

**Chico U.S.A. Urban Water Quality Survey 2005 and 2007 Combined**  
**DATA CODEBOOK (revised by Dr. Diane E. Schmidt 9-7-07)**

**Overview:** The data were collected by phone interview but recorded in different ways each year. In 2005, the data were collected by hand on answer sheets. In 2007, the data were collected by a computer program entitled *Sawtooth Inc.* There are some differences in the questionnaire so that the data had to be recoded to create consistency between the years. Where significant revisions occurred, the variable was designated with an *rev* next to the label in the data set. Variables unique to one survey were designed with the year in the label. **Importantly**, 2005 q16 was coded as a *check all that apply* with 1, 0 responses to each choice as 16a-15f. The q16, however, was written to select only one response. While the data entry was incorrect, the respondents choose only one response. To correct the data entry error, 2005 q16a-f were recoded to the correct response categories to be consistent with 2007 q16 categories. Once the 2005 q16a-f were recoded, they were summed to create a single q16 variable.

Other issues were also address through recoding. In 2005 some questions used a 0, 1, 2, 3, format, whereas in 2007, the format was 1, 2, 3, 4. The 2005 data were recoded to the 2007 response format. In the 2005 data set, questions q31-32a were asked differently and were about different topics than in 2007 for q31-33. Because 2007 had an additional question asked in the new set of questions, the numbering is different between 2005 and 2007 after question q32a in 2005 and q33 in 2007. After these questions, the codes designate 2005 first and the 2007 using a dot between the question numbers (e.g. q33/34). In addition, all “don’t know” and “refused to answer” responses have been recoded to 88=*Don’t Know* and 99=*Refused to Answer* in each data set. Finally, text responses for variables including “other” as a response currently not available for either data set. In 2007, no text responses were recorded for q2a8, q3, q4, q5, q16, q18, q23, q26, and q28. For all other variables, the text response to “other” was recorded but are not entered into this data set at this time.

Final note, due to question order changes involving 2005 q35, 2005 q36, 2007 q36, and 2007 q37, it is not recommended to compare the data between 2005 and 2007 for these questions because the data are inconsistent and the results would be biased. In the 2005 questions, the amount was 25 dollars in the first question and then 50 dollars in the second question in the series. In the 2007 questions, the amount was 50 dollars in the first question and 25 dollars in the second question in the series. In these series, the skip/jump patterns are different to accommodate the different order of the question topic.

**CASEID:** 2007 data 1-304  
2005 data 1001-1350

**SURVEY:** 1=2005  
2=2007

**YEAR** 2005, 2007

- q1.** In your opinion, which of the following best describes the condition of Butte County streams in residential and urban areas? **(2005 data recoded to 2007 response order. 2005 responses were in the reverse order)**
- 1 =  Pristine
  - 2 =  Some minor pollution
  - 3 =  Impaired by pollution
  - 88 =  Don’t know
  - 99 =  Refused to answer

**q1 recoded: Condition of Streams**1 =  Not Polluted2 =  Polluted**q2.** Do you think storm-water runoff from urban residential areas carries pollution to creeks?1 =  Yes (proceed to Q2a)2 =  No (proceed to Q3)88 =  Don't know)99 =  Refused to answer**q2a.** (If yes) In your opinion, which of the following causes urban runoff pollution of creeks? (Check all that apply) *1=checked, 0=blank for each of the following***q2a1** =  Cigarettes**q2a2** =  Roadside litter**q2a3** =  Animal waste**q2a4** =  Fertilizer**q2a5** =  Pesticides**q2a6** =  Soil**q2a7** =  Lawn waste**q2a8** =  Other**q2a9** =  Don't know**q3.** In your opinion, what is the **best** way to protect water quality while cleaning your driveway and sidewalks? (Select only one)1 =  hosing down with water2 =  sweeping with a broom3 =  other88 =  Don't know99 =  Refused to answer**q4.** In your opinion, what is the **best** way to clean your barbecue grill to protect water quality? (Select only one)1 =  In the kitchen sink with a scrub brush2 =  In the yard with a hose and a scrub brush3 =  In the yard with a hose and oven cleaning products4 =  Burn off the grill (*not in 2005*)5 =  Other88 =  Don't know99 =  Refused to answer**q5.** What do you think are permissible ways to dispose of your TVs, computer parts, cell phones, oil, batteries, paint, and fluorescent light bulbs when you no longer have a use for them? Take them: (Check all that apply) *1=checked, 0=blank for each of the following***q5a** =  to the dump**q5b** =  to a toxic waste recycling center**q5c** =  to the garbage can**q5d** =  other**q5d List**      list from other

q5e =  Don't know

q5f =  Refused to answer

- q6. To protect water quality, would you say that recycling TVs is ...?  
1 =  not important  
2 =  somewhat important  
3 =  important  
4 =  very important  
88 =  Don't know  
99 =  Refused to answer
- q7. To protect water quality, would you say that recycling oil is ...?  
1 =  not important  
2 =  somewhat important  
3 =  important  
4 =  very important  
88 =  Don't know  
99 =  Refused to answer
- q8. To protect water quality, would you say that recycling batteries is ...?  
1 =  not important  
2 =  somewhat important  
3 =  important  
4 =  very important  
88 =  Don't know  
99 =  Refused to answer
- q9. To protect water quality, would you say that recycling paint is ...?  
1 =  not important  
2 =  somewhat important  
3 =  important  
4 =  very important  
88 =  Don't know  
99 =  Refused to answer
- q10. To protect water quality, would you say that recycling cell phones is ...?  
1 =  not important  
2 =  somewhat important  
3 =  important  
4 =  very important  
88 =  Don't know  
99 =  Refused to answer
- q11. To protect water quality, would you say that recycling household chemicals (i.e. insecticides, cleaners, etc.) is ...?  
1 =  not important  
2 =  somewhat important  
3 =  important  
4 =  very important

**88** =  Don't know

**99** =  Refused to answer

**q12.** Do you know of any environmentally friendly cleaning products and/or lawn and garden care products?

**1** =  Yes

**2** =  No

**99** =  Refused to answer

**q13.** Do you know where to find environmentally friendly cleaning products and/or lawn and garden care products?

**1** =  Yes (Proceed to Q.14)

**2** =  No (Proceed to Q.15)

**99** =  Refused to answer

**q14.** Are you currently using any environmentally friendly products for household cleaning and/or gardening?

**1** =  Yes (Proceed to Q 14a)

**2** =  No

**88** = Don't know

**99** = Refused to answer

**q14a.** What are you using? (list)\_\_(currently unavailable)\_\_\_\_\_

**q15.** Do you own a car?

**1** =  Yes (Proceed to Q.15a)

**2** =  No (Proceed to Q.16)

**q15a.** When you wash your car, do you wash it at home, or do you take your car to a commercial car wash?

**1** =  Home (Proceed to Qs. 15b & 15c)

**2** =  Commercial car wash (Proceed to Q.16)

**3** =  Both home and commercial car wash (Proceed to Qs. 15b & 15c)

**99** =  Refused to answer

**q15b.** If at home, do you use environmentally "friendly" cleaning products?

**1** =  Yes

**2** =  No

**99** = Refused to answer

**88** =  Don't know

**q15c.** If at home, where do you wash the car? *1=checked, 0=blank for each of the following*

**q15c1** =  in the driveway

**q15c2** =  in the street

**q15c3** =  on the lawn

**q15c4** =  Refused to answer

- q16.** In your opinion, where does most of the runoff from your yard, gutter, street or road end up?  
**1** =  the city sewage treatment plant  
**2** =  local creeks and streams  
**3** =  outlying farmland  
**4** =  a septic tank  
**5** =  other  
**88** =  Don't know  
**99** =  Refused to answer
- q16.** Recoded Run off Ends up  
**1** =  Waste Processing  
**2** =  Environment  
**88** =  Don't know  
**99** =  Refused to answer
- q17.** Do you have a lawn or garden?  
**1** =  Yes (Proceed to Q.17a)  
**2** =  No (Proceed to Q.18)  
**99** =  Refused to answer
- q17a.** Do you apply pesticides to your lawn or garden?  
**1** =  Yes (Proceed to Q.17b)  
**2** =  No (Proceed to Q.18)  
**99** =  Refused to answer
- q17b.** Do you consider the weather forecast before applying pesticides and fertilizers to your lawn or garden?  
**1** =  Yes  
**2** =  No  
**99** =  Refused to answer
- q18.** How do you dispose of your green waste, such as leaves and lawn clippings? (Check all that apply) *1=checked, 0=blank for each of the following*  
**q18a** =  green waste pick-up  
**q18b** =  in the garbage  
**q18c** =  in creeks or streams  
**q18d** =  compost it  
**q18e** =  burn it  
**q18f** =  I don't, it doesn't apply  
**q18g** =  Other  
**q18h** =  Refused to answer
- q19.** How harmful do you think lawn fertilizers are to water quality? Would you say that they are ...?  
**1** =  not harmful  
**2** =  somewhat harmful  
**3** =  harmful  
**4** =  very harmful  
**88** =  Don't know

99 =  Refused to answer

**q20.** How harmful do you think cigarettes butts on the ground are to water quality? Would you say that they are ...?

1 =  not harmful

2 =  somewhat harmful

3 =  harmful

4 =  very harmful

88 =  Don't know

99 =  Refused to answer

**q21.** How harmful do you think it is to water quality to let anti-freeze run into the gutter or onto the ground? Would you say it is ...?

1 =  not harmful

2 =  somewhat harmful

3 =  harmful

4 =  very harmful

88 =  Don't know

99 =  Refused to answer

**q22.** How harmful do you think it is to water quality to dump lawn clippings into the creeks, or along the banks of the creeks? Would you say it is ...?

1 =  not harmful

2 =  somewhat harmful

3 =  harmful

4 =  very harmful

88 =  Don't know

99 =  Refused to answer

**q23.** In terms of protection of water quality, which do you think is the **best** way to dispose of animal waste?

1 =  leave it to decompose

2 =  in a bag, in the garbage can

3 =  let it wash away with gutter runoff

4 =  other

88 =  Don't know

99 =  Refused to answer

**q24.** Do you change your automobile oil at home?

1 =  Yes (Go to Q.24a)

2 =  No (Skip to Q.25)

3 = Does not apply (**not in 2005**)

99 = Refused to answer

**q24a.** (If yes) How do you dispose of your used oil? \_\_ (list currently unavailable) \_\_\_\_

- q25.** In your opinion, how harmful is used oil to water quality?  
1 =  not harmful  
2 =  somewhat harmful  
3 =  harmful  
4 =  very harmful  
88 =  Don't know  
99 =  Refused to answer
- q26.** What do you think is the **best** way to dispose of used oil? (Select only one)  
1 =  in the gutter  
2 =  in the yard  
3 =  in the garbage  
4 =  at a recycling center  
5 =  other  
88 =  Don't know  
99 =  Refused to answer
- q27.** In your opinion, how harmful is (non-biodegradable) roadside litter to water quality? Would you say that it is ...?  
1 =  not harmful  
2 =  somewhat harmful  
3 =  harmful  
4 =  very harmful  
88 =  Don't know  
99 =  Refused to answer
- q28.** In your opinion, how does soil runoff affect a stream or creek?  
1 =  it supports life in the stream  
2 =  it has no effect  
3 =  it pollutes the water  
4 =  other  
88 =  Don't know  
99 =  Refused to answer
- q29.** In your opinion, how harmful is soil runoff to water quality?  
1 =  not harmful  
2 =  somewhat harmful  
3 =  harmful  
4 =  very harmful  
88 =  Don't know  
99 =  Refused to answer

- q30.** Overall, how would you rate your knowledge of local water issues? Would you say that you are.?  
**1** =  not knowledgeable  
**2** =  somewhat knowledgeable  
**3** =  knowledgeable  
**4** =  very knowledgeable  
**99** =  Refused to answer

- q30.** Recoded to Rate Knowledge  
**1** =  not knowledgeable  
**2** =  somewhat knowledgeable  
**3** =  knowledgeable

**2005 q31.** Which of the following do you use as primary sources of information on local environmental issues? (Check all that apply)

- |  |                                 |                                |
|--|---------------------------------|--------------------------------|
| <b>2005 q31a</b> <input type="checkbox"/> Daily newspaper                    | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31b</b> <input type="checkbox"/> Weekly newspaper                   | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31c</b> <input type="checkbox"/> Television                         | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31d</b> <input type="checkbox"/> Radio                              | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31e</b> <input type="checkbox"/> Community organization newsletters | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31f</b> <input type="checkbox"/> Community organization brochures   | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31g</b> <input type="checkbox"/> Community events                   | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31h</b> <input type="checkbox"/> Internet                           | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31i</b> <input type="checkbox"/> Magazines                          | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31j</b> <input type="checkbox"/> Books                              | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31k</b> <input type="checkbox"/> Journals                           | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31l</b> <input type="checkbox"/> Other                              | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q31l list</b> (list currently unavailable)                           |                                 |                                |

**2005 q31.** Recode: Local Environmental Issues Current Events Index (sum q31a, 31b, 31c, 31d, 31g, 31i)

**2005 q31.** Recode: Local Environmental Issues: Other Media Index (sum q31e, 31f, 31h, 31j, 31k)

**2005 q31a1.** Which one of those primary sources is your number one choice? List \_\_\_\_\_ (list currently unavailable) \_\_\_\_\_

**2005 q32.** Which of the following do you use as sources of information about home maintenance? (Check all that apply)

- |  |                                 |                                |
|--|---------------------------------|--------------------------------|
| <b>2005 q32a</b> <input type="checkbox"/> Daily newspaper                    | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32b</b> <input type="checkbox"/> Weekly newspaper                   | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32c</b> <input type="checkbox"/> Television                         | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32d</b> <input type="checkbox"/> Radio                              | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32e</b> <input type="checkbox"/> Community organization newsletters | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32f</b> <input type="checkbox"/> Community organization brochures   | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32g</b> <input type="checkbox"/> Community events                   | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |
| <b>2005 q32h</b> <input type="checkbox"/> Internet                           | 1= <input type="checkbox"/> Yes | 2= <input type="checkbox"/> No |

- 2005 q32i  Magazines 1=  Yes 2=  No  
 2005 q32j  Books 1=  Yes 2=  No  
 2005 q32k  Journals 1=  Yes 2=  No  
 2005 q32l  Other 1=  Yes 2=  No  
 2005 q32l list (list currently unavailable)

2005 q31. Recode: Home Maintenance : Current Events Index (sum q31a, 31b, 31c, 31d, 31g, 31i)

2005 q31. Recode: Home Maintenance: Other Media Index (sum q31e, 31f, 31h, 31j, 31k)

2005 q32a1. Which one of those primary sources is your number one choice? List  
 \_\_\_\_\_(list currently unavailable)\_\_\_\_\_

2007 q31. Which of the following educational messages about potential for polluted water runoff from yards, driveways, and gutters directly to the creek did you hear or see last year? (Check all that apply)

- 2007 q31aa  Television 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31bb  Radio 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31cc  Daily Newspaper 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31dd  Weekly Newspapers 1=  Yes 2=  No (coding error)  
 2007 q31ee  Posters 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31ff  Cal Water bill inserts 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31gg  Chico USA booth at a public event 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31hh  Chico USA brochure 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31ii  Internet (www.becnet.org) 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31jj  Murals (downtown Chico) 1=  Yes 2=  No 99 =  Refused to answer  
 2007 q31kk  Other (list currently unavailable)

2007 q31. Recode: Educational Messages: Current Events Index (sum q31a, 31b, 31c, 31d, 31g, 31i)

2007 q31. Recode: Educational Messages: Other Media Index (sum q31e, 31f, 31h, 31j, 31k)

2007 q31. Recode: Outreach Cat (sum number of messages seen and categorize)

- 0 =  No sources viewed  
 1 =  1-3 sources viewed  
 2 =  4-6 sources viewed  
 3 =  7-11 sources viewed

2007 q31a. Which one of those primary sources is your number one choice? List  
 \_\_\_\_\_(list currently unavailable)\_\_\_\_\_

2007 q32. Were you aware of the fact that water runoff from your yard, driveway and gutter drains directly into our creeks and streams before hearing or reading this message?

- 1=  Yes  
 2=  No  
 99 =  Refused to answer

- 2007 q33.** Which of the following behaviors have you changed to protect our local creeks and streams from polluted water runoff? (Select all that apply) *1 = checked 0 = blank for each of the following*
- 2007 q33a**  Wash your car on the lawn, or at a car wash, instead of in the driveway.
- 2007 q33b**  Recycle used auto oil.
- 2007 q33c**  Not over-fertilizing your lawn; not applying fertilizer and/or pesticides to your lawn before it rains; not over-watering your lawn.
- 2007 q33d**  Compost green waste.
- 2007 q33e**  Pick up after you pet and dispose of the waste in the trashcan.
- 2007 q33f**  Use ashtrays, rather than dropping cigarette butts on the ground.
- 2007 q33g**  Use reusable shopping bags, rather than plastic bags.
- 2007 q33h**  Never litter
- 2007 q33i**  Use Clean Water Business Partners to landscape your lawn and/or clean your carpets.
- 2007 q33j**  Use environmentally-friendly cleaning products and/or gardening methods.
- 2007 q33k**  Other (list currently unavailable)
- 2007 q33.** Recode: Behavior Index: (Sum number of yes=1, no=0 for all q33).
- 2007 q33.** Recode: Behavior Cat:
- 0** =  No changes reported
- 1** =  1-3 changes reported
- 2** =  4-6 changes reported
- 3** =  7-11 changes reported
- q33.34.** How important do you think it is to have environmental advocacy organizations in our area? Would you say that they are ...?
- 1** =  not important
- 2** =  somewhat important
- 3** =  important
- 4** =  very important
- 88** =  Don't know
- 99** =  Refused to answer
- q34.35.** How important do you think it is to have environmental education organizations in our area? Would you say that they are ...?
- 1** =  not important
- 2** =  somewhat important
- 3** =  important
- 4** =  very important
- 88** =  Don't know
- 99** =  Refused to answer
- 2005 q35.** Would you be willing to pay \$25 a year in taxes to protect local water quality?
- 1** =  Yes
- 2** =  No (Proceed to Q 37/38)
- 88** =  Don't know

**2007 q36.** Would you be willing to pay \$50 a year in taxes to protect local water quality?  
**1** =  Yes(Proceed to Q 37/38)  
**2** =  No(Proceed to 2007 Q 37)  
**88** =  Don't know  
**99** =  Refused to answer

**2005 q36.** Would you be willing to pay \$50 a year in taxes to protect local water quality?  
**1** =  Yes  
**2** =  No  
**88** = Don't know

**2007 q37.** Would you be willing to pay \$25 a year in taxes to protect local water quality?  
**1** =  Yes  
**2** =  No  
**88** =  Don't know  
**99** =  Refused to answer

**q37.38.** How long have you lived in this area? \_\_\_\_\_(*Enter the number of years*)  
 (Chico, Forest Ranch and/or Cohasset)

**q38.39.** In what year were you born? \_\_\_\_\_ (*Enter the year*)

**Recoded Age.** Calculated where Age=Study Year-Respondent Year of Birth (q38.39).  
 Example: 2007-1962=45

**q39.40.** What is the highest level of education that you have completed?  
**1** =  Did not graduate High School  
**2** =  GED  
**3** =  High School  
**4** =  Vocational certificate  
**5** =  Some college, but no degree  
**6** =  AA degree  
**7** =  BA or BS degree  
**8** =  Graduate level degree  
**99** =  Refused to answer

**q39.40.** Education Recode  
**1** =  High school or less  
**2** =  Some College, AA Degree, Vocational Certificate  
**3** =  BS/BS Degree  
**4** =  Graduate Level Degree

**q40.41.** What is your current employment status?  
**1** =  Employed full time  
**2** =  Employed part-time  
**3** =  Unemployed  
**4** =  Stay at home parent  
**5** =  Retired

- 6 =  Disabled  
 7 =  Student  
 99 = Refused to answer

**Recoded Employment.**

- 0 =  (q3,q4,q5, q6,) unemployed, stay at home, retired, disabled  
 1 =  (q1, q2) full time, part time  
 5 =  (q5) retired  
 7 =  (q7) student  
 99 =  refused to answer

**q41.42.** Which of the following is the best estimate of your annual household income that is the total income of all the persons living in your household before taxes? Please stop me when I read the category.

- 1 =  Under \$25,000  
 2 =  \$25-34,999  
 3 =  \$35,000-49,999  
 4 =  \$50,000-74,999  
 5 =  \$75,000-99,999  
 6 =  \$100,000 or more  
 99 = Refused to answer

**Gender.** (estimated)

- 1 =  Male  
 2 =  Female

**2007** Recode: Direct Knowledge of Causes: Pollution Cat: (q2, q2a1-q2a7 recoded where pollution yes=1, summed, and recategorized)

- 0 =  None pollute  
 1 =  1-3 things pollute  
 2 =  4-5 things pollute  
 3 =  6-8 things pollute

**2007** Recode: Direct Knowledge of Causes: Harm Cat: (q19, q20, q21, q22, q25, q27, q29 where harm yes=1, summed, and recategorized)

- 0 =  None harm  
 1 =  1-3 things harm  
 2 =  4-5 things harm  
 3 =  6-7 things harm

- 2007** Recode: Indirect Knowledge of Causes: BestWay Cat: (q3, q4, q5, q23, q26, where bestway yes=1, summed, and recategorized)  
**0** =  No bestway  
**1** =  1-3 bestway  
**2** =  4-5 bestway  
**3** =  6-7 bestway
- 2007** Recode: Attitudes Index: (q6-q11 where Importance yes=1, summed, 0-6.)
- 2007** Recode: Environmentally Friendly Activities: Env Friendly Cat: (q12-q14, q15b, q15c3, q17a, q17b, q18a, q18d, q24a recoded-rev where Friendly yes=1, summed, 0-8. and recategorized)  
**0** =  No Activities  
**1** =  1-3 Activities  
**2** =  4-5 Activities  
**3** =  6-8 Activities
- 2007** Recode: Support Index: (q33/34, q34/35, q35/36, q36/37 where Support (Important or Give Money) yes=1, summed, 0-3.)