

Western States Public Lands Survey finds
“Problems” are not that big of a deal

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Few sins are as ubiquitous as misinterpretation of statistical survey data. However, when coupled with the sins of poor survey design, guided questioning, and biased answer choices, the results are at best misleading and at worst immoral.

For example, recently published were the “results” of the Western States Public Lands Survey that has been recently conducted in Utah and other western states. We examined the survey questions and responses, and it became clear that the questions asked presupposed certain outcomes, and even those responses were over interpreted to support a particular position.

Problems in Question and Survey Design:

The many survey questions were worded with language that guides the respondent to a pre-determined conclusion. In a courtroom, we might call this “leading the witness” and is rightly disallowed. In this survey, for example, the questions referred to “problems” that have been identified within the state(s) and request that the respondent rate the seriousness of the problem.

Nearly every question is laced with negative connotations that imply a problem exists whether or not one actually exists in the respondent’s opinion. Survey questions included the words with obvious negative connotations – “cuts to funding”, “impacts...on our land, air and water”, “a low level”, “too much”, “not enough oversight”, “inadequate water”, and others.

Respondents are led to believe there actually is a problem whether or not they are actually familiar with it or not and it has been well established by survey design experts that how you ask the question matters to answers you receive. When respondents are told there *is* a problem by a pollster, few will belligerently disagree with the pollster and contradict them. These un-scientific tactics bias a survey toward pre-determined and predictable conclusions.

A second problem with the Western States Public Lands Survey was in the response categories provided to respondents. The surveyor provided a majority of choices that were biased toward obtaining answers from respondents that would result in a finding of “serious problems” with Public Lands and Public Land Policy. Indeed, respondents were only presented with four response options regarding “issues some people say are problems in Utah”. These response options only

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included a) “extremely serious”, b) “very serious”, c) “somewhat serious”, and d) “not a problem”.

After being told by the pollster that other people in your state (your peers) think there *is* a problem, many are reluctant to deny a problem exists. After all, if other people think there is a problem, who am I to say there isn’t? Skewing conclusions further, any choice that does not deny a problem still stipulates a “serious” problem (choices a, b, or c).

In addition survey respondents will migrate to middle responses when they have little information and are unlikely to take a stand on one extreme or another (choices a and d). However, by choosing the moderate options (not on the extremes), the only choice is to again imply a “serious” problem (choices b and c).

Problems in Interpretation:

While the flaws in the survey itself are substantial a larger problem looms in the misinterpretation of the results. The pollsters lumped all answers indicating any type of problem into one “Total Serious” category. Those respondents who chose “Somewhat a Serious Problem,” probably didn’t mean that they thought the problem was truly *serious*. “Somewhat a Serious Problem” was the only option a respondent could choose if they thought there was any problem at all, even just a small one. A more accurate interpretation might be to lump “Somewhat a Serious Problem” and “Not a Problem” together into a “Not that Big of a Deal” category. When this is done, many of the issues that were concluded to be “serious,” are now “Not that Big of a Deal.” As demonstrated with the data in Table 1, different methodologies of data interpretation can result in the exact opposite meaning.

Table 1. “Serious” (a+b+c) data interpretation versus “not that big of a deal” (c+d) data interpretation.

Survey Question	“Serious”	“Not that Big of a Deal”
(1)	n/a	n/a
(2) Loss of habitat	68%	71%
(3) Pollution of waters	75%	63%
(4) Cuts to funding	72%	71%
(5) Impact of oil and gas drilling	53%	70%
(6) Low level of snowpack	69%	63%
(7) Low levels of river waters	76%	60%
(8) Too much public land	34%	76%
(8a) Not enough oversight	41%	70%
(9) Loss of family farms and ranch	78%	54%
(10) Too much government	70%	53%

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regulation		
(11) Air pollution	88%	42%
(12) Inadequate water supplies	74%	65%
(13) Dependence on foreign oil	89%	44%
(14) Unemployment	87%	58%
(15) Funding cuts for state health care	71%	57%
(16) Children not spending enough time outdoors	82%	56%

This change in approach to interpretation of the results leads to vastly different conclusions. For example, using the surveyor’s methodology, 68% of respondents were classified as considering the loss of habitat a “serious problem.” Using the revised methodology, 71% could be classified as considering loss of habitat “not that big of a deal.”

Likewise, pollution of waters changes from 75% “Serious” to 63% “Not that Big of a Deal.” Cuts to funding changes from 72% “Serious” to 71% “Not that Big of a Deal.” And inadequate water supplies changes from 74% “Serious” to 65% “Not that Big of a Deal.”

The Western States Public Lands Survey especially as it has been reported in the press groans under the weight of its design and interpretation problems. Pollsters “led the witness” by asking guiding questions. They biased the results toward “serious” problems by using that word in three out of the four answer choices. The pollsters and those using the responses then inappropriately lumped together the results obscuring the real diversity in the answers. Collectively, these biases skew the data toward a conclusion that the majority of the respondents consider these “problems” to be “serious”, when they may intend the opposite.