

**To:** Sierra Club

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**Re:** National Study of Hispanics on Environmental Issues

### **Introduction**

In 2008, the Sierra Club commissioned Bendixen & Amandi International, a professional polling firm, to conduct and release a survey of 1,000 Hispanics nationwide to study their opinion about different environmental issues. On March 16, 2011, the Environmental Protection Agency (EPA) proposed strong new air quality standards for life-threatening hazardous air pollution from power plants, including mercury. Bendixen & Amandi believes that the findings from the 2008 survey are still valid and raise an important issue – Hispanics have health and environmental concerns and enjoy outdoor activities and habits, such as fishing. The findings are still relevant because the survey studied habits and attitudes that do not change greatly over time.

Although the Hispanic community in the United States is concerned about long-term environmental problems like polluted air and water, there is a low level of awareness for more “immediate” problems like living close to toxic sites. In general, the Hispanic community enjoys outdoor activities, like going to the beach, especially with their friends and family. Among other outdoor activities, they also enjoy fishing, and they often eat what they catch. Thus, their concern about pollution and its effect on their outdoor habits is justified because they are at risk when they go fishing and subsequently consume what they catch. In addition to the strong new protections from the EPA, this concern can be eased if there were more signs (especially in Spanish) warning the Hispanic community of the high mercury levels in the places that they fish.

Previous studies of Hispanic fishing patterns in California have established that this is mostly a subsistence activity with two fundamental goals: obtaining high-quality protein to compensate for economic inequalities and to pass cultural traditions onto the next generation. In most instances, the angler shares the fish he catches with his entire family, including young children and women in childbearing age, the two sectors of the population most vulnerable to mercury poisoning<sup>1</sup>.

These surveys have also revealed that Hispanic anglers fish close to their urban communities because of lack of transportation options. The fish caught in urban areas tend to contain the highest concentrations of mercury contamination<sup>2</sup>. And this exposure is already showing high levels of mercury contamination among Hispanic anglers. According to a Shilling Study of Subsistence Fishing conducted among several ethnic groups in California, Hispanic anglers on average ingest 13.9 micro grams of mercury per day via fish they catch

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<sup>1</sup> <http://apha.confex.com/apha/138am/webprogram/Paper222440.html>

<sup>2</sup> <http://elq.typepad.com/currents/2009/08/currents36-08-shilling-2009-0726.pdf>

mostly in local waters. This is almost twice the EPA's safe limit (7 micro grams per day)<sup>3</sup>.

To aggravate the problem, Hispanic anglers show little awareness about the danger in which they put themselves and their families. According to the Shilling Study of Subsistence Fishing, in an awareness scale of 0 to 4 (0 being the lowest) Hispanic anglers rated 1<sup>4</sup>. This problem is compounded by several factors, the most important being the fact that fish advisories and warning signs posted near waterways are very rarely in Spanish. But even when Hispanic anglers can read in English, other barriers play a significant role, according to a Shilling paper titled "Fishing for Justice or Just Fishing". These barriers include: "1) not everyone reading the sign will believe the information or change their behavior in response; 2) few people read the sign; and 3) when they do, they think it is referring to that exact spot and not necessarily nearby spots on the same river<sup>5</sup>."

The same study also mentions the animosity that all too often exists between ethnic anglers, including Hispanics, and "cultural arrogance and ignorance in the agencies," stemming from the fact that those agencies often make "decisions in the absence of input from those impacted by the decisions"<sup>6</sup>. It can also be safely assumed that the distrust and suspicion many Hispanics show in their relationship with any government agency play a decisive role in this alarming lack of awareness among this community's anglers.

In this memo, Bendixen & Amandi will present the major findings of the study in relation to the environmental concerns of the Hispanic community, their level of awareness, and their outdoor activities and habits. A methodological description of the survey can be found at the end of this report.

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<sup>3</sup> <http://regionalchange.ucdavis.edu/about-us/faculty-affiliates-publications/Contaminated%20fish%20consumption%20in%20California2019s%20Central%20Valley%20Delta.pdf>, page 5

<sup>4</sup> <http://regionalchange.ucdavis.edu/about-us/faculty-affiliates-publications/Contaminated%20fish%20consumption%20in%20California2019s%20Central%20Valley%20Delta.pdf>, page 8

<sup>5</sup> <http://elq.typepad.com/currents/2009/08/currents36-08-shilling-2009-0726.pdf>, page 4

<sup>6</sup> <http://elq.typepad.com/currents/2009/08/currents36-08-shilling-2009-0726.pdf>, pages 4-5

## Major findings

### 1. When it comes to the environment, most Hispanics think air and water pollution is the most important problem for them and their family.

A majority of Hispanics (51%) said air and water pollution is a problem for them and their family, followed by global warming (43%). Only 12% of Hispanics said the most important problem for them and their family is toxic lead and mercury poisoning, which suggest there is a low level of awareness for this specific problem.

*When it comes to the environment, which are the two most important problems to you and your family? (Allow for two choices)*

Problem*	%
Polluted air and water	51
Global warming	43
The destruction of our wilderness and forests	17
Toxic waste sites	14
Toxic lead and mercury poisoning	12
Something else	1
Don't know/ No answer	2

\*Note: Multiple responses accepted.

### 2. Most Hispanics are not aware of any toxic sites close to their home or workplace.

Two-thirds of Hispanics (66%) said they are not aware of any toxic sites close to their home or place to work, such as a refinery, a chemical plant, an incinerator, an agricultural field, a major highway, or a factory.

*Are you aware of any toxic sites close to your home or place of work, such as a refinery, a chemical plant, an incinerator, an agricultural field, a major highway, or a factory?*

Proximity to any toxic site	%
Yes	34
No	66

**3. Almost all Hispanics interviewed believe that outdoor activities are important to them and their families.**

Eighty eight percent of Hispanics considered outdoor activities “very important” (61%) and less than three in ten Hispanics (27%) said they are “somewhat important.” Hispanics enjoy outdoor activities like fishing, hunting, camping, or visiting national parks. Moreover, they like to perform all those activities with their own family.

*How important are outdoor activities – like fishing, hunting, camping, or visiting national parks – to you and your family?*

<i>Level of importance</i>	%
Very important	61
Somewhat important	27
Not important	11
Don't know/ No answer	1

**4. The most popular outdoor activities among Hispanics are going to the beach and exploring national parks.**

When asked for the two most popular outdoor activities of Hispanic families, survey respondents mentioned going to the beach (36%) and exploring the national parks (31%). These two activities were followed closely by picnics (27%) and fishing (20%).

*Which are the two most popular outdoor activities of your family – picnics, fishing, hunting, camping, hiking, going to the beach, exploring the national parks, or something else? (Allow for two choices)*

<i>Outdoor activities*</i>	%
Going to the beach	36
Exploring national parks	31
Picnics	27
Fishing	20
Camping	17
Hiking	10
Hunting	4
Something else	6
Don't know/ No answer	1

\*Note: Multiple responses accepted.

**5. Almost one-third of Hispanics say they prefer to go fishing in lakes, and most of them prefer to go with a family member instead of friends or co-workers. Hispanics also have a tendency to eat what they catch.**

One-third of Hispanics go fishing either “very often” or “once in a while.” When asked where they prefer to go fishing, four-in-ten Hispanics (39%) say they prefer to fish in lakes, compared to the ocean (32%), or the river (24%). A large majority prefer going with a family member (64%) to going with a friend (22%). In addition, more than three-in-four Hispanics interviewed (76%) say they eat the fish they catch.

*How often do you go fishing?*

<b>Frequency</b>	<b>%</b>
Very often	10
Once in a while	21
Very seldom	19
Never	49
Don't know/ No answer	1

*Where do you fish?*

(Asked only of respondents who fish  
“very often” or “once in a while”)

<b>Place to fish</b>	<b>%</b>
Ocean	32
River	24
Lake	39
Somewhere else	5
Don't know/ No answer	1

*Who do you go fishing with?*

(Asked only of respondents who fish “very often”  
or “once in a while”)

<b>Person</b>	<b>%</b>
Son/ Daughter	30
Friends	22
Other relative	14
Other person	9
Father/ Mother	9
Brother/ Sister	8
Cousin	2
Co-workers	2
Aunt/ Uncle	1
Don't know/ No answer	1

*Do you eat the fish that you catch?*

(Asked only of respondents who fish “very often”  
or “once in a while”)

<b>Eat the fish you catch</b>	<b>%</b>
Yes	76
No	23
Don't know/ No answer	1

## **Methodology**

In 2008, Sierra Club commissioned Bendixen and Amandi to conduct a national survey of Hispanics. The purpose of the survey was to measure the Hispanic population's opinions about different environmental issues and measure their outdoor activities and habits.

The survey was conducted of Hispanics nationally from March 20-30, 2008. It was conducted by telephone and by professional bilingual interviewers. The interviews were conducted either in Spanish or in English, according to the respondent's preference. The Computer Assisted Telephonic Interviewing (CATI) system was utilized to collect and analyze the information.

The sample size for the survey was 1,000 completes, with four over-samples of 100 interviews each in Florida, Colorado, New Mexico, and Nevada. All the data was accumulated in a central data bank and treated as a national sample to be representative of the Hispanic population in the United States. The margin of error for the 1,000 interviews is +/- 3%, at the 95% level of confidence. The margin of error for the over-samples of Florida, Nevada, New Mexico, and Colorado is +/- 10%, at the 95% level of confidence.

## **Significance of the Findings/Conclusion**

The EPA's proposed strong new air quality standards for life-threatening hazardous air pollution from power plants, including mercury, is progress, however, there is still not much signage in waterways advising fisherman of these new standards. The survey demonstrates the need for signs in English and Spanish to warn Hispanics of this potential hazard, since one-third of them fish on a regular basis, and the vast majority of those eat what they catch. Even though the survey was taken in 2008, the findings remain accurate because they measured habits which rarely change over such a short period of time.