



---

## **I. Survey Methodology**

The Elon University Poll is conducted using a stratified random sample of households with telephones in the population of interest – in this case, citizens in North Carolina. The sample of telephone numbers for the survey is obtained from Survey Sampling International, LLC.

### ***Selection of Households***

To equalize the probability of telephone selection, sample telephone numbers are systematically stratified according to subpopulation strata (e.g., a zip code, a county, a state, etc.), which yields a sample from telephone exchanges in proportion to each exchange's share of telephone households in the population of interest. Estimates of telephone households in the population of interest are generally obtained from several databases. Samples of telephone numbers are distributed across all eligible blocks of numbers in proportion to the density of listed households assigned in the population of interest according to a specified subpopulation stratum. Upon determining the projected (or preferred) sample size, a sampling interval is calculated by summing the number of listed residential numbers in each eligible block within the population of interest and dividing that sum by the number of sampling points assigned to the population. From a random start between zero and the sampling interval, blocks are systematically selected in proportion to the density of listed household "working blocks." A *block* (also known as a *bank*) is a set of contiguous numbers identified by the first two digits of the last four digits of a telephone number. A working block contains three or more working telephone numbers. Exchanges are assigned to a population on the basis of all eligible blocks in proportion to the density of working telephone households. Once each population's proportion of telephone households is determined, then a sampling interval, based on that proportion, is calculated and specific exchanges and numbers are randomly selected. Because exchanges and numbers are randomly selected by the computer, unlisted as well as listed telephone numbers are included in the sample. Thus, the sample of telephone numbers generated for the population of interest constitutes a random sample of telephone households of the population, stratified by exchange.

### ***Procedures Used for Conducting the Poll***

The survey was conducted Monday, March 10<sup>th</sup> through Thursday, March 13<sup>th</sup> of 2008. During this time calls were made from 5:00 pm to 9:00 pm EST. The Elon University Poll uses CATI system software (computer assisted telephone interviewing) in the administration of surveys. For each working telephone number in the sample, several attempts were made to reach the household. Only individuals in households 18 years or older were interviewed; those reached at business or work numbers were not interviewed. Within each household, one adult is generally selected based on whether s/he is the oldest or youngest adult in the home. Interviews, which are conducted by live interviewers, are completed with adults from households in the target population as specified. Interviews for this survey were completed with 473 adults from households in North Carolina. For a sample size of 473, there is a 95 percent probability that our survey results are within plus or minus 4.5 percent (the margin of sampling error) of the actual population distribution for any given question. For sub-samples (a subgroup selected from the overall sample), the margin of error is higher depending on the size of the subsample. When we use a subsample, we identify these results as being from a subsample and provide the total number of respondents and margin of error for that subsample. In reporting our results, we note any use of a subsample where applicable. Because our surveys are based on probability sampling, there are a variety of factors that prevent these results from being perfect, complete depictions of the population; the foremost example is that of margin of sampling error (as noted above). With all probability samples, there are theoretical and practical difficulties estimating population characteristics (or parameters). Thus, while efforts are made to reduce or lessen such threats, sampling error as well as other sources of error – while not all inclusive, examples of other error effects are non-response rates, question order effects, question wording effects, etc. – are present in surveys derived from probability samples.

### ***Questions and Question Order***

The Elon University Poll provides the questions as worded and the order in which these questions are administered (to respondents). Conspicuous in reviewing some questions is the “bracketed” information. Information contained within brackets ( [ ] ) denotes response options as provided in the question; this bracketed information is rotated per question to ensure that respondents do not receive a set order of response options presented to them, which also maintains question construction integrity by avoiding respondent acquiescence based on question composition. Some questions used a probe maneuver to determine a respondent’s intensity of perspective. Probe techniques used in this questionnaire mainly consist of asking a respondent if their response is more intense than initially provided. For example, upon indicating whether s/he is satisfied or dissatisfied, we asked the respondent “would you say you are very \_\_\_\_\_”. This technique is employed in some questions as opposed to specifying the full range of

choices in the question. Though specifying the full range of options in questions is a commonly accepted practice in survey research, we sometimes prefer that the respondent determine whether their perspective is stronger or more intense for which the probe technique used. Another method for acquiring information from respondents is to ask an “open-ended” question. The open-ended question is a question for which no response options are provided, i.e., it is entirely up to the respondent to provide the response information.

### ***The Elon University Poll***

The Elon University Poll is conducted under the auspices of the Center for Public Opinion Polling (Hunter Bacot, Director), which is a constituent part of the Institute for Politics and Public Affairs (George Taylor, Director); both these organizations are housed in the department of political science at Elon University. These academic units are part of Elon College, the College of Arts and Sciences at Elon University, which is under the direction of Dr. Steven House (Dean). The Elon University administration, led by Dr. Leo Lambert, President of the university, fully support the Elon University Poll as part of its service commitment to state, regional, and national constituents. Dr. Hunter Bacot, a professor in the department of political science, directs the Elon University Poll. Elon University students administer the survey as part of the University’s commitment to experiential learning where “students learn through doing.”

## II. Survey Instrument and Percent Distributions by Question

Interviews were completed with 473 adults from households in the North Carolina. For a sample size of 473, there is a 95 percent probability that our survey results are within plus or minus 4.5 percent (the margin of sampling error) of the actual population distribution for any given question. Data are weighted to reflect the adult population in terms of gender.

About the Codes appearing in Questions and Responses	
<b>Response Options not offered</b>	Response options are <u>not</u> offered to the person taking the survey (respondent), but are included in the question as asked (and usually denoted by brackets, [ ]). Response options are generally offered only for demographic questions (background characteristic, e.g., age, education, income, etc.).
<b>v = volunteered response</b>	Respondents volunteer response option. As response options are <u>not</u> offered to those taking the survey, some respondents offer or volunteer response options. Though not all volunteered options can be anticipated, the more common options are noted.
<b>p = probed response</b>	Respondents self-place in this option or category. A probe maneuver is used in questions to allow the respondent to indicate whether her/his response is more intense than initially provided for in the choices appearing in the question. For example, on probe questions the interviewer, upon a respondent indicating that she/he is satisfied (or dissatisfied), is instructed to ask him/her “Would you say you are “very satisfied”?”

## Percentage Tables

Now, changing topics completely, I'd like to ask you some questions about the drought and water use in your household . . .

How aware are you of the drought in North Carolina, [a great deal, a good amount, some, not too much, or not at all]? (if some, good amount, or great deal, go to next question; if not at all, not too much, don't know, skip to next set of questions)

	Percent
NOT AT ALL	.7
NOT TOO MUCH	4.1
SOME	9.2
A GOOD AMOUNT	13.8
A GREAT DEAL	72.1
DON T KNOW/NOT SURE (v)	.2
Total (473, +/-4.5%)	100.0

Please tell me where you have gotten information about the drought. . .

Source of Information	Percent
Local Television News	82.8
Local Newspaper	64.1
Local Radio Station	31.4
Cable Television News	26.5
Internet	23.8
Friends, Family, or Neighbors	16.1
National Network News or National Newspaper	8.3
Local Government	6.7
Community Group	5.9
Environmental Group	5.9
Co-Workers	3.8
Other	6.7
Don't Know (v)	1.1

Note: the question was administered in an open-ended format that permitted respondents to identify multiple responses; respondents who selected "not at all" or "not too much" with regard to awareness (in previous question) are counted as "no" in these questions about information acquisition. Percentages are based on total sample size of 473 (+/-4.5%).

**How concerned are you about the drought in North Carolina? Are you [very concerned, somewhat concerned, or not at all concerned]?**

	Percent
NOT AT ALL CONCERNED	4.9
SOMEWHAT CONCERNED	31.8
VERY CONCERNED	62.8
DON T KNOW (v)	.5
Total (473, +/-4.5%)	100.0

**How concerned are you about the water supply levels in North Carolina? Are you [not at all concerned, somewhat concerned, or very concerned]?**

	Percent
NOT AT ALL CONCERNED	6.8
SOMEWHAT CONCERNED	30.2
VERY CONCERNED	62.0
DON T KNOW (v)	1.1
Total (473, +/-4.5%)	100.0

**Are you [reducing or not reducing] water use in your home? (skip; if reducing, go to next question,; if not reducing skip to next set of questions)**

	Percent
NOT REDUCING WATER USE	15.0
REDUCING WATER USE	83.9
DON T KNOW (v)	1.1
Total (473, +/-4.5%)	100.0

**Which of the following activities for reducing water use are you doing at your home?**

<b>Activity</b>	<b>Percent Yes</b>
Not Watering Outside	54.6
Not Washing the Car at Home	51.0
Taking Shorter Showers	53.3
Turning Off Water when Brushing Your Teeth	45.1
Limiting the Number of Laundry Loads You Do	47.6
Limiting the Number of Dishwashing Loads You Do	45.4
Filling the Sink to Wash Dishes, and Not Running the Water to Do Dishes	31.9
Have Limited Flushing of the Toilet	28.8
Have Installed Water Efficient Shower Head	27.8
Have Installed Low Flow Toilet	23.4
Have Installed Water Efficient Washing Machine	16.8
Have Checked and Repaired Leaks in Home	34.2
Have Installed Rain Barrel(s)	7.0
Other	9.2
Don't Know/Refused (v)	1.4

Note: respondents who selected "not reducing" water use in their home (in previous question) are counted as "no" in these questions about activities to reduce water use in the home. In this question, respondents were provided each option; percentages are based on total sample size of 473 (+/-4.5%).

I'm going to read you a list of water users in the state of North Carolina. I'd like to know what level of responsibility, if any, you feel each has in reducing water use . . . so, as I read these, tell me whether they are [not at all responsible, somewhat responsible, or very responsible].

Water Users in the State	Not at All Responsible	Somewhat Responsible	Very Responsible	Don't Know (v)
Business	6.1	32.7	55.6	5.6
Local Government	6.0	23.9	62.0	8.1
State Government	6.1	22.3	62.1	9.4
Local School Systems	12.7	39.5	39.9	7.9
Manufacturing Industries	5.6	26.4	56.9	11.0
Residents	5.8	30.3	60.5	3.4
Farmers	12.9	42.8	37.4	6.9
Builders & Developers	9.7	27.9	54.4	8.0
Universities	7.5	36.8	44.2	11.5
Power Companies	4.8	31.2	52.8	11.2
Tourists & Tourism Industry	17.3	37.4	32.8	12.6
Environmental Groups	10.6	25.5	56.0	7.9

Note: 473, +/-4.5%.

Do you think that water conservation in North Carolina is [a short term issue that will last about 2 to 3 years, or a long term issue that will last more than 5 years]?

	Percent
SHORT TERM ISSUE	25.7
LONG TERM ISSUE	67.8
DON T KNOW (v)	6.2
REFUSED (v)	.2
Total (473, +/-4.5%)	100.0



Now I'd like to read you a list of statements about household water use . . . please let me know whether you [agree or disagree] with each statement.

Statements about Water Use	Strongly Disagree (p)	Disagree	Agree	Strongly Agree (p)	Don't Know (v)
"I probably won't seriously cut back on water until it no longer comes out of the tap when I turn it on."	61.3	27.9	5.5	3.0	2.4
"If I heard news reports and other information on the critical shortage of water, I would cut back on my use."	2.7	5.6	37.4	51.1	3.2
"I am making an effort to reduce my water use."	2.2	8.3	33.0	54.0	2.5
"Reducing water use is not my personal responsibility."	55.1	34.5	4.0	5.1	1.4
"I don't use that much water, so I don't need to cut back."	38.1	42.4	13.8	3.0	2.7
"Businesses need to cut back first, before I do."	24.4	43.6	16.0	8.3	7.8
"As long as I pay for it, I can use as much as I want."	47.5	41.6	4.5	3.3	3.2
"I'm on a well, so I don't need to worry about how much I use."	42.0	40.7	5.2	4.3	7.8

Note: 473, +/-4.5%