OMB Number: 1028-New Expiration Date: XX/XX/XXXX

This document includes the questions and the text that will be included on the GAP survey. Statements regarding justification of the questions are inserted in gray-shaded text boxes. Respondents will not see these justifications. Skip logic directions are included in unshaded text boxes and in italicized text after response options. Respondents will not see the skip logic but will automatically be directed to the next question.

#### **GAP Evaluation Survey**

Welcome! This study is sponsored by the United States Geological Survey (USGS) National Gap Analysis Program (GAP). The purpose of this survey is to collect information to help GAP understand the needs of those who use GAP data and to understand how well existing GAP data and programs meet those needs.

We include data from state GAP projects, regional GAP projects, and the newest national GAP datasets in our definition of GAP data.

We estimate it will take an average of 28 minutes to complete this survey. If you need to stop at any time during the survey, you can exit and re-enter the survey to finish it at another time.

This survey is an adaptive survey—the questions you are asked later in the survey will be based on your answers early in the survey. The programming that allows the adaptive function to operate requires that some questions be answered. If you skip one of the required questions, the survey software will prompt you to enter an answer.

PAPERWORK REDUCTION ACT STATEMENT: The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et. seq.) requires us to inform you that this information is being collected to further the mission of GAP. Furnishing this information is completely voluntary and will be used to provide a report of up-to-date GAP data users. Public reporting burden for this collection of information is estimated to average 6 minutes per response, including time for reviewing instructions and completing the survey. Please direct any comments regarding this collection to the USGS Information Collection Officer, U.S. Geological Survey, 12201 Sunrise Valley Drive, MS 807, Reston, VA, 20192. Under the Paperwork Reduction Act, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

PRIVACY ACT STATEMENT: You are not required to provide your personal contact information in order to submit your survey. However, if you do not provide contact information, we will not be able to contact you for additional information to verify your responses. This information will only be used to initiate follow-up communications with you and will be deleted from our files immediately afterwards. The records for this collection will be maintained in the appropriate Privacy Act System of Records identified as Computer Registration System. (INTERIOR/USGS-20) published at 74 FR 23430 (May 19, 2009).

The first section of questions addresses your use of GAP data

**Justification for Q1**: This question is necessary because knowing the respondent's use level is critical to: a) accurately characterize the survey respondents and interpret their responses with appropriate context and b) permit the direction of respondents to appropriate questions later in the survey.

- **Q1** Which statement best describes your use of GAP data:
- a. I am using GAP data (either state, regional, or national data) at the present time, or have used it within the last five (5) years.  $\Rightarrow$  *Q11*
- b. I last used GAP data (either state, or regional) more than five (5) years ago.  $\rightarrow Q2$
- c. I am familiar with GAP data but have not used it.  $\rightarrow$  Q2
- d. I am not familiar with GAP and believe I have received this survey in error.  $\rightarrow$  Q13

**Responses to Q1 d** will automatically skip to an abbreviated version of the survey consisting of R13 through R19, and R209.

#### Special instructions if Q1 = d:

Our sampling process for this survey was based on recommendations from other users of GAP data. Your name and email address were provided to us by someone who thought you were likely to have used GAP data. We apologize for the inconvenience.

If you would be willing to answer a few questions, it would help us to understand the ways in which our sampling process was off.

→ Q13 through Q19, and Q209

**Justification for Q2**: Although the primary focus of the survey is on uses of GAP data, it is important for GAP to understand why past users and potential users do not currently use GAP data (Q2).

- **Q2** Which of the following is the most significant reason that you do not currently use GAP data? (*select one response from the items listed below*)
- a. GAP data are not available for my area.  $\rightarrow$  if Q1 = b, then Q11; if Q1 = c, then Q13
- b. GAP data are not applicable to the work I'm currently doing.  $\rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- c. GAP data are outdated.  $\rightarrow$  if Q1 = b, then Q11; if Q1 = c, then Q13
- d. I have concerns about the content of the land cover data.  $\rightarrow$  Q3
- e. I have concerns about the quality of the land cover data.  $\rightarrow$  Q4
- f. I have concerns about the content of the predicted species distribution data.  $\rightarrow Q5$
- g. I have concerns about the quality of the predicted species distribution data.  $\rightarrow$  Q6
- h. I have concerns about the content of the stewardship/protected areas data.  $\rightarrow$  Q7
- i. I have concerns about the quality of the stewardship/protected areas data.  $\rightarrow$  Q8
- j. GAP data are not compatible with the hardware that I use.  $\rightarrow$  Q9

- k. GAP data are not compatible with the other software packages I use.  $\rightarrow$  Q10
- l. Lack of information on how to use GAP data.  $\Rightarrow$  if Q1 = b, then Q11; if Q1 = c, then Q13 m. Lack of support from my organization for use of GAP data.  $\Rightarrow$  if Q1 = b, then Q11; if Q1 = c, then Q13
- n. I use data similar to GAP data but that is provided by a different source.  $\Rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13

**Justification for Q3 through Q10:** The next set of questions includes open ended questions that are designed to provide GAP with information about the concerns the users have with GAP data. This information will help GAP understand why past users and potential users of GAP data do not currently use GAP data. GAP will use this information to adjust their program to better meet the needs of GAP data users.

- **Q3** My main concern about the content of the land cover data is: [open-ended]  $\Rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- **Q4** My main concern about the quality of the land cover data is: [open-ended]  $\Rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- **Q5** My main concern about the content of the predicted species distribution data is: [openended]  $\rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- **Q6** My main concern about the quality of the predicted species distribution data is: [openended]  $\rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- **Q7** My main concern about the content of the stewardship/protected areas data is: [openended]  $\rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- **Q8** My main concern about the quality of the stewardship/protected areas data is: [openended]  $\rightarrow$  *if* Q1 = b, *then* Q11; *if* Q1 = c, *then* Q13
- **Q9** The hardware I use is [open-ended]  $\rightarrow$  if Q1 = b, then Q11; if Q1 = c, then Q13
- **Q10** The software package I use is [open-ended]  $\rightarrow$  if Q1 = b, then Q11; if Q1 = c, then Q13

**Justification for Q11 and Q12**: GAP data are publicly available and can be obtained by anyone with internet access and appropriate software. Therefore, we cannot assume how the data are being used. The survey includes questions that ask respondents how they have used GAP data for the following two reasons: (1) knowing this information will provide context to the interpretation of other results; and (2) knowing how respondents use GAP will answer the question of how well GAP is meeting its primary objective to preserve biodiversity

**Q11** Please indicate below the main issue that you used GAP data to address?

- a. Agriculture
- b. Biodiversity conservation
- c. Climate change
- d. Ecological/Ecosystem monitoring
- e. Geology/Hydrology
- f. Engineering/Construction/Surveying
- g. Fish and Wildlife management
- h. Fire management
- i. Forest management
- j. Invasive Species
- k. Mapping/Cartography
- l. Oil and gas/minerals exploration/extraction
- m. Range/Grassland management
- n. Recreation management
- o. Rural planning and development
- p. Transportation planning
- q. Urbanization (growth, sprawl, etc.)
- r. Water management (including coastal, wetland, and watershed management)
- s. Other: [open response]

All responses → Q12

**Q12** Which option below most closely describes the purpose for which you used GAP datasets?

- a. To provide information regarding conservation-related policy issues such as land use.
- b. To provide decision makers with knowledge about topics such as conservation concepts, models or priorities.
- c. To legitimize decisions, such as decisions about land use and land protection, made on the basis of other information.
- d. To conduct academic research to fulfill course or degree requirements or for the purpose of publication.
- e. To conduct applied research that is conducted for some reason other than to inform conservation decisionmaking.

All responses → Q13

**Justification for Q13-Q19:** These questions will help characterize respondents to the survey. We are primarily interested in organization-level demographics. The few individual-level questions that are asked relate to use of GIS. The organization-level questions will help GAP understand their customer base. The individual-level questions will help GAP to understand the GIS skill level of current, past, and potential users of their data.

**Q13** Which category best describes your organization?

- a. Private (for profit)
- b. State
- c. University

- d. County
- e. Municipal
- f. Federal
- g. Non-profit
- h. Regional
- i. Tribal
- j. Other: [open response]

All responses  $\rightarrow$  Q14

**Q14** How important is the conservation of biodiversity in the mission of your organization?

- a. Not important
- b. Slightly important
- c. Important
- d. Very important
- e. Critical

All responses → Q15

**Q15** Which field most closely describes your current position?

- a. Ecology
- b. Biology
- c. Conservation
- d. GIS
- e. Land Use Planning
- f. Fish and Wildlife Management
- g. Land Management
- h Other: [open response]

All responses → Q16

**Q16** What is the journal, newsletter, or publication that you read most frequently to keep current in your field? [Open-ended response] *All responses*  $\Rightarrow$  *Q17* 

**Q17** In your current position, which of the following roles with respect to GIS data do you fill: (Please select all that apply)

- a. Acquire data sets
- b. Create data sets
- c. Maintain data sets
- d. Inventory data sets
- e. Distribute data sets
- f. Use data sets to create information products

All responses → Q18

**Q18** How long have you been using GIS technology?

- a. Less than 1 year
- b. 1-2 years
- c. 3-5 years
- d. 6-10 years

e. More than 10 years

All responses → Q19

**Q19** What was the main source of training you had on the use of GIS?

- a. I am self-taught in GIS
- b. Informal on the job training from a co-worker
- c. Formal training provided by employer
- d. Professional seminar on GIS provided by company other than employer
- e. Formal undergraduate level GIS course
- f. Formal graduate level GIS course

All responses  $\rightarrow$  Q20 (EXCEPTION: responses to Q1-d will skip to Q209.)

**Justification for Q20:** This question asks current and past GAP users about their opinion regarding the level of GIS skill necessary to use GAP data. The response to this question will help GAP to determine if they need to consider changes to how the data sets and supporting information are provided.

**Q20** What level of GIS skill is necessary to use GAP data?

- a. No skill required.
- b. Must have basic GIS skills.
- c. Must have intermediate GIS skills.
- d. Must have advanced GIS skills.

All responses → Q21

**Justification for Q21 and Q22:** These questions ask about how the respondents became aware of and acquired GAP data. The responses to these questions will help GAP understand which methods of communicating about and providing the data are more commonly used in order to help GAP with planning how to best meet the needs of GAP users.

**Q21** How did you first learn about the types of GAP data available?

- a. I was a partner in a state GAP project.
- b. I learned about it in school and used it for school projects.
- c. I found it online on the GAP website.
- d. I found an online link to GAP from another website.
- e. Someone I knew told me about it.
- f. GAP data were referenced in a publication I read.
- g. GAP data were referenced in a conference presentation I attended.
- h. Other: [open response]

All responses → Q22

**Q22** What was the primary method you used to get GAP data that you use?

- a. It was distributed directly to me by GAP
- b. I downloaded it off of the GAP website
- c. A colleague sent it to me.
- d. I am familiar with GAP data but have not used it.

e. Other: [open response] *All responses* → *Q23* 

In the next section of questions, we will ask you about GAP datasets. We want you to answer these questions keeping in mind the dataset with which you are most familiar. You will be asked which geographic dataset (state, regional, or national) you used. You will be asked which type of GAP data you used (land cover, predicted species distributions, stewardship/protected areas, or analysis).

#### For example:

If you used land cover data from Idaho state GAP, you should click Idaho in the state dropdown menu. When asked about type of data, you should select land cover. You should answer all questions on the survey asking about GAP data with the Idaho land cover data in mind.

Note: Puerto Rico and the U.S. Virgin Islands are included on the state dropdown menu.

**Justification for Q23-Q32:** GAP produces data at the state, regional, and most recently national levels. In order to interpret the survey questions regarding data in the appropriate context, we need to know which data set survey respondents used. This set of questions asks about experience with and preferences for geographic datasets.

- **Q23** We would like to ask you a few questions concerning the GAP data set with which you have the most experience or with which you are most familiar. With which geographic set of data are you most experienced or familiar?
- a. State: [drop down menu including all states plus Puerto Rico and the U.S. Virgin Islands] → *O27*
- b. Regional: [drop down menu including Southwest, Southeast, and Northwest]  $\Rightarrow$  Q24
- c. National:  $\rightarrow$  Q30

**Q24** I prefer regional data sets because they are more accurate than state data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses  $\rightarrow$  Q25

**Q25** I use regional data sets because they are more current than state data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

**Q26** Regional data sets meet my needs for data more closely than state data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q33

**Q27** I prefer state data sets because they are more accurate than regional data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q28

**Q28** State data sets meet my needs for data more closely than regional data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q29

**Q29** There are no regional data available for my location.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q33

**Q30** I use the new national datasets because the national data is the most recently produced dataset.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

- **Q31** I use the new national datasets because I need data that is consistent at a national scale.
- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree

e. Strongly agree

All responses → Q32

- **Q32** I use the new national datasets because the way that national data is provided on the GAP website makes it easier to access and use than the state or regional datasets.
- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q33

**Justification for Q33:** GAP produces datasets with different types of content: land cover, predicted species distributions, stewardship, and layered analysis data. In order to interpret other survey questions regarding data in the appropriate context, we need to know which data set survey respondents had used. This question asks about experience with type of GAP data.

- **Q33** We would like to ask you a few questions concerning the GAP data set with which you have the most experience or with which you are most familiar. With which type of GAP data are you most experienced or familiar?
- a. Land cover
- b. Predicted Species Distributions
- c. Stewardship/protected areas
- d. Analysis (Land cover + Predicted Species Distribution + Stewardship/protected areas)

All responses → Q34

**Justification for Q34-Q38:** This set of questions addresses two issues that will be asked of all respondents who indicate that they have used GAP. The first issue the appropriateness and availability of GAP data for the user's area of interest. The second issue is the extent to which additions or manipulations to GAP data are necessary to make it useful. This is an important aspect of understanding how well GAP is meeting the needs of its users. The next several sets of questions are data-type specific and would not be asked of all respondents.

**Q34** The GAP data I need for my area are available.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q35

**Q35** I have to add to GAP datasets or manipulate the data to make it useful.

- a. Strongly disagree  $\rightarrow$  Q37
- b. Somewhat disagree  $\rightarrow$  Q37

- c. Neither agree or disagree  $\rightarrow$  Q37
- d. Somewhat agree  $\rightarrow$  Q36
- e. Strongly agree  $\rightarrow$  *Q36*

**Q36** What change or manipulation do you usually make to GAP data in order to make it useful? [open-ended response]

All responses → Q37

**Q37** In using <u>GIS</u> data in general, what extent (area of interest) do you most commonly use? The words "county" and "state" in response options are only given for general reference.

- a. smaller than a county
- b. about the size of a single county
- c. multiple counties
- d. state
- e. multiple states
- f. national

All responses → Q38

**Q38** In using <u>GAP data</u>, what extent (area of interest) do you most commonly use? The words "county" and "state" in response options are only given for general reference.

- a. smaller than a county
- b. about the size of a single county
- c. multiple counties
- d. state
- e. multiple states
- f. national

If Q33 = a (land cover), then Q39; if Q33 = b (predicted species distributions), then Q59; if Q33 = c (stewardship/protected areas), then Q84; if Q33 = d (analysis), then Q105.

**Justification for Q39-Q58:** These questions address respondents' data needs, satisfaction with, and perceptions specific to GAP land cover data. These questions will only be asked of those survey respondents who indicated they were most familiar with GAP land cover data. The best way to determine this information is to ask those who have used data to describe their experiences. The feedback that GAP receives from the responses to these questions will allow the program to consider adjustments to the land cover datasets they provide.

This section of the survey includes questions regarding your opinion of GAP land cover data.

**Q39** GAP land cover data are useful at the following levels (select all that apply):

- a. National
- b. Regional
- c. Ecosystem
- d. State
- e. County

- f. Refuge
- g. Other: [open response]

**Q40** GAP land cover data are necessary at the following levels (select all that apply):

- a. National
- b. Regional
- c. Ecosystem
- d. State
- e. County
- f. Refuge
- g. Other: [open response]

All responses → Q41

**Q41** How important is it to have consistent seamless national coverage of vegetation?

- a. Not important
- b. Slightly important
- c. Important
- d. Very important
- e. Critical

All responses → Q42

**Q42** How frequently should GAP land cover data be produced?

- a. Yearly
- b. Every 2-4 years
- c. Every 5-7 years
- d. Every 8-10 years
- e. Other: [open response]

All responses  $\rightarrow$  Q43

**Q43** For my purposes, GAP land cover data are relevant.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q44

**Q44** I believe that GAP land cover data are reliable. Reliable data are accurate, complete, dependable, and consistent.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

**Q45** Appropriate processes were used to assemble GAP land cover data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q46

**Q46** GAP land cover data are sufficiently current for my use.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q47

**Q47** The appropriate set of GAP land cover data was available when I needed it.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* → *Q48* 

**Q48** GAP land cover data are the best available data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q49

**Q49** GAP land cover data are easy to use with other datasets.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses  $\rightarrow$  Q50

**Q50** GAP land cover data are developed through cooperation with stakeholders (potential users of data)

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree

- d. Somewhat agree
- e. Strongly agree

**Q51** It is easy for me to access the GAP land cover data I need.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q52

**Q52** GAP land cover data are sufficiently complete for my intended uses.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q53

**Q53** At what level would you rate the quality of GAP land cover data?

- a. Very low
- b. Low
- c. Medium
- d. High
- e. Very High

All responses → Q54

**Q54** To what extent do GAP land cover data meet your expectations?

- a. Not at all
- b. Meets some expectations
- c. Meets most expectations
- d. Meets all expectations

*All responses* **→** *Q55* 

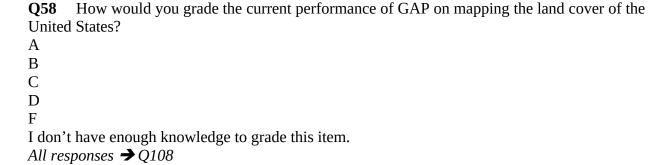
**Q55** In your opinion, what one type of information or feature could be added to GAP land cover data to make the data more useful? [open-ended response]

*All responses* **→** *Q56* 

**Q56** Are there alternative sources for the information provided in GAP land cover data – similar data but from a different source?

- a. Yes **→** *Q*57
- b. No **→** *Q*58

**Q57** Name the primary alternative to GAP land cover data: [open-ended response] *All responses*  $\rightarrow$  **Q58** 



**Justification for Q59-Q83**: These questions address respondents' data needs, satisfaction with, and perceptions specific to GAP predicted species distribution data. A few questions address the methods used to generate the predicted species distribution models. These questions will only be asked of those survey respondents who indicated they were most familiar with GAP predicted species distribution data. The best way to determine this information is to ask those who have used data to describe their experiences. The feedback that GAP receives from the responses to these questions will allow the program to consider adjustments to the predicted species distribution datasets they provide.

This section of the survey includes questions regarding your opinion of GAP predicted species distribution data.

**Q59** GAP predicted species distribution data sets are useful at the following levels (select all that apply):

- a. National
- b. Regional
- c. Ecosystem
- d. State
- e. County
- f. Refuge
- g. Other: [open response]

All responses → Q60

**Q60** GAP predicted species distribution data sets are necessary at the following levels (select all that apply):

- a. National
- b. Regional
- c. Ecosystem
- d. State
- e. County
- f. Refuge
- g. Other: [open response]

All responses  $\rightarrow$  Q61

**Q61** How important is it to have consistent seamless national coverage of predicted species distribution?

- a. Not important
- b. Slightly important
- c. Important
- d. Very important
- e. Critical

All responses → Q62

**Q62** How frequently should GAP predicted species distribution data be produced?

- a. Yearly
- b. Every 2-4 years
- c. Every 5-7 years
- d. Every 8-10 years
- e. Other: [open response]

All responses → Q63

**Q63** It is more useful to me for species to be modeled on biological range rather than along state boundaries.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q64

**Q64** The select group of species modeled by GAP is appropriate for my use.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q65

**Q65** For my purposes, GAP predicted species distribution data are relevant.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* **→** *Q66* 

**Q66** I believe that GAP predicted species distribution data are reliable. Reliable data are accurate, complete, dependable, and consistent.

- a. Strongly disagree
- b. Somewhat disagree

- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

**Q67** Appropriate processes were used to assemble GAP predicted species distribution data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q68

**Q68** GAP predicted species distribution data are sufficiently current for my use.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* **→** *Q69* 

**Q69** The appropriate set of GAP predicted species distribution data was available when I needed it.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* **→** *Q70* 

**Q70** GAP predicted species distribution data are the best available data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q71

**Q71** GAP predicted species distribution data are easy to use with other datasets.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses  $\rightarrow$  Q72

**Q72** GAP predicted species distribution data are developed through cooperation with stakeholders (potential users of data)

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q73

**Q73** GAP has a biologically meaningful rationale for defining the species to be modeled.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q74

**Q74** It is easy for me to access the GAP predicted species distribution data I need.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses  $\rightarrow$  Q75

**Q75** GAP predicted species distribution data are sufficiently complete for my intended uses.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* **→** *Q76* 

**Q76** Previous GAP projects used deductive modeling - based on expert input on habitat associations - for predicted species distributions. The Northwest Regional GAP project added inductive modeling - based on species occurrences, climatic data input, and statistical algorithms. To what extent will this change from deductive to inductive modeling improve GAP predicted species modeling?

- a. Cannot judge.
- b. No improvement.
- c. Slight improvement
- d. Moderate improvement
- e. Great improvement

All responses **→** Q77

**Q77** The selection of species to be modeled should be based on: (check one)

- a. A hierarchical spatial model with widely occurring species being mapped more coarsely and species dependent on small habitat patches being mapped more finely
- b. The species that are known to be modeled well with the current modeling approach used by GAP
- c. The species that were previously identified as GAP species
- d. Species that can be used as indicator, umbrella or keystone species
- e. Species that are most sensitive to biological stressors such as climate change, invasive species, and habitat fragmentation.
- f. Other: [open-ended response].

- **Q78** At what level would you rate the quality of GAP predicted species distribution data?
- a. Very low
- b. Low
- c. Medium
- d. High
- e. Very High

All responses → Q79

- **Q79** To what extent do GAP predicted species distribution data meet your expectations?
- a. Not at all
- b. Meets some expectations
- c. Meets most expectations
- d. Meets all expectations

All responses  $\rightarrow$  Q80

- **Q80** In your opinion, what one type of information or feature could be added to GAP predicted species distribution data to make the data more useful? [open-ended response] *All responses*  $\rightarrow$  *Q81*
- **Q81** Are there alternative sources for the information provided in GAP predicted species distribution data similar data but from a different source?
- a. Yes **→** *Q82*
- b. No **→** *Q83*
- **Q82** Name the primary alternative to GAP predicted species distribution data: [open-ended response]

- **Q83** How would you grade the current performance of GAP on mapping the predicted distributions of vertebrate species for the United States?
- A
- В
- C D
- F

I don't have enough knowledge to grade this item.

All responses → Q108

**Justification for Q84-Q104:** These questions address respondents' data needs, satisfaction with, and perceptions specific to GAP stewardship data. These questions will only be asked of those survey respondents who indicated they were most familiar with GAP stewardship data. The best way to determine this information is to those who have used data to describe their experiences. The feedback that GAP receives from the responses to these questions will allow the program to consider adjustments to the stewardship datasets they provide.

This section of the survey includes questions regarding your opinion of GAP stewardship/protected areas data.

**Q84** GAP stewardship/protected areas data sets are useful at the following levels (select all that apply):

- a. National
- b. Regional
- c. Ecosystem
- d. State
- e. County
- f. Refuge
- g. Other: [open response]

All responses → Q85

**Q85** GAP stewardship/protected areas data sets are needed at the following levels (select all that apply):

- a. National
- b. Regional
- c. Ecosystem
- d. State
- e. County
- f. Refuge
- g. Other: [open response]

All responses → Q86

**Q86** How important is it to have consistent seamless national coverage of stewardship/protected areas?

- a. Not important
- b. Slightly important
- c. Important
- d. Very important
- e. Critical

All responses → Q87

**Q87** How frequently should GAP stewardship/protected areas data be produced?

- a. Yearly
- b. Every 2-4 years
- c. Every 5-7 years
- d. Every 8-10 years
- e. Other: [open response]

**Q88** Incorporating the United Nations Environment Programme's World Commission on Protected Areas IUCN (International Union for Conservation of Nature) codes is a great improvement.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q89

**Q89** For my purposes, GAP stewardship/protected areas data are relevant.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q90

**Q90** I believe that GAP stewardship/protected areas data are reliable. Reliable data are accurate, complete, dependable, and consistent.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q91

**Q91** Appropriate processes were used to assemble GAP stewardship/protected areas data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q92

**Q92** GAP stewardship/protected areas data are sufficiently current for my use.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree

- d. Somewhat agree
- e. Strongly agree

**Q93** The appropriate set of GAP stewardship/protected areas data was available when I needed it.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q94

**Q94** GAP stewardship/protected areas data are the best available data of that type.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q95

**Q95** GAP stewardship/protected areas data are easy to use with other datasets.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q96

**Q96** GAP stewardship/protected areas data are developed through cooperation with stakeholders (potential users of data)

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* → *Q97* 

**Q97** It is easy for me to access the GAP stewardship/protected areas data I need.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

<b>Q98</b> GAP stewardship/protected areas data are sufficiently complete for my intended uses. a. Strongly disagree b. Somewhat disagree c. Neither agree or disagree d. Somewhat agree e. Strongly agree <i>All responses</i> → <i>Q</i> 99
<b>Q99</b> At what level would you rate the quality of GAP stewardship/protected areas data?  a. Very low b. Low c. Medium d. High e. Very High All responses → Q100
<b>Q100</b> To what extent do GAP stewardship/protected areas data meet your expectations? a. Not at all b. Meets some expectations c. Meets most expectations d. Meets all expectations <i>All responses</i> → <i>Q101</i>
<b>Q101</b> In your opinion, what one type of information or feature could be added to GAP stewardship/protected areas data to make the data more useful? [open-ended response] <i>All responses</i> $\Rightarrow$ <i>Q102</i>
<b>Q102</b> Are there alternative sources for the information provided in GAP stewardship/protected areas data – similar data but from a different source? a. Yes $\Rightarrow$ <i>Q103</i> b. No $\Rightarrow$ <i>Q104</i>
<b>Q103</b> Name the primary alternative to GAP stewardship/protected areas data: [open-ended response] <i>All responses</i> → <i>Q104</i>
Q104 How would you grade the current performance of GAP on documenting the representation of land ownership and protection (mapping stewardship/protected areas)? A B C D F I don't have enough knowledge to grade this item. <i>All responses</i> → Q108

**Justification for Q105-Q107**: These questions address respondents' data needs, satisfaction with, and perceptions specific to GAP analysis data. These questions will only be asked of those survey respondents who indicated they were most familiar with GAP analysis data. The feedback that GAP receives from the responses to these questions will allow the program to consider adjustments to the analysis datasets they provide.

This section of the survey includes questions regarding your opinion of GAP analysis (land cover + predicted species + stewardship/protected areas) data.

**Q105** GAP analysis data, which combines land cover, predicted species distribution, and stewardship/protected areas data, are sufficiently complete for my intended uses.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

*All responses* → Q106

**Q106** Are there alternative sources for the information provided in GAP analysis data – similar data but from a different source?

a. Yes → Q107

b. No **→** *Q108* 

**Q107** Name the primary alternative to GAP analysis (land cover + predicted species + stewardship/protected areas) data: [open-ended response] *All responses* → *Q108* 

**Justification for Q108-Q120**: One of the goals of this program evaluation is to understand how GAP data are being used to conserve biodiversity. Because of the public manner in which GAP data are made available, GAP data can be used for other purposes. This section of questions will measure what benefits are experienced by users of GAP data and the organizations for which they work.

This section of the survey includes questions regarding how using GAP data has been beneficial for your organization.

**Q108** I intend to continue to use existing GAP data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

**Q109** To what extent are GAP data compatible with other data sets that you use?

- a. Not at all Compatible  $\rightarrow$  Q110
- b. Somewhat Compatible  $\rightarrow$  *Q110*
- c. Moderately Compatible  $\rightarrow$  *Q111*
- d. Very Compatible  $\rightarrow$  Q111

**Q110** In what way is GAP not compatible?

- a. Resolution
- b. Format
- c. Content
- d. Software incompatibility
- e. Other: [open response]

All responses  $\rightarrow$  Q111

**Q111** To what extent does using GAP data improve your capacity to impact conservation of biodiversity?

- a. I don't work directly on conservation of biodiversity
- b. Not at all
- c. Somewhat
- d. Moderately
- e. Substantially
- f. Use of GAP data maximizes my capacity.

All responses → Q112

**Q112** Use of GAP data helps my organization achieve its conservation related goals.

- a. My organization doesn't have conservation related goals.
- b. Strongly disagree
- c. Somewhat disagree
- d. Neither agree or disagree
- e. Somewhat agree
- f. Strongly agree

*All responses* → *Q113* 

**Q113** To what extent has use of GAP data improved your communication of information to others involved in conservation of biodiversity?

- a. Not at all
- b. Somewhat
- c. Moderately
- d. Substantially

- **Q114** To what extent does/did use of GAP data increase your productivity?
- a. No increase in productivity
- b. Slight increase in productivity
- c. Moderate increase in productivity
- d. Large increase in productivity

e. Extreme increase in productivity

All responses  $\rightarrow$  Q115

**Q115** By using GAP data did your organization experience any of the following benefits?

a. Monetary savings

Yes

No

b. Time savings

Yes

No

c. Improved efficiency in the work process

Yes

No

d. Improved effectiveness

Yes

No

e. Improved decisions

Yes **→** *Q116* 

No

f. If there are benefits, other than the ones named above, that your organization experienced as the result of using GAP data, please name them here: [open-ended response]

All responses  $\Rightarrow$  Q117 unless the response to e (Improved decisions) is yes, then respondents will go to Q116.

**Q116** In what way(s) did use of GAP data improve decision making?

a. Provided necessary information.

Yes

No

b. Reduced uncertainty about decision options.

Yes

No

c. Products based on GAP data allowed for better visualization of decision options.

Yes

No

d. Products based on GAP data allowed for identification of issues that were unforeseen at the beginning of the project.

Yes

No

e. Other: [open-ended response]

All responses  $\rightarrow$  Q117

**Q117** The quality of the work conducted by my organization would deteriorate if GAP data were no longer available.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree

- d. Somewhat agree
- e. Strongly agree

**Q118** If GAP data were no longer available, which of the following actions would your organization most likely take?

- a. I could switch to a readily available substitute data set.
- b. I would have to search for an acceptable replacement data set.
- c. Create the data set ourselves
- d. Other: [open-ended response]

*All responses* → *Q119* 

**Q119** If GAP data were no longer available, how much would you have to pay to purchase a substitute data set?

- a. Less than \$10,000
- b. \$10,000 20,000
- c. \$20,001 50,000
- d. \$50,001 100,000
- e. More than \$100,000
- f. Unknown no readily available substitute

All responses → Q120

**Q120** If GAP data were not available and you had to use alternate data, how much less effective would your products be that you now base on GAP data?

- a. No change in effectiveness
- b. Somewhat less effective
- c. Moderately less effective
- d. Substantially less effective
- e. Actually, the products would be more effective

All responses  $\rightarrow$  Q121

**Justification for Q121-Q127**: Because the use of GAP data is technologically dependent, GAP would benefit from knowing about the technology preferences and needs of users of GAP data. The questions included in this section ask respondents to indicate their preferences for software and methods of downloading and acquiring data.

To help GAP understand the needs of the users of GAP data, the next section includes a few questions regarding GIS software and data preferences.

**Q121** Which GIS software packages do you frequently use? (select all that apply):

- a. ArcView
- b. ArcGIS
- c. Imagine
- d. GRASS
- e. ENVI
- f. MapInfo

- g. Manifold
- h. Idrisi
- i. Other: [open response]

**Q122** Which GIS software packages do you have access to but only occasionally use? (select all that apply):

- a. ArcView
- b. ArcGIS
- c. Imagine
- d. GRASS
- e. ENVI
- f. MapInfo
- g. Manifold
- h. Idrisi
- i. Other: [open response]

All responses → Q123

# **Q123** Do you prefer to:

- a. Access Web-based GIS tools/data sets.
- b. Download data for use in your GIS system.
- c. I have equal preference for each of the above options.

All responses → Q124

Q124 When you are obtaining GIS data in general, which delivery option do you prefer?

- a. File Transfer Protocol (FTP)
- b. Direct Download
- c. Receive on CD-ROM, DVD, or external hard drive for large datasets
- d. Other: [open response]

All responses → Q125

**Q125** In general when you download GIS raster data (GAP or other), which format do you most frequently use?

- a. ESRI GRID (Interchange format)
- b. Geotiff
- c. Spatial Data Transfer Standard (SDTS)
- d. ERDAS .img
- e. Other: [open response]

All responses → Q126

**Q126** When you download GAP raster data, which format do you most frequently use?

- a. ESRI GRID (Interchange format)
- b. Geotiff
- c. ERDAS .img
- d. Use all with roughly the same frequency
- e. Use none of the above. I use other: [open response]

Q127 How satisfied are you with the speed with which you can download GAP data?

- a. Completely dissatisfied
- b. Somewhat dissatisfied
- c. Neither satisfied or dissatisfied
- d. Somewhat satisfied
- e. Completely satisfied

All responses → Q128

**Justification for Q128-Q143:** One option for increasing the use of GAP data in order to meet GAP's program goals is to provide training on the use of GAP data. GAP has provided some training opportunities, however the training they provide is limited. The questions in this section of the survey are designed to determine the level of interest, and the perceived value that training would have to GAP users. There is one question that addresses the willingness to pay for training. The values included in this question are based on current rates for commercially available GIS training. This information will provide GAP with information about what limits they may face in planning training that would be affordable to GAP users.

This section of the survey asks questions about learning to use GAP data, your opinions about training on the use of GAP data, and informational support to use GAP data.

**Q128** How difficult was it for you to use GAP data the first time you used it?

- a. Very difficult
- b. Somewhat difficult
- c. Not difficult or easy
- d. Somewhat easy
- e. Very easy

*All responses* **→** *Q129* 

**Q129** If you had a question about using GAP data, what would your most likely course of action be?

- a. Go online to the GAP website to find information
- b. Go online to the GAP website to use one of the online data viewers.
- c. Go online but not to the GAP website, I'd search for other GAP users
- d. Contact someone I know who has previously used GAP
- e. Contact someone I know who worked on a GAP project
- f. Contact a current GAP staff member.
- g. Contact someone I know who has GIS knowledge
- h. Other: [open response]

All responses → Q130

**Q130** How valuable would training on the use of GAP data be to you?

a. Not at all valuable.  $\rightarrow$  Q137

- b. Somewhat valuable  $\rightarrow$  Q131
- c. Moderately valuable.  $\rightarrow$  Q131
- d. Very valuable.  $\rightarrow$  Q131

**Q131** How much would you be willing to pay, if necessary, for course registration for a one day training course on using GAP data?

- a. Only a negligible amount, definitely less than \$100
- b. \$100-200
- c. \$201-300
- d. \$301-400
- e. \$401-500
- f. over \$500
- g. I would not be willing to pay any amount.

All responses → Q132

**Q132** How valuable would training on the use of GIS data as a tool for conservation decision making (that used GAP data as an example) be to you?

- a. Not at all valuable.
- b. Somewhat valuable
- c. Moderately valuable.
- d. Very valuable.

All responses → Q133

**Q133** How much would you be willing to pay, if necessary, for course registration for a one day training course on GIS data as a tool for conservation decision making that used GAP data as an example?

- a. Only a negligible amount, definitely less than \$100
- b. \$100-200
- c. \$201-300
- d. \$301-400
- e. \$401-500
- f. over \$500
- g. I would not be willing to pay any amount.

All responses → Q134

**Q134** If you were to attend training on use of GAP data, what would be your preference for length of training?

- a. ½ day
- b. 1 day
- c. 2 day
- d. I would not attend training

All responses  $\rightarrow$  Q135

**Q135** In your opinion, which of the following would be the most <u>effective</u> training method (for best learning) on the use of GAP data?

a. Training session- Instructor led classroom

- b. Training session Instructor led web-based
- c. Training session held in conjunction with a conference
- d. Online tutorial
- e. Online Help desk- questions would be responded to by a member of the GAP staff *All responses*  $\rightarrow$  *Q136*

**Q136** Which of the following would be the most <u>practical</u> training method (training that could be completed within the realistic constraints of time and budget) on the use of GAP data?

- a. Training session- Instructor led classroom
- b. Training session Instructor led web-based
- c. Training session held in conjunction with a conference
- d. Online tutorial
- e. Online Help desk- questions would be responded to by a member of the GAP staff *All responses*  $\Rightarrow$  *Q137*

**Q137** How satisfied are you with the support you have received from GAP staff in your use of GAP data?

- a. Completely dissatisfied
- b. Somewhat dissatisfied
- c. Neither satisfied or dissatisfied
- d. Somewhat satisfied
- e. Completely satisfied
- f. I have never received any support from GAP staff (N/A)

All responses → Q138

Q138 How satisfied are you with any communication you have had with GAP staff?

- a. Completely dissatisfied
- b. Somewhat dissatisfied
- c. Neither satisfied or dissatisfied
- d. Somewhat satisfied
- e. Completely satisfied
- f. I have never had any communication with GAP staff (N/A)

All responses → Q139

**Q139** How did you learn to make use of GAP data?

- a. I figured it out myself.  $\rightarrow$  Q140
- b. A colleague helped me learn what I needed to know in order to use the data.  $\rightarrow$  Q141
- c. A member of GAP staff helped me learn what I needed to know to use the data.  $\rightarrow$  Q142
- d. I used resources on the GAP website.  $\rightarrow$  Q144

**Q140** How easy was it to figure out how to use GAP in your work?

- a. Very difficult
- b. Somewhat difficult
- c. Not difficult or easy
- d. Somewhat easy
- e. Very easy

**Q141** How easy was it to find a colleague who could provide you with the needed assistance?

- a. Very difficult
- b. Somewhat difficult
- c. Not difficult or easy
- d. Somewhat easy
- e. Very easy

All responses → Q144

**Q142** How accessible were GAP staff when you needed assistance?

- a. Extremely inaccessible
- b. Somewhat inaccessible
- c. Neither inaccessible or accessible
- d. Somewhat accessible
- e. Extremely accessible

All responses → Q143

**Q143** How satisfied were you with the assistance you received?

- a. Completely dissatisfied
- b. Somewhat dissatisfied
- c. Neither satisfied or dissatisfied
- d. Somewhat satisfied
- e. Completely satisfied

All responses → Q144

**Justification for Q144-Q163**: GAP provides data that it hopes will be used towards a distal goal – conservation of biodiversity. The path connecting the action taken by GAP (data provision) and the ultimate goal (conservation of biodiversity) is undefined. The questions in this section of the survey will provide information to determine how GAP data and products and information based on GAP data are distributed. This information will help GAP plan future information distribution efforts.

We are interested in learning how GAP data and products based on GAP data are distributed. This section of the survey asks questions regarding your perceptions of how information about GAP spreads and your role in the information distribution process.

**Q144** How would you characterize GAP's coordination with other agencies to promote awareness and use of GAP data sets?

- a. Insufficient to the point of rendering unusable the data that GAP provides because of lack of awareness.
- b. Insufficient to the point that the data GAP provides are less widely used than they could be because GAP doesn't coordinate much with other agencies.
- c. Sufficient to the point that the most likely users of GAP data are aware of how to obtain data as the result of GAP coordination other agencies.

- d. Sufficient to the point that both likely and unlikely users are aware of GAP data due to GAP coordination with other agencies.
- e. I cannot judge this.

**Q145** Do you personally know someone who was involved in developing a regional GAP project?

a. Yes

b. No

All responses → Q146

**Q146** Do you personally know someone who is currently employed by GAP?

a. Yes

b. No

All responses → Q147

**Q147** Do you personally know someone who was involved in developing a state GAP project?

a. Yes

b. No

*All responses* **→** *Q148* 

**Q148** How frequently do you send GAP datasets (in original form, without additions or revisions) to someone else?

- a. Never  $\rightarrow$  Q150
- b. Up to several times a year  $\rightarrow$  Q149
- c. Once a month  $\rightarrow$  Q149
- d. Once a week  $\rightarrow$  Q149
- e. Daily  $\rightarrow$  Q149

**Q149** To whom have you distributed GAP data in its original form, without additions or revisions? Mark all that apply.

- a. A colleague at my workplace
- b. A colleague in my local area
- c. A colleague in my state
- d. A colleague in my multi-state region
- e. A colleague in another part of the country
- f. A colleague in another country

All responses  $\rightarrow$  Q150

**Q150** How frequently do you direct someone else to the GAP website to download data?

- a. Never  $\rightarrow$  Q152
- b. Up to several times a year  $\rightarrow$  Q151
- c. Once a month  $\rightarrow$  Q151
- d. Once a week  $\rightarrow$  Q151
- e. Daily  $\rightarrow$  Q151

**Q151** Whom have you directed to the GAP website to download data? Select all that apply.

- a. A colleague at my workplace
- b. A colleague in my local area
- c. A colleague in my state
- d. A colleague in my multi-state region
- e. A colleague in another part of the country
- f. A colleague in another country

All responses  $\rightarrow$  Q152

**Q152** How frequently do you send others to the GAP website to use the online data viewers?

- a. Never  $\rightarrow$  Q154
- b. Up to Several times a year  $\rightarrow$  Q153
- c. Once a month  $\rightarrow$  Q153
- d. Once a week  $\rightarrow$  Q153
- e. Daily  $\rightarrow$  Q153

**Q153** To whom have you recommended using the online data viewers on the GAP website? Select all that apply.

- a. A colleague at my workplace
- b. A colleague in my local area
- c. A colleague in my state
- d. A colleague in my multi-state region
- e. A colleague in another part of the country
- f. A colleague in another country

All responses → Q154

**Q154** How frequently do you send someone else an information product (map, chart, document) that you created based on GAP data?

- a. Never  $\rightarrow$  Q158
- b. Up to several times a year  $\rightarrow$  Q155
- c. Once a month  $\rightarrow$  Q155
- d. Once a week  $\rightarrow$  0155
- e. Daily  $\rightarrow$  Q155

**Q155** To whom have you distributed the product (dataset, map, chart, or other document) that you made using GAP data? Select all that apply.

- a. An individual who makes policy about conservation of biodiversity
- b. An individual who implements policy about conservation of biodiversity
- c. An individual who advocates policy about conservation of biodiversity
- d. An individual who studies conservation of biodiversity
- e. An individual who creates products to be used by those who implement, advocate or make policy about biodiversity

All responses → Q156

**Q156** When you distributed the product (dataset, map, chart, or other document) that you made using GAP data, to how many individuals did you distribute?

- a. An individual
- b. A small group (3-5)
- c. A moderate group (6-10)
- d. A large group (11-50)
- e. A very large group (such as a listserv)
- f. An undefined group (made available to the public)

**Q157** When you distributed the product (dataset, map, chart, or other document) that you made using GAP data, how broad was your intended audience?

- a. Local
- b. State
- c. National
- d. International

All responses → Q158

Q158 Who is the primary recipient of the product you make using GAP data?

- a. Myself, I am the end user
- b. Public, I publish
- c. Legislators
- d. State Planners
- e. Land Managers
- f. Other: [open response]

All responses  $\rightarrow$  Q159

**Q159** Which of the following best describes the aspect of decision making present in your current position?

- a. I make decisions regarding how to define policies affecting conservation of biodiversity.
- b. I implement but do not make policies affecting conservation of biodiversity.
- c. I provide information products to those who make policies affecting conservation of biodiversity.
- d. I decide what data to use in creating information products to be used by those who make or implement policies affecting conservation of biodiversity.
- e. None of the above

All responses → Q160

**Q160** Have you ever used a GAP data set or a product based on GAP data to make a decision that had a direct effect on conservation of biodiversity?

Yes **→** Q161 No **→** O164

**Q161** When responding to the following questions, think about the most recent time when you used a GAP data set or a product based on GAP data to make a decision that had a direct effect on conservation of biodiversity.

Without the information that GAP data provided, the decision made would have been very different.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

Q162 How successful would you say GAP data or products were in influencing the decision?

- a. Very unsuccessful
- b. Somewhat unsuccessful
- c. Neither unsuccessful or successful
- d. Somewhat successful
- e. Very successful

All responses → Q163

**Q163** No decision would have been made without the information provided by GAP data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q164

**Justification for Q164-Q171:** The questions in this section of the survey address potential future actions that GAP could take to improve how it serves the users of GAP data. Because whether GAP meets its ultimate goal (conservation of biodiversity) is dependent on those who use the data, it is important for GAP to consider how possible future actions would affect users of GAP data.

This section of the survey includes questions regarding actions that GAP could take in the future to maximize the usefulness of its data.

**Q164** Which database is most important to keep current?

- a. Land cover
- b. Predicted Species Distributions
- c. Stewardship/protected areas

All responses → Q165

**Q165** Which is more important, to update existing data or to create new data?

- a. Update existing
- b. Create new

All responses → Q166

**Q166** What is the most important characteristic for future GAP data?

- a. That it be comparable to the current (regional) and past (state) GAP data
- b. That it be at a higher resolution

- c. That it be at a lower resolution
- d. That it be developed more closely with the individuals who will be primary users of the data
- e. That it be seamless and nation-wide

**Q167** I intend to use new releases of GAP data in the future.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q168

**Q168** I would use national level GAP data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q169

**Q169** What process change would have the greatest effect on improving use of GAP data?

- a. Correcting errors/omissions in existing data sets
- b. Creating data sets more quickly from newer data
- c. Incorporation of aquatic gap data sets
- d. Provision of a GAP Helpdesk, where users could submit technical questions and issues for response by a GAP staff member
- e. Training offered on use of GAP data
- f. Aggressive marketing of GAP data to potential users
- g. Other: [open-ended response]

All responses → Q170

**Q170** How useful would it be to have access to an individual to answer questions about using GAP data?

- a. Not at all useful
- b. Somewhat useful
- c. Moderately useful
- d. Very useful

All responses → Q171

**Q171** How useful would it be to have access to an individual who could help you modify GAP data for specific use?

- a. Not at all useful
- b. Somewhat useful
- c. Moderately useful
- d. Very useful

**Justification of Q172-Q184:** One of the concerns of GAP is that past outreach efforts to current and potential users of GAP data have been insufficient. The questions in this section address three outreach methods: GAP conferences, the GAP Bulletin, and the GAP web site. The questions regarding each of the methods are tailored to provide the information that would best help GAP determine how to proceed with that outreach method in the future.

GAP is interested in learning about effective means by which to communicate with current and potential users of GAP data. This section of the survey includes questions asking your opinion about possible outreach methods.

**Q172** What factors would affect your attendance at a GAP conference? (select all that apply)

- a. Cost
- b. Location
- c. Supervisory permission
- d. Topics covered at the conference
- e. Educational/Training Credit
- f. Other: [open response]

All responses  $\rightarrow$  Q173

**Q173** How likely is it that you would attend an annual GAP conference?

- a. Very likely → Q174
- b. Somewhat likely → Q174
- c. Neither likely or unlikely → Q174
- d. Somewhat unlikely → Q174
- e. Very unlikely  $\rightarrow Q177$

**Q174** What topic would you most like to see covered at a GAP conference? Select one

- a. Demonstrations by GAP staff of the uses of various GAP datasets.
- b. Submissions and presentations by others (not GAP staff) demonstrating how they have used GAP data.
- c. Ongoing discussions about the advantages and limitations of using GAP data.
- d. In-depth workshops on how to use GAP data.
- e. Presentations on current and in-development GIS software.
- f. Presentations/discussions on conservation of biodiversity.
- g. Other: [open response]

All responses  $\rightarrow$  Q175

**Q175** How likely is it that you would submit a presentation to a GAP conference?

- a. Very Likely
- b. Somewhat likely
- c. Neither likely or unlikely
- d. Somewhat unlikely
- e. Very Unlikely

# All responses $\rightarrow$ Q176

Q176 How useful would it be to have access to the proceedings from a GAP conference?

- a. Not at all useful.
- b. Somewhat useful
- c. Moderately useful.
- d. Very useful.

*All responses* → Q177

**Q177** What outreach activity would be most useful in reaching potential users of GAP data? [open response]

All responses **→** Q178

Q178 Have you ever used information that you located in the GAP Bulletin publication?

- a. No **→** *Q17*9
- b. Yes **→** *Q180*

**Q179** What is the main reason you haven't used information from the GAP Bulletin publication?

- a. I'm not familiar with the GAP Bulletin.
- b. The information provided is too narrow in focus to be of use to me.
- c. Never had an occasion to use information from the Bulletin.
- d. Other: [open response]

All responses → Q182

**Q180** How useful was the information?

- a. Not at all useful.
- b. Somewhat useful
- c. Moderately useful.
- d. Verv useful.

*All responses* **→** *Q181* 

**Q181** How would you rate the quality of the GAP Bulletin as an information source?

- a. Poor
- b. Fair
- c. Good
- d. Excellent

All responses → Q182

**Q182** When was the last time you visited the GAP website?

- a. Never  $\rightarrow$  Q185
- b. Within the last 4 months  $\rightarrow$  Q183
- c. Within the last 5-8 months  $\rightarrow$  Q183
- d. Within the last 9-12 months  $\rightarrow$  Q183
- e. More than 1 year ago  $\rightarrow$  Q183

**Q183** What was your primary purpose in visiting the site?

- a. Information
- b. Download data
- c. Use a web map service
- d. Use the Gap Ecosystem Data Explorer tool
- e. Find contact information
- f. Other: [open response]

All responses → Q184

**Q184** Did your visit to the website meet your needs?

- a. No
- b. Yes, the visit met a few of my needs
- c. Yes, the visit met most of my needs
- d. Yes, the visit met all of my needs

All responses → Q185

**Justification for Q185-Q197:** Judgments of the reputation of a program can be used as part of an assessment of the effect created by the program. The questions in this section of the survey ask respondents about their perceptions of GAP's reputation. The information provided with these questions helps GAP to understand where there may be weaknesses in its reputation that will need to be addressed in promoting the data that GAP provides.

In this section, we ask your opinion regarding the reputation of GAP and the data it produces.

**Q185** GAP is mostly unknown in the community of conservation professionals.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q186

**Q186** GAP is mostly unknown in the GIS user community.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q187

**Q187** GAP has a reputation as being a credible source of data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree

- d. Somewhat agree
- e. Strongly agree

**Q188** GAP has a unique niche in the biodiversity data it provides.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q189

**Q189** GAP is losing ground to competing organizations that produce similar data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q190

**Q190** Does the GAP program and its data have a national reputation?

- a. GAP is not known
- b. Known to a few individuals nation-wide
- c. Known to some individuals nation-wide
- d. Known to many individuals nation-wide
- e. Well known nation-wide

All responses  $\rightarrow$  Q191

**Q191** Does the GAP program and its data have a state-level reputation?

- a. GAP is not known
- b. Known to a few individuals state-wide
- c. Known to some individuals state-wide
- d. Known to many individuals state-wide
- e. Well known state-wide

All responses  $\rightarrow$  Q192

**Q192** Does the GAP program and its data have a municipal/county level reputation?

- a. GAP is not known
- b. Known to a few individuals at the level of cities and counties.
- c. Known to some individuals at the level of cities and counties.
- d. Known to many individuals at the level of cities and counties.
- e. Well known at the level of cities and counties.

All responses → Q193

**Q193** What proportion of people who could potentially use GAP data actually know about GAP and the data it provides?

- a. Less than 10%
- b. Between 10 and 25%
- c. Between 26 and 50%
- d. Between 51 and 75%
- e. Between 76 and 100%

**Q194** How strongly would you recommend use of GAP data to others, assuming they had an appropriate need for the type of data that GAP provides?

- a. I would give my strongest recommendation to someone considering use of GAP data.
- b. I would recommend use of GAP data.
- c. I would hesitate to recommend use of GAP data.
- d. I would caution against use of GAP data.
- e. I would strongly urge others not to use GAP data.

*All responses* → *Q195* 

**Q195** Have you recommended use of GAP data to someone else?

a. Yes **→** Q196

b. No **→** Q197

**Q196** After you made the recommendation, did you receive feedback from the person to whom you recommended use of GAP data?

- a. No, no feedback.
- b. Yes, positive feedback
- c. Yes, negative feedback

All responses → Q198

**Q197** What is the main reason why you have not recommended GAP data to someone else?

- a. No appropriate opportunity has presented itself.
- b. I have reservations about the accuracy of the data.
- c. I have reservations that the data are outdated.
- d. I had difficulty in using GAP data myself.
- e. GAP data are missing relevant content.
- f. Other: [open-ended response]

All responses → Q198

**Justification of Q198-Q208:** Part of this assessment is to determine how well GAP is meeting its stated goals. Because those who use GAP data have a unique perspective on how GAP data is used and what can be accomplished by using GAP data, this section of the survey includes questions that ask respondents to provide their opinion on how well GAP is performing and meeting the program's goals. Because GAP data is publicly available, and GAP achieves its goals through use of its data, the best way to measure achievement of these goals is to ask those who used the data.

In this section, we ask you to assess how well the GAP is meeting its goals and objectives. This is the last section of survey questions.

**Q198** In your experience and opinion, in what way are GAP datasets most frequently used?

- a. To solve policy issues such as land use issues relating to conservation
- b. To provide decision makers with knowledge about topics such as conservation concepts, models or priorities.
- c. To legitimize decisions, such as decisions about land use and land protection, made on the basis of other information.
- d. To conduct academic research to fulfill course or degree requirements or for the purpose of publication.
- e. To conduct applied research that is conducted for some reason other than to inform conservation decisionmaking.

*All responses* → *Q199* 

**Q199** In your experience and opinion, what is the most appropriate use for GAP datasets?

- a. To solve policy issues such as land use issues relating to conservation
- b. To provide decision makers with knowledge about topics such as conservation concepts, models or priorities.
- c. To legitimize decisions, such as decisions about land use and land protection, made on the basis of other information.
- d. To conduct academic research to fulfill course or degree requirements or for the purpose of publication.
- e. To conduct applied research that is conducted for some reason other than to inform conservation decisionmaking.

All responses → Q200

**Q200** Please rate how helpful GAP data are or could be in addressing the following issues:

	a. Cannot judge.	b. Not at all helpful.	c. Slightly helpful	d. Moderately helpful.	e. Helpful	f. Very helpful.
Habitation conversion/loss						
Habitat conservation						
Invasive/exotic species						
Changes in hydrological						
processes/Hydrologic						
restoration						
Pollution						
Fire Suppression						
Disturbance caused by						
transportation/infrastructure						
development						
Consumptive use of						
biological resources						

Improper forest			
management			
Lack of knowledge about			
species			
Climate change			
Loss of natural community			
integrity			
Degradation of migration			
corridors/routes			
Destructive resource			
harvesting			
Non-consumptive use of			
resources			
Research on species			
Private land conservation			
Restoration of Species of			
greatest conservation need			
(SGCN) and habitats			
Species conservation and/or			
management			
Research on habitats			
Public lands conservation			

Other current biological conservation issue, please specify: [open-ended response]

If respondents select option b for any of the topics, they will be directed to Q201, otherwise respondents will be directed to Q202.

**Q201** Why are GAP data <u>not</u> helpful in addressing those issues?

- a. Data quality
- b. Data availability, needed data are not available
- c. Data are available but not in needed format or spatial resolution
- d. Data are not helpful, because of limited awareness about GAP data
- e. GAP data are just not relevant to this issue.
- f. Other: [open response]

All responses → Q202

**Q202** The information products that can be derived from GAP data are compatible with existing policy making processes and models.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

**Q203** GAP data are relevant to currently pending decisions that relate to the conservation of biodiversity

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q204

**Q204** I believe individuals who are in positions to make decisions about conservation of biodiversity would be open to considering the type of information products that could be produced using GAP data.

- a. Strongly disagree
- b. Somewhat disagree
- c. Neither agree or disagree
- d. Somewhat agree
- e. Strongly agree

All responses → Q205

**Q205** To what extent has GAP met its objective to assess the geographic extent of biodiversity in the United States?

- a. GAP has done nothing to meet this objective.
- b. GAP is less than halfway to meeting this objective.
- c. GAP is about halfway to meeting this objective.
- d. GAP is more than halfway to meeting this objective.
- e. GAP has completely met this objective.
- f. I don't have enough knowledge to make this judgment

All responses → O206

**Q206** To what extent has GAP met its objective to assess the amount of biodiversity found on protected lands?

- a. GAP has done nothing to meet this objective.
- b. GAP is less than halfway to meeting this objective.
- c. GAP is about halfway to meeting this objective.
- d. GAP is more than halfway to meeting this objective.
- e. GAP has completely met this objective.
- f. I don't have enough knowledge to make this judgment

*All responses* → *Q207* 

**Q207** How would you grade the current performance of GAP on building institutional cooperation in the application of its information to state and regional management activities?

A

В

C

D

F

I don't have enough knowledge to grade this item. *All responses* → *Q208* 

**Q208** How would you grade the current performance of GAP on providing information to the public and to those organizations charged with natural resource research, policy, planning, and management?

A

B C

D

L

I don't have enough knowledge to grade this item.

All responses → Q209

**Justification for Q209:** This open-ended question is provided as a courtesy to the survey respondents. It provides them with an opportunity to make any comment they wish. Survey respondents can skip this question if they choose.

**Q209** End question: Would you like to provide any other comments about the data provided by the GAP? [open-ended response]

All responses or no response → Q210

**Justification for Q210**: This question is included in the survey at the request of GAP. In order to protect the anonymity of the survey respondents, we will not provide GAP with any personal information regarding the respondents unless the respondents provide an email address in response to this question.

**Q210** If you would like to receive notifications of new release of GAP data, products, and other information, please type your email address here. If you choose to provide your email address, it will not be associated with your answers to any survey questions: [open-ended response]