred with smoking visitors who protested that they had to extinguish their cigarette.

Visitor views: Three-month follow-up

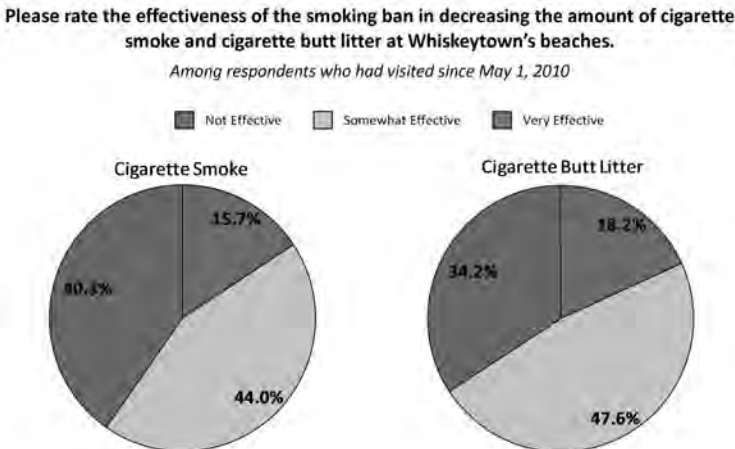
A post-implementation survey was conducted over the summer of 2010. The purpose of the post-implementation survey was to (1) collect data to gauge the level of awareness that park visitors had of the smoke-free policy, (2) determine if the policy was effective at reducing cigarette smoke and cigarette butt litter, and (3) conclude if sentiment towards the policy had remained favorable among visitors since the 2009 survey. The data collected by the survey answered these questions rather clearly.

As with the pre-implementation policy survey, a significant majority of visitors and survey respondents (72.3%) were females. Additionally, the visitor count data show that approximately 54% of the visitors affected by the smoke-free policy are children. This further supported the view that the smoke-free policy at Whiskeytown will reduce secondhand smoke exposure to the large numbers of families at the lake.

Only about a third of all respondents were aware of the smoke-free policy. This level of awareness can only be considered low and may have been due to the relatively short, three-month period between implementation and survey delivery. Additionally, more than two-thirds of survey respondents reported not seeing the “No Smoking” signs at each of the four designated swimming beaches. If measures are taken to increase awareness of the policy, the policy may become more effective at reducing cigarette smoke and cigarette butt litter. Such measures may include additional temporary signage, increased visitor contact with park staff, and visitor education through print materials and public service announcements.

Despite the low level of awareness of the smoke-free policy, a significant majority of respondents perceive the policy to be effective at reducing cigarette smoke and cigarette butt litter (Figure 5). If it is assumed that awareness of the policy will continue to increase with continued visitor education and time, it is likely that Whiskeytown will see continued reductions in secondhand smoke exposure and cigarette butt litter.

Figure 5. Response to the survey request, “Please rate the effectiveness of the smoking ban in decreasing the amount of cigarette smoke and cigarette butt litter at Whiskeytown beaches” (Shasta County Public Health, 2010).



Finally, support for the smoke-free policy increased markedly since the pre-implementation survey (Figure 6). In the 2010 survey, 83.3% of respondents report that they either “strongly favor” or “somewhat favor” the smoke-free policy, while in 2009, 66.0% of respondents favored the policy.

Conclusions

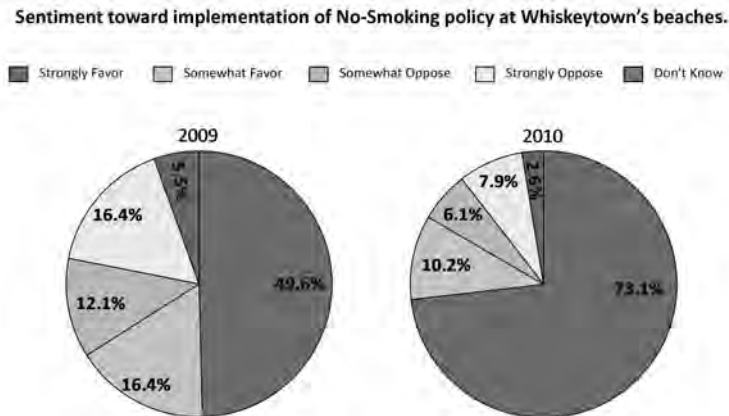
Whiskeytown National Recreation Area’s management considers the implementation of the smoke-free policy a success. Overwhelming support for implementation of this policy was expressed by the public. While many of our local park visitors were unaware of the smoke-free campaign, awareness of the policy will continue to increase. With continued visitor education and time, it is likely that secondhand smoke exposure and cigarette butt litter will continue to decline at Whiskeytown.

Whiskeytown National Recreation Area’s management made the conscious decision to go through a public process to debate the pros and cons of implementing this policy. Some of the visitors who came to the park in the summer had remembered hearing of this policy discussion. Managers believed the smoke-free policy was consistent with Whiskeytown National Recreation Area’s push for outdoor athletic activities and physical exercise. From a public policy perspective, implementation of a smoke-free beach experience will provide people with a premier park experience. Visitors can enjoy the fresh air of the lake and surrounding forests that the National Park Service strives to protect through its mission to leave the area unimpaired for the enjoyment of future generations. We encourage other parks to implement outdoor smoke-free areas, and believe that, as we have seen at Whiskeytown, the public will support expansion of this policy in other park areas.

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Figure 6. Response to the survey question, “Do you favor or oppose a No Smoking Policy at all 4 of the designated swimming beaches at Whiskeytown Lake?” (Shasta County Public Health, 2010).



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