MEMORANDUM | January 25, 2016

TO Katherine Pease, NOAA

FROM Total Value Team

SUBJECT Technical Memo TM-6: Structure of the Main Study Questionnaires (Revised Draft)

6.1 INTRODUCTION

The main study used two versions of questionnaires that were administered in-person. The two versions of the questionnaire differed only in the description of the harm done by the 2010 oil spill. Version A of the questionnaire described harm that was limited to three items while Version B described harms to a larger number of items.[1]

In this memo we describe the main elements of the survey questionnaire.

[1] Details of the description of harm can be found in Section 6.2.10.

6.2 COMPONENTS OF THE SURVEY

6.2.1 PROCEDURAL INFORMATION

The questionnaire began with an exchange of information between the interviewer and the respondent about the interview. This exchange included:

- Determining if the respondent needed glasses to view the visuals (text and graphics) displayed on the screen of a laptop computer.

> I will be asking you to look at the computer screen here a little later **[POINT TO LAPTOP]**.
>
> **INTERVIEWER: IF R DOES NOT HAVE GLASSES ON:** In order to read this screen, do you need glasses that you don't have with you now? **[IF YES]** Would you please get them?

- Offering the respondent a chance to read a letter from the Department of Commerce about the study.

> As we begin, please take a moment to read this letter. **[SHOW DEPARTMENT OF COMMERCE LETTER]**

> **Department of Commerce Letter**
>
> Dear Resident:
>
> This letter is to confirm that Abt SRBI is working with the U.S. Department of Commerce on a national study to find out people's opinions about important issues facing the country. Abt SRBI is conducting interviews with 4,000 households that have been scientifically selected across the United States.
>
> We would like to include a member of your household in this effort. Your participation is voluntary and your identity will be kept confidential to the maximum extent of the law.
>
> Sincerely,
>
> Norman Meade
> Senior Economist
> Department of Commerce
> 1-877-251-3433

- Describing how the survey would be administered, encouraging the respondent to ask the interviewer to reread portions of the information presented if the respondent had any difficulties understanding what was being presented, and stressing the importance of taking time to consider the information provided and answering each question as accurately as possible.

> As the letter states, the federal government wants to find out what you think about a series of issues, and that's why I am interviewing you today.
>
> During this interview, I am going to read you some information and show you pictures on this screen **[POINT TO LAPTOP SCREEN].**
>
> I'll read the information to you **slowly**, to make it easy for you to understand it, and **think** about it. If you would like me to reread anything to you, please just let me know.
>
> When I ask you questions later, it's important that you take your time to think **carefully** about each question, and give me as accurate an answer as you can.

- Collecting a bit of information about the household structure.[2] This information was used to customize the wording of questions that reference the number of adults in the household.
    - If the respondent was living with only one other adult, the interviewer asked if the respondent and the other adult were related.

> Before we begin, are you related to the other adult who lives with you?

    - Alternatively, if the respondent was living with more than one other adult, the interviewer asked if the respondent was related to any of the other adults living with him/her. If the respondent answered

[2] These questions were only asked if the respondent lived with one or more other adults. Information about how many other adults lived with the respondent was collected during the pre-interview screener, which consisted of a series of demographic questions used to determine the eligible respondent.

affirmatively, the interviewer then asked how many other adults lived with the respondent that were related to the respondent.

> Before we begin, are you related to any of the other **adults** who live with you?
>
> **[IF RESPONDENT ANSWERS "YES"]:** How many other **adults** that live with you are you related to?

6.2.2 PRELIMINARY QUESTIONS

The interviewer next told the respondent that there would be a series of questions about "issues in the United States." The first six questions asked the respondent to report the importance he/she places on six different issues.

> To begin, I'd like to ask for your opinions about some issues in the United States.
>
> Some of the issues may be important to you personally. Others may not be important to you personally.

These issues were presented in random order.

> **Q1**. First, how important to you is [FIRST ISSUE]? Is it extremely important, very important, moderately important, slightly important, or not important at all?

The six issues included:

- Improving education in public schools;
- Protecting coastal areas from oil spills;
- Reducing the number of people entering the United States illegally;
- Preventing terrorist attacks in the United States;
- Reducing federal taxes;
- Helping unemployed people get jobs.

The next six questions asked the respondent to report his/her feelings about the amount of money currently being spent on the six other issues.

> Next, I'm going to read a list of some things the federal government spends money on. For each one, please tell me whether you think the federal government should spend, a lot more money for that purpose than it spends now, a little more money than it spends now, the amount of money that it spends now, a little less money than it spends now, or a lot less money than it spends now.
>
> **Q7** First…

Issues were presented in a random order and included:

- Building new prisons;
- Cleaning up pollution;
- Improving interstate highways;
- Health care for children;
- The United States military;
- Giving money to governments of foreign countries to help the people living there.

6.2.3 OVERVIEW OF SURVEY PURPOSE

In this section the respondent was told that a proposal for a new program would be described and that he/she would be asked to vote on whether the program should be carried out.

At the end of this section the respondent was told that the specific program he/she would hear about involves the Gulf of Mexico. This was the first point in the interview process at which the respondent knew that the interview would involve issues related to the Gulf of Mexico.

Proposals are sometimes made for the federal government to start new programs. The government does not want to start a new program unless enough taxpayers are willing to pay for it.

Today, I'll give you information about a program, so that you can make up your own mind about it.

After I tell you about the program, I will ask you to vote for it or against it, and I will ask you **why** you vote the way you do.

The federal government wants to learn the opinions of people who think the program is needed, and the opinions of people who think it is not needed.

The program I will ask you about involves the Gulf of Mexico.

6.2.4 INTRODUCING THE GULF OF MEXICO

In this section of the questionnaire, the respondent was provided with information about the geography of the Gulf of Mexico, including a number of maps.

Here is a map of the United States [**SCREEN 6**].

This is the Gulf of Mexico [**SCREEN 7**].

In this close-up, the **yellow line** marks the **shoreline** of the United States along the Gulf of Mexico **[SCREEN 8]**.

The area of the Gulf between the yellow line and this **white line [POINT TO SCREEN 9]** is the U.S. part of the Gulf. From now on, when I say the Gulf, I will mean **just** that marked area.

Along the shore of the Gulf are more than a thousand miles of beach, and thousands of miles of marsh, which is land often flooded with water and covered with thick tall grass and other plants.

The referenced maps were shown on a high resolution computer monitor and measured approximately eight inches by 13 inches.

Screen 6

6 6

Screen 7

7 7

Screen 8

8 8

Screen 9

9 9

Next, respondents were told about animals that live in and along the Gulf. The types of animals listed varied among questionnaire Versions A and B.

- Version A of the questionnaire:

Also in the Gulf are: millions of birds.

- Version B of the questionnaire:

> Also in the Gulf are: many trillions of fish; many billions of snails and worms; millions of birds; hundreds of thousands of sea turtles; tens of thousands of bottlenose dolphins; and thousands of deepwater corals.

6.2.5 ACTIVITIES IN THE GULF OF MEXICO

In this section of the questionnaire, the respondent was provided with information about human uses of the Gulf. This information included both recreational and commercial uses.

> And people use the Gulf for many purposes, including going to the beach about one hundred million times each year to sunbathe, swim, fish, and do other things **[SCREEN 11].**
>
> This screen summarizes what I just told you **[SCREEN 12]**.
>
> People and businesses also use the Gulf for catching seafood from boats like this to sell around the world **[SCREEN 14]**, moving products on ships like this **[SCREEN 15]**, to be sold in stores and used by businesses, and drilling wells for oil and natural gas from platforms like these **[SCREEN 16]**.

Screen 11

Screen 12

Millions of birds
Thousands of miles of marsh
One hundred million times to the beach

Screen 14

Screen 15

Screen 16

6.2.6 CURRENT STATUS OF THE GULF

In this section of the questionnaire, the respondent was told that humans and natural events have affected the Gulf for many years.

> People and natural events have affected the water, shoreline, and animals in the Gulf for many years.
>
> For example, during the summer, pollution from farms and cities has reduced the amount of oxygen in the water in some parts of the Gulf. This harms the fish and other animals living there.
>
> Wells drilled in the Gulf have often leaked small amounts of oil into the water.
>
> Also, oil naturally comes slowly out of the bottom of the Gulf in many different places.

The respondent was then asked whether he/she had heard or read anything about the previously discussed activities that happen in the Gulf.

> **Q13**. Before today, had you **read** or **heard** anything about what I just told you happens in the Gulf, or had you not read or heard anything about this?

6.2.7 INTRODUCING THE 2010 SPILL

In this section of the questionnaire, the respondent was provided with background information about the 2010 spill.

> **Q14**. In April 2010, an **oil spill** happened in the Gulf of Mexico. A very large amount of oil leaked out of a well being drilled there. Many news stories were written about this at that time. Some people call this the BP oil spill. Today, I will call it the **2010 Spill**.
>
> Do you remember reading or hearing anything about the 2010 spill, or do you not remember reading or hearing anything about it?

If the respondent remembered reading or hearing about the 2010 spill he/she was asked to tell the interviewer what he/she remembered. The interviewer recorded verbatim everything said by the respondent.

> **Q15**. When you answer the next question, I will be typing everything you say. So I would be grateful if you would speak **slowly** while you answer.
>
> Now, please tell me everything you remember reading or hearing about it.

When the respondent was done telling everything he/she remembered about the 2010 spill, he/she was asked to report how serious the effects of the 2010 spill were.

> **Q16**. Now let me continue. Based on what you remember, please tell me: in your opinion, how serious you think the effects of the 2010 spill were: extremely serious, very serious, moderately serious, slightly serious, or not serious at all?

6.2.8 EVOLUTION OF INFORMATION ABOUT THE SPILL

In this section of the questionnaire, the respondent was told about media coverage of the 2010 spill and how that coverage evolved over time. Some example headlines were displayed.

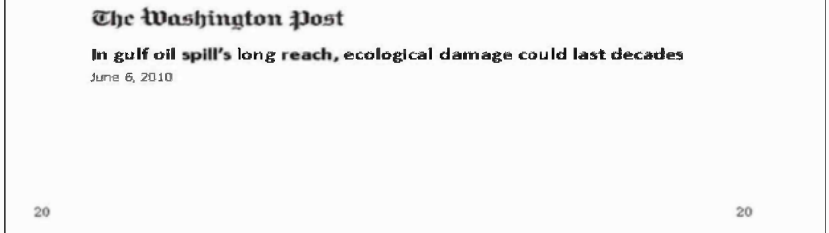
When oil first started leaking out of the well in 2010, the news media said there might be a great deal of harm from the spill.

One headline at that time said: "In gulf oil spill's long reach, ecological damage could last decades." **[SCREEN 20]**

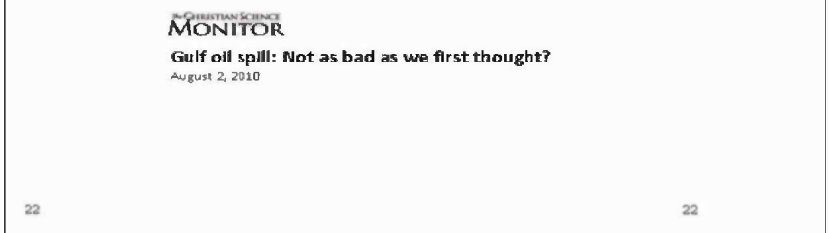
A few months after the oil **stopped** leaking, the news media said the harm from the 2010 spill appeared to be **less** than first reported.

One headline at that time said: "Gulf oil spill: Not as bad as we first thought?" **[SCREEN 22]**

Screen 20



Screen 22



Then the respondent was told that scientists have intensively studied the 2010 spill and now have a good understanding of what actually happened, the effects of the spill, and how long those effects lasted.

> These **headlines** show that right after the spill started, the news media **guessed** what the effects of the spill would be. But **now** that more than three years have passed, we have learned what the effects **really were**.
>
> In fact, the 2010 spill is the **most studied** oil spill in history.
>
> Some of the scientists studying the spill work for universities; others work for private companies; some work for the federal government; others work for state governments; and some work for environmental protection organizations.
>
> These scientists collected **more information** about the 2010 spill than any other spill in the past.
>
> They took thousands of samples of the Gulf water; took thousands of pictures from satellites, boats and submarines; counted people on the beaches and in boats; and examined large numbers of many different kinds of fish, birds, and other animals for signs of oil.
>
> Based on these studies and what the scientists learned from other past oil spills, the scientists determined **where** the oil went in 2010, **what effects** it had, and **how long** it's taken for things to get back to normal.
>
> When I say "back to normal," I mean how things would have been if the spill hadn't happened. Next, I'll tell you how the 2010 spill happened and what the scientists learned about the effects of the oil.

6.2.9 HOW THE 2010 SPILL HAPPENED INFORMATION AND HOW IT WAS STOPPED

In this section of the questionnaire, the respondent was presented with a map that shows the location where the well was drilled.

The well was about 50 miles from the shore, here **[POINT TO SCREEN 24]**.

Screen 24

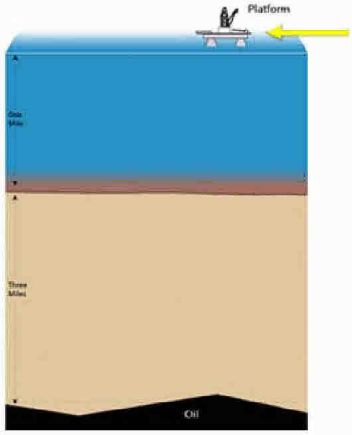
Next the respondent was presented with information about the deep water drilling process.

Drilling the well began by putting a platform on the surface of the water **[SCREEN 25]**. A pipe was put down through the water **[SCREEN 26]** and then down through the mud underneath **[SCREEN 27]** until the pipe reached a pool of oil **[SCREEN 28]**.

Almost always, this method works perfectly. But very rarely, when a well is drilled under deep water, the pocket of oil turns out to be under tremendous pressure, and explodes upward much more strongly than usual, when the drill first goes into the pocket of oil.

This happens with about one out of every 400 wells drilled in the Gulf, and that's what happened in 2010. The oil blew up through the pipe, the pipe broke, and oil began gushing out here **(SCREEN 29)**.

Screen 25



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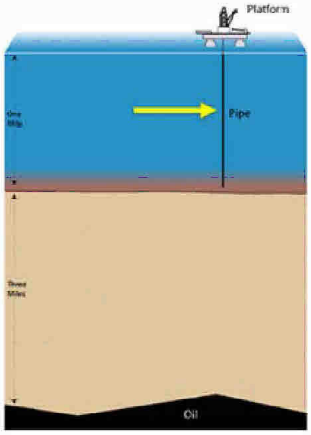
Screen 26



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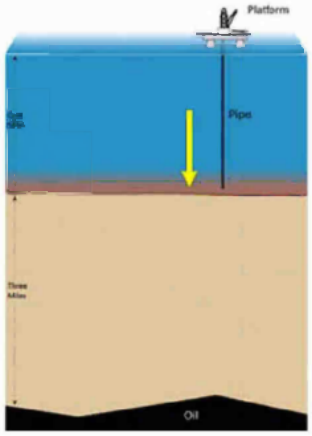
Screen 27



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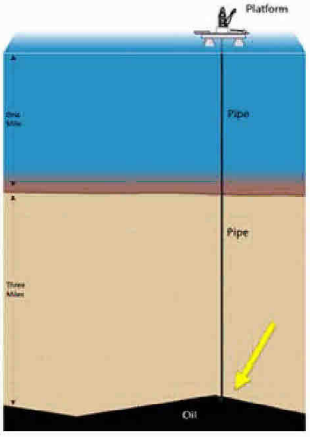
Screen 28



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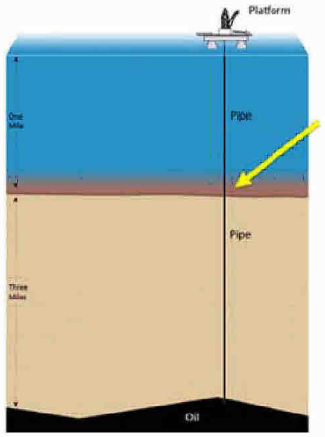
Screen 29



29 29

Next the respondent was presented with information about how leaks in deepwater oil wells can be stopped.

There is only **one way** to permanently stop a leak like this under deep water, and that is by using a **second pipe** to stop the flow of oil. This is what was done in 2010.

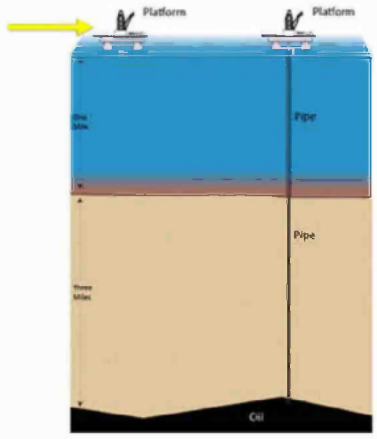
Another platform was put on the surface of the water, here **[SCREEN 31]**.

A second pipe was put down through the water **[SCREEN 32]** and through the mud, and reached almost all the way to the first pipe **[SCREEN 33]**. Then, a hole was drilled to connect the **second** pipe to the **first** one, here **[SCREEN 34]** and **cement** was quickly pushed down through the second pipe into the first pipe **[SCREEN 35]**. The cement stopped the oil leak, and closed the well, permanently.

This method has been used many times in the past, to stop **every other** very large spill that has happened in deep water around the world. The second pipe has always been drilled as **quickly** as possible, but it **always** takes about three months, and oil gushes out during all that time.

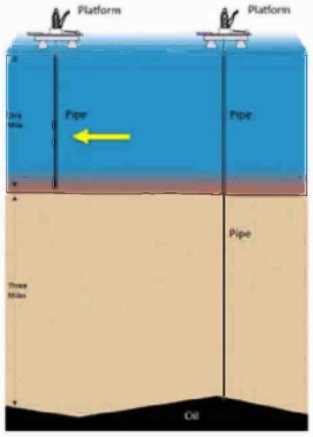
In 2010, engineers tried several new ways to stop the leak, but none of them worked.

Screen 31



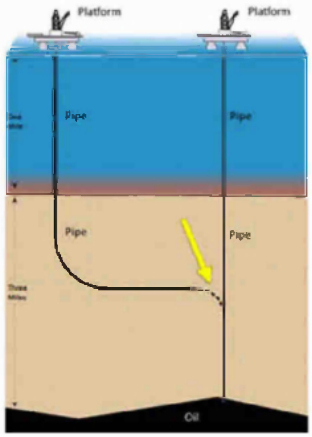
31 31

Screen 32



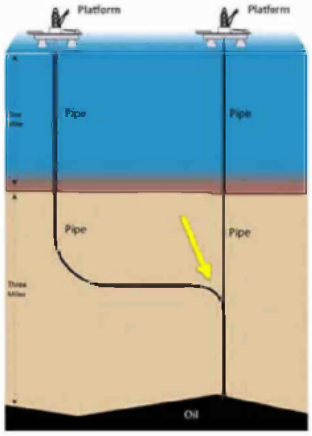
32 32

Screen 33



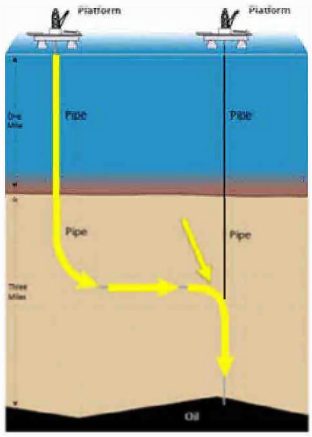
33 33

Screen 34



34 34

Screen 35



6.2.10 EFFECTS OF THE OIL

In this section the effects of the spilled oil were described to the respondent. The descriptions of the effects were presented verbally along with a series of images and texts on the laptop screen.

> Some of the gushing oil mixed into the water, some settled on the bottom of the Gulf, and some floated across the surface of the water, and reached the shore.
>
> The oil in the water was eaten by **harmless microbes** that have lived in the Gulf waters for thousands of years, eating the oil that naturally comes out of the bottom. All the oil from the 2010 spill was gone three years after the spill started.

The descriptions of the effects differed between **Version A** and **Version B**.

In **Version A**, the respondent was told that the oil had effects on birds, marshes and recreation by people that were not completely gone until three years after the spill.

The oil had three effects on birds, marshes, and recreation by people that were not completely gone until about three years after the spill started.

Number one, birds. Number two, marshes along the shore. Number three, going to the beach.

First, I'll tell you about the effects on birds. Oil got on about three thousand birds, and they died as a result. The types of birds most affected were: Laughing Gulls **[VERSION A SCREEN 42]**[3], Brown Pelicans **[VERSION A SCREEN 43]**, Northern Gannets **[VERSION A SCREEN 44]**, and Royal Terns **[VERSION A SCREEN 45]**. About one year after the spill started, the number of birds was back to normal.

Now I'll tell you about the effect on marshes. When the oil reached the shore, it got on about 185 miles of marshes. A marsh looks like this when there's no oil on it **[VERSION A SCREEN 48]**. About three years after the spill started, the marshes were back to normal.

Scientists have carefully studied many other kinds of animals and plants in the Gulf, and have found no other wide-spread or long-lasting effects from the 2010 spill.

Now, I'll tell you about the effects of the oil on recreation by people. Oil got on many beaches along the shoreline. As a result, people went to beaches about 7 million fewer times. About one year after the spill started, the number of times people went to the beach was back to normal.

Please open the booklet **[HAND RESPONDENT THE VERSION A FLIP CARD LISTING THREE EFFECTS OF THE OIL SPILL]**. Now, please take your time to review the three effects the oil had on birds, marshes, and recreation by people that I just told you about.

[3] In some cases, screen numbers and their corresponding images differ between Version A and Version B.

Version A Screen 45

Laughing gull

Brown pelican

Royal tern

Northern gannet

45 45

Version A Screen 48

48 48

Version A Booklet – printed on facing page of spiral bound booklet		
		Back to Normal
1.Birds	3,000 died	1 year
2.Marshes	Oil on 185 miles	3 years
3.Going to the beach	7 million fewer times	1 year

In **Version B** the respondent was told that the oil affected birds, young fish, snails and worms living on the bottom of the Gulf, young sea turtles, dolphins, deepwater corals, marshes and recreation by people.

The oil had eight effects on animals, plants, and recreation by people that won't be completely gone until about 300 years after the spill started. There were effects on animals, plants, and recreation by people. I'll start with the animals that were affected.

Number one, snails and worms living on the bottom of the Gulf. Number two, young fish. Number three, young sea turtles. Number four, bottlenose dolphins. Number five, birds. Number six, deep water corals many miles from shore, under water so deep that you need to go down in a submarine to see them.

The plants that were affected are: number seven, marshes along the shore. And the other effect was on recreation by people: number eight, going to the beach.

First, I'll tell you about the effects on animals. Near the well, oil covered much of the bottom, in an area about three miles across. About one-third of the snails and worms in that area died. This is what these snails and worms look like when there's no oil on them **[VERSION B SCREEN 48]**. About 10 years after the spill started, the numbers of snails and worms will be back to normal.

About 80 million newly born fish and young fish died because of the oil. This is what some of these young fish look like when they have no oil on them **[VERSION B SCREEN 51]**. Most of these young fish are less than a half inch long. About one year after the spill started, the number of fish in the Gulf was back to normal.

Oil got on about 8,000 young sea turtles, and they died because of it. All of the sea turtles in the Gulf of Mexico are at risk of becoming extinct. Most of the sea turtles that died were Kemp's ridley sea turtles, which look like this when there is no oil on them **[VERSION B SCREEN 54]**. About 20 years after the spill started, the number of sea turtles in the Gulf will be back to normal.

The oil caused about 500 bottlenose dolphins to get sick. They look like this when there is no oil on them **[VERSION B SCREEN 56]**. About 120 of the sick bottlenose dolphins died from the oil. About 20 years after the spill started, the number of dolphins in the Gulf

will be back to normal.

Oil got on about fifty thousand birds, and they died as a result. The types of birds most affected were: Laughing Gulls **[VERSION B SCREEN 60]**, Brown Pelicans **[VERSION B SCREEN 61]**, Northern Gannets **[VERSION B SCREEN 62]**, and Royal Terns **[VERSION B SCREEN 63]**. About five years after the spill started, the number of birds will be back to normal.

Oil also got on deepwater corals living on the bottom of the Gulf, a half a mile or more below the surface of the water, where no light reaches. This is what these corals look like with no oil on them, if you shine a light on them **[SHOW SCREEN 65]**. These corals grow to be about three feet tall. Oil caused parts of about 120 of these corals to die. The animals living on the corals were not harmed. Because these corals grow very slowly, they will get back to normal about 300 years after the spill started.

Now, I'll tell you about the effects on marshes. When the oil reached the shore, it got on about 185 miles of marshes. A marsh looks like this when there is no oil on it **(VERSION B SCREEN 69)**. About three years after the spill started, the marshes were back to normal.

Scientists have carefully studied many other kinds of animals and plants in the Gulf, and have found no other wide-spread or long-lasting effects from the 2010 spill.

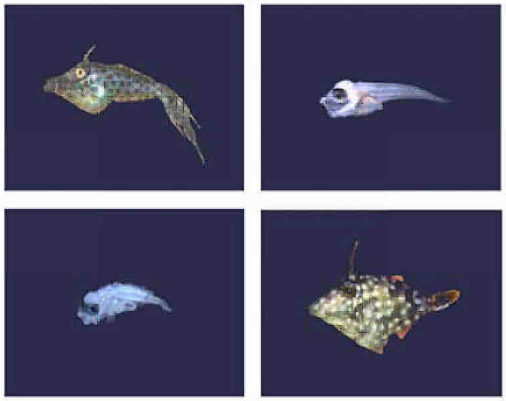
Now, I'll tell you about the effects of the oil on recreation by people. Oil got on many beaches along the shoreline. As a result, people went to beaches about 10 million fewer times. About one year after the spill started, the number of times people went to the beach was back to normal.

Please open the booklet **[HAND RESPONDENT THE VERSION B FLIP CARD LISTING THREE EFFECTS OF THE OIL SPILL]**. Now, please take your time to review the 8 effects the oil had on animals, plants and recreation by people that I just told you about.

Version B Screen 48

48 48

Version B Screen 51



51 51

Version B Screen 54

54 54

Version B Screen 56

56 56

Version B Screen 63

Laughing gull

Brown pelican

Royal tern

Northern gannet

63 63

Version B Screen 65

65 65

Version B Screen 69

69 69

Version B Booklet – printed on facing page of spiral bound booklet		
Animals		**Back to Normal**
1.Snails and worms	1/3 near well died	10 years
2.Young fish	80 million died	1 years
3.Young sea turtles	8,000 died	20 years
4.Bottlenose dolphins	120 died	20
5.Birds	50,000 died	1 year
6. Deep water corals	Parts of 120 died	300 years
Plants		
7.Marshes	Oil on 185 miles	3 years
Recreation		
8.Going to the beach	10 million fewer times	1 year

The respondent was then told about the compensation payments that had already been made to businesses and people who work in the Gulf.

Because of the 2010 spill, businesses and people who worked in the Gulf lost money.

But the law requires that any company that causes an oil spill must pay businesses and people the money they would have earned, and that has been done after every large oil spill. The company that caused the 2010 spill has paid **billions** of dollars to tens of thousands of businesses and people who lost money as a result of the spill.

So businesses and people got back the money they lost.

At the end of this section the respondent was asked two questions about his/her perception of the 2010 spill after hearing what is now known about the effects of the 2010 spill. First the respondent was asked to report how serious he/she thought the effects of the spill were. Then the respondent was asked to report how much harm these effects caused in the Gulf. Note that while Version A of the questionnaire asked the respondent to consider the three mentioned effects of the oil spill, Version B cited the eight previously mentioned effects.

Version A

Q17. Now that I've described the three effects the 2010 spill had, please tell me, in your opinion, how serious were these effects: extremely serious, very serious, moderately serious, slightly serious, or not serious at all?

Q18. Overall, how much did these three effects harm the Gulf? A great deal, a lot, a moderate amount, a little, or not at all?

Version B

Q17. Now that I've described the eight effects the 2010 spill had, please tell me, in your opinion, how serious were these effects: extremely serious, very serious, moderately serious, slightly serious, or not serious at all?

Q18. Overall, how much did these eight effects harm the Gulf? A great deal, a lot, a moderate amount, a little, or not at all?

6.2.11 INTRODUCING THE NEED FOR GOVERNMENT INVOLEMENT IN OIL SPILL PREVENTION

Next the respondent was told why another large spill will occur in the next 15 years and why the government would have to be involved if a program to prevent a large spill in the Gulf is to be carried out.

> The 2010 spill was not the first spill of its type, and it will almost certainly not be the last in the Gulf, as I'll explain next.
>
> Oil companies have purchased **permits** from the government to drill 400 more wells in deep water in the Gulf during the next 15 years. No other permits will be sold during the next 15 years, so only these 400 wells will be drilled.
>
> Based on experience with drilling in deep water in the Gulf, and in other parts of the world, geologists agree that when drilling one of these 400 wells, the oil will turn out to be under super high pressure and will explode, just as happened in the 2010 spill, and the same sort of oil spill will happen.
>
> Of course, no one can know **exactly** what effects that spill will have. But we do know that these effects will be **very similar** to what happened in 2010, for the following reasons.
>
> First, the wells will all be drilled about the same 50 mile distance from the shore, and it will take the same **three months** to drill to put the second pipe in place.
>
> During those three months, about the same amount of oil will leak out as in 2010, and the oil will move around the Gulf in ways similar to the 2010 spill. So the effects of the oil will be about the same as those of the 2010 spill.

The respondent was then told that although companies were making changes to the way they drill, there would be no way to prevent this next accident. The respondent was is asked whether he/she knew before the interview that one out of every 400 wells in the Gulf hits an underground pocket of oil under high pressure.

After every large oil spill in the past, companies have changed the ways they drill wells, to reduce the chances of a spill happening and to reduce its effects.

And companies drilling in the Gulf have been making changes because of the 2010 spill. But there's no way to know that a pocket of oil is under super high pressure until the pipe goes all the way into the oil, and there is no way to test the pressure before that.

So there will be no way to prevent this next accident.

Q19. Before today, did you know that one out of every 400 wells in the Gulf hits an underground pocket of oil under super high pressure, or did you not know this?

Then the respondent was told that the only way to prevent the future spill is to put a second pipe into place at the same time each of the next 400 wells are drilled in deep water. Since the oil companies don't know in advance which of the 400 new wells will result in a spill, they are not willing to pay the extra cost of the second pipe at each new well.

The only way to prevent the effects of the next spill would be to put a second pipe in place at the same time that the first pipe is drilled. That way, a well can be closed in just 2 days after the leak starts, rather than in three months.

As you can imagine, putting a second pipe into all of the 400 new wells to be drilled during the next 15 years would cost a lot of money. In fact, it would **double** the price of drilling each new well.

And because the chance of any one well exploding is very small, the company building it won't want to pay twice the cost. So the companies **won't** put the second pipes in themselves.

The respondent was then told that under terms of the 400 permits already given out, the government cannot require the oil companies to install the second pipe. So if the program to prevent spills by installing second pipes is to be carried out, the government will have to pay for it.

> And the government can't force the companies to drill the second pipes. Each company paid a specific price to buy a permit to drill in each location according to the government rules in effect at the time, when the risks of drilling for oil in deep water were not as clear as they are today.
>
> The government can't change those rules now and increase the cost of drilling, just like a car company can't increase the price they charge you for a car after you have paid for the car.
>
> Fifteen years from now, the government will sell new permits to oil companies, and those new permits can require drilling a second pipe every time a new well is drilled in the Gulf. But until then, the second pipes will not be drilled unless the government chooses to pay for them.

The respondent was then asked whether he/she knew that oil companies must buy permits from the government to drill for oil in the Gulf before today.

> **Q20**. Before today, did you know that an oil company must buy a permit from the government that lets them drill for oil in a specific place in the Gulf, or did you not know this?

Next, the respondent was told that the program he/she was being asked to consider is a program to install second pipes at all 400 new wells drilled in deep water in the Gulf during the next 15 years.

> From now on, when I say the "**prevention program**" today, I will mean the **government** paying to put a **second pipe** in each of the 400 new wells that will be drilled in the Gulf during the next 15 years.

6.2.12 WHAT THE PROGRAM WOULD AND WOULD NOT DO

In this section the respondent was told that he/she would soon be told how much the program would cost the respondent if it is carried out.

> Next, I'll tell you what the prevention program would do and what it would not do.
>
> I'll tell you how much the prevention program would cost you and your family living with you.[4] Then I'll ask you whether you think the government **should** or **should not** do this.

Then the respondent was reminded of things the prevention program would and would not do. First the respondent was directed to look at the flip card that verbally describes the effects of the 2010 spill and reminded that if carried out, the prevention program would prevent the effects listed on the flip card from happening in the Gulf during the next 15 years.

> The prevention program would prevent the effects listed on the card in front of from happening in the Gulf during the next 15 years **[POINT TO FLIP CARD LISTING [(VERSON A): THREE / (VERSION B): EIGHT] EFFECTS OF THE SPILL]**.

Then the respondent was reminded of things the program would not do.

> There are various things that the prevention program would **not** do, and I'll list some of these next.
>
> The prevention program would **not** affect the price of oil. Almost all of the oil produced in the world comes from outside the Gulf. So what happens in the Gulf has no noticeable effect on the price of oil in the United States or elsewhere in the world.
>
> The prevention program would **not** have a noticeable effect on the number of jobs that people can get in the Gulf. Only a small number of wells would be drilled at any one time, so only a small number of jobs would be created by the prevention program.

[4] If the respondent lives in a household with no other adults, the tax would be paid solely by the respondent. Thus the interviewer simply states "I'll tell you how much the prevention program would cost you," with no mention of the respondent's family. The same applies for all additional questions that reference the cost to the respondent and the respondent's family.

6.2.13 HOW THE PROGRAM WOULD BE PAID FOR

In this section the respondent was told that the program would be paid for through the imposition of a one-time tax on all households in the US, the proceeds of which would be deposited in a special fund. The respondent was told that the tax would be paid in the tax year following the year in which the interview occurred.

> Here's how the prevention program would be paid for. The federal government would charge all American households a **one-time** extra tax, next year, to pay for all the costs of drilling the second pipes during the next 15 years.
>
> **All** the money from this one-time tax would be put in a new account, called the Gulf Protection Fund. This money would only be spent on drilling the second pipes.
>
> Even if you and your family living with you are not required to pay any taxes on money received during [THIS YEAR],[5] you and your family living with you would still have to pay the one-time tax next year.
>
> If you and your family living with you expect to get a tax refund, the refund would be reduced by the amount of the one-time tax.

6.2.14 COLLECTION OF INCOME INFORMATION

The respondent was told that the amount of the one-time tax would be based on family income. So the interviewer asked the respondent to report family income, before taxes, for the prior tax year.

For respondents living with other family members, the question was asked as follows:

[5] Throughout the questionnaire, [THIS YEAR] is replaced with the year in which the questionnaire is carried out, i.e. 2013 or 2014.

> The government has calculated the total amount of money needed to drill 400 second pipes, based on the known cost of drilling in deep water.
>
> The amount of money you and your family living with you would pay as the one-time tax would be determined by your income. So I now need to know what your total family income was for all of [LAST YEAR].[6, 7]
>
> This includes income from jobs, pensions, social security, interest, dividends, capital gains, profits from businesses, unemployment payments, and **all** other money you received.
>
> Your total family income includes your own income plus the incomes of all family members who live with you.
>
> **Q21**. Adding up the income from all these sources and all other sources, what was the total income for you and your family living with you for all of [LAST YEAR], before taxes?

If the respondent said he/she did not know, the interviewer gave a long pause and said:

> It would be a big help to us if you would be willing to give me your best estimate in answering the question, even if you're not completely sure.
>
> Adding up the income from all these sources and all other sources, what was the total income for you and your family living with you for all of [LAST YEAR], before taxes?

The interviewer then checked that he/she typed the correct the correct amount.

[6] For questionnaires carried out in 2013, [LAST YEAR] res replaced with 2012. For questionnaires carried out in 2014, [LAST YEAR] is replaced with 2013. The same applies to all other references to "[LAST YEAR]".

[7] If the respondent lives in a household with no other adults, the interviewer asks only for the respondent's income, as opposed to his / her family's income. The same applies for all additional income questions.

Q21v1. I typed "XX" dollars per year. Is this what you said?

If the respondent stated that he/she had no income in the previous year, the interviewer did a second consistency check:

Q21v2. Just to check, you and your family living with you received no money from **any** source in [LAST YEAR], is that correct?

If the respondent refused to provide the total family income for the prior year, the respondent was shown a card with 10 income categories and asked to indicate in which income category his/her family income fell.[8]

Q22. Could you please just tell me the letter on this screen that best matches the total income for all of [LAST YEAR] for you and your family living with you? **[VERSION A SCREEN 61 /VERSION B SCREEN 82]**.[9]

[8] The same applies if the respondent refused to answer either the first or second consistency check.

[9] In some cases, different screen numbers for Version A and Version B refer to the same image or display. Where this is the case, both the Version A and Version B screen numbers are listed.

Screen 61 (shown in Version A) and
Screen 82 (Shown in Version B)

Total income for all of [LAST YEAR]

A. Less than $10,000

B.$10,000 to $14,999

C.$15,000 to $24,999

D.$25,000 to $34,999

E.$35,000 to $49,999

F.$50,000 to $74,999

G.$75,000 to $99,999

H.$100,000 to $149,999

I.$150,000 to $199,999

J.$200,000 or more

If the respondent refused to select an income category, he/she was asked up to two questions about whether his/her family income fell above $35,000 or above $75,000.

Q23A. In order for me to be able to determine how much the prevention program would cost you and your family living with you, could you please just tell me whether the total income for all of [LAST YEAR], for you and your family living with you, was more than $35,000?

Q23B. Was it more than $75,000?

While the respondent was told that the amount of the one-time tax would be determined by the family income, in reality, the amount of the one-time tax was determined by an experimental design.[10]

[10] See Appendix 1.2 for details

After reporting family income, the respondent was told the amount he/she would have to pay as a one-time tax if the program is carried out.[11] If the respondent had stated his/her annual income, or had stated which of the ten income brackets he/she falls into, the respondent was told:

> The cost of the one-time tax for the prevention program to you and your family living with you is [BID AMOUNT].[12]

If the respondent had refused to state his/her annual income, and had also refused to say which of the ten income brackets he/she falls into, the respondent was told:

> On average, the cost of the one-time tax for the prevention program to a family living in your Zip Code is [BID AMOUNT].

6.2.15 REASONS TO VOTE FOR OR AGAINST PROGRAM

In this section the respondent was reminded that he/she would be asked to vote on the prevention program and that if the prevention program was carried out it, would prevent the effects listed on the flip card from happening in the next 15 years.

[11] If the respondent did not provide any information about family income, he or she was told the amount of the average one-time tax for people living in the respondent's zip code.

[12] [BID AMOUNT] is replaced with the amount of the one time tax the respondent would have to pay for the program, as determined by the experimental design. The same applies to all other references to "[BID AMOUNT]".

Ok. So now you understand how the prevention program would work. At this time, there are two options.

One option is for the government to charge the one-time tax and pay for second pipes to be drilled with all new wells in deep water in the Gulf during the next 15 years.

The second option is **not** to do this, and instead, let people and nature deal with the effects of the oil spill that will happen during the next 15 years.

Interviewers like me are visiting households around the country to ask people how they vote on this. Government officials will take people's votes into account in deciding what should happen in the Gulf.

In a moment, I'll ask you to decide whether or not it is worth it to **you** to pay the one-time tax to prevent the [(VERSON A): three / (VERSION B): eight] effects on the card in front of you from happening during the next 15 years **[POINT TO FLIP CARD LISTING [(VERSON A): THREE / (VERSION B): EIGHT] EFFECTS OF THE SPILL]**

Before voting the respondent was reminded of a list of reasons why he/she might vote against the program.

> There are reasons why you might vote against the prevention program. For instance, you might **not** want the program to be carried out, for various reasons. For example: you might feel that preventing the things listed on this card is not worth the cost you'd have to pay. Or, You might think the government should not spend money on any new programs now.
>
> Even if you **would** like the prevention program to be carried out, you might vote against it for various reasons. For example: You might prefer to spend the money on something else instead. Or, the prevention program might cost more money than you and your family living with you can spend for it.
>
> Or, you might vote against the prevention program for some other reason.
>
> Please take a moment to think about the effects listed on the card in front of you **[POINT TO FLIP CARD LISTING [(VERSON A): THREE / (VERSION B): EIGHT] EFFECTS OF THE SPILL]**, the amount of money you and your family living with you would pay for the program, how much you would be able to afford to pay, and the other things you could spend the money on instead.

6.2.16 INITIAL VOTE

Then the respondent was asked if he/she would vote for or against the program.

> **Q24**. Now, please tell me: Do you vote for or against the prevention program, which will cost you and your family living with you the one-time tax of [BID AMOUNT].

If the respondent refused to answer the question, the interviewer encouraged the respondent to answer.

> Your answer will be kept confidential and it would be a big help to us if you would please vote, even if you're not completely sure.

Alternatively, if the respondent stated that he/she did not know if they would vote for or against the program, the interviewer stated that the respondent should answer even if he/she was not entirely sure.

It would be a big help to us if you would be willing to vote, even if you're not completely sure.

6.2.17 SECOND VOTE

This section was read **only** to respondents that voted "For" the program in the initial vote. In this section the interviewer reminded the respondent of the things the program would **not** do (it would not affect the price of oil, and would not affect the number of jobs in the Gulf). After that reminder, the respondent was asked how he/she would vote given that the program would not do those things and would only prevent the things listed on the flip card.

Q25. These are the things I showed you before, about what the prevention program would not do **[VERSION A SCREEN 73 / VERSION B SCREEN 94]**.

When you voted, you may have been thinking that the prevention program **would** do something listed on this screen.

Next, I would like you to tell me, if the prevention program would **definitely not** do the things listed on this screen, and would **only** prevent the things listed on the card in front of you **[POINT TO FLIP CARD LISTING [(VERSON A): THREE / (VERSION B): EIGHT] EFFECTS OF THE SPILL]**, do you vote for or against the prevention program, which will cost you and your family living with you the one-time tax of [BID AMOUNT].

Screen 73 (shown in Version A) and
Screen 94 (Shown in Version B)

The program would not:

- Affect the price of oil
- Have a noticeable effect on the number of jobs that people can get in the Gulf

6.2.18 REASONS FOR VOTING

All respondents were then asked to report their reasons for voting the way they did.[13]

> **Q26**. When you answer the next question, I will be typing everything you say. So I would be grateful if you would speak **slowly** while you answer.
>
> Now, [why did you vote for the prevention program? / why did you vote against the prevention program / why did you refuse to vote? / why aren't you sure?]

The interviewer then repeatedly probed the respondent by asking for additional reasons, until the respondent stated "no other reason." If the respondent mentioned animals, wildlife, sea life, plants, nature, ecosystems or the environment in general terms, the interviewer asked the respondent to be more specific.

6.2.19 DEBRIEFING QUESTIONS

Next the respondent was asked a number of issues potentially related to the respondent's vote.

The first set of questions asked about the respondent's beliefs about the program. These included:

- Beliefs about what would happen if the program was not carried out;

> Now let me continue.
>
> My next question is about what you believed when you voted.
>
> **Q27**. If the second pipes are **not** drilled, did you think that oil drilling in deep water in the Gulf during the next 15 years will most likely cause about what is listed here **[POINT TO FLIP CARD LISTING [(VERSON A): THREE / (VERSION B): EIGHT] EFFECTS OF THE SPILL]** cause more than this, or cause less than this?

[13] If a respondent initially voting for the program, he / she was asked this question only after being reminded of things the program would not do and asked to vote again.

- Effectiveness of the program in preventing a future spill;

> **Q28**. If the second pipes are drilled, how effective do you think they will be at preventing a large amount of oil from being spilled in the Gulf during the next 15 years?
>
> Extremely effective, very effective, moderately effective, slightly effective, or not effective at all?

- Beliefs about how much the respondent would actually pay in the form of a one-time tax if the program is carried out;

> **Q29**. Next, did you believe that if the government carries out the prevention program, you and your family living with you would be charged the one-time tax of [BID AMOUNT], more than [BID AMOUNT], or less than [BID AMOUNT]?

The second set of questions in this section asked about respondent attitudes and experiences. These included:

- Trust in government;

> **Q30**. In general, how much do you trust the federal government to do what is right? A great deal, a lot, a moderate amount, a little, or not at all?

- Trust in oil companies;

> **Q31**. In general, how much do you trust oil companies to do what is right? A great deal, a lot, a moderate amount, a little, or not at all?

- Trust of information provided by scientists studying the environment;

> **Q32**. In general, how much do you believe the things that scientists studying the environment say? A great deal, a lot, a moderate amount, a little, or not at all?

- Whether the respondent had ever been to the Gulf Coast;

> **Q33**. Have you ever been to the Gulf, anywhere from Texas to Florida, shown in yellow on this map? **[VERSION A SCREEN 82 / VERSION B SCREEN 103]**.

Screen 82 (shown in Version A) and
Screen 103 (shown in Version B)

- Whether the respondent considered himself/herself as an environmentalist.

Q34. Would you say you think of yourself as: a very strong environmentalist, a strong environmentalist, a moderate environmentalist, slightly an environmentalist, or not an environmentalist at all?

6.2.20 RESPONDENT BACKGROUND DEMOGRAPHICS

In this section the interviewer asked the respondent to report a number of demographic items including:

- Year of birth;

Q35. Now, I have some questions about your background. In what year were you born?

  - If the respondent did not provide his/her year of birth, the following question was asked:

Q35a. Could you please just tell me the letter on this screen that best matches your age? **[VERSION A SCREEN 86 / VERSION B SCREEN 107]**

Screen 86 (shown in Version A) and
Screen 107 (shown in Version B)

A. 18 – 29

B. 30 - 39

C. 40 - 49

D. 50 - 59

E. 60 - 69

F. 70 or older

- Highest degree or level of school completed;

Q36. What is the highest degree or level of school you have completed? **[VERSION A SCREEN 88 / VERSION B SCREEN 109]**

Screen 88 (shown in Version A) and
Screen 109 (shown in Version B)

No schooling completed
Nursery school
Kindergarten
Grade 1 through 11
12th grade, NO DIPLOMA
Regular high school diploma
GED or alternative credential
Some college credit, but less than 1 year of college credit
1 or more years of college credit, no degree
Associate's degree (for example: AA, AS)
Bachelor's degree (for example: BA, BS)
Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)
Professional degree beyond a bachelor's degree (for example: MD, DDS, DVM, LLB, JD)
Doctorate degree (for example: PhD, EdD)

- Number of family members 17 years old or younger;

Q37. How many members of your family 17 years old or younger live with you?

- Housing arrangement (rent or own);

Q38. Do you or your family members living with you own the place where you live, do you rent it, or do you have another arrangement?

- Ethnic/racial categorization;

Q39. Are you of Hispanic, Latino, or Spanish origin?

Q40. What is your race? Please tell me all that apply. **[VERSION A SCREEN 90 / VERSION B SCREEN 111]**

Screen 90 (shown in Version A) and
Screen 111 (shown in Version B)

White
Black, African American, or Negro
American Indian or Alaska Native
Asian
Native Hawaiian or Other Pacific Islander
Some Other Race

- Employment status;

Q41. Are you now working for pay, full-time, part-time, or are you not now working for pay at all?

- Federal income tax filing status;

Q42. In the last 12 months, did you or any members of your family living with you, file a federal income tax return, or did none of you file a federal income tax return?

- Federal income tax withholding status;

> **Q42a**. In the last 12 months, were federal income taxes taken out of any of your pay checks or the pay checks of anyone in your family living with you, or did this never happen?

- Expectations about future family income level for next year;

> **Q43**. Do you think that in [THIS YEAR], the total income of you and your family members living with you will be more than it was in [LAST YEAR], less than it was in [LAST YEAR], or about the same as it was in [LAST YEAR]?

- Whether it would be difficult to pay the one-time tax if the program was carried out.

> **Q44**. How difficult would it be for and your family living with you to come up with the money to pay the one-time tax of [BID AMOUNT] next year? Extremely difficult, very difficult, moderately difficult, slightly difficult, or not difficult at all?

6.2.21 FINAL VOTE

If the respondent voted in favor of the program in both Question 24 and Question 25, the interviewer noted that the respondent had had more time to think about the program and offered the respondent an opportunity to change his/her vote. The interviewer then asked the respondent if he/she would vote for or against the program.

> **Q45**. Now that you've had time to think a bit more about the situation, I'd like to give you a chance to change your answer to the voting question if you would like to.
>
> Please tell me whether you vote for or against the prevention program, which will cost you and your family living with you the one-time tax of [BID AMOUNT].

6.2.22 EVALUATION QUESTIONS

The interviewer asked the respondent two final questions. First, the interviewer asked the respondent if he/she felt the materials presented in the interview tried to push him/her to vote for the program, to vote against the program, or allowed him/her to decide.

Q46. Please think back about everything I said during this interview. Overall, do you think it tried to push you to vote for the prevention program, tried to push you to vote against the prevention program, or let you make up your own mind about how to vote?

Then the interviewer noted that new programs to protect the environment could either be paid for by the government, which would result in higher taxes, or the new programs could be paid for by business, which would increase prices for everyone. The interviewer then asked the respondent if he/she would prefer to pay for new environmental programs through higher taxes or higher prices.

Q47. There are different ways for people to pay for new programs to protect the environment. One way is for the government to pay the cost. This will raise everyone's taxes. The other way is for businesses to pay the cost. This will make prices go up for everyone. If you had to choose, would you prefer to pay for new environmental programs through higher taxes, or through higher prices?

6.2.23 VALIDATION INFORMATION

In this section the interviewer explained that the interviewer's supervisor might call the respondent to check that the interviewer had actually talked to the respondent. The interviewer then asked for a first name and a phone number so that this check could be performed if needed.

Q48. My supervisor or another staff member may call you to check that I talked to you today. It would be a big help if I could have your name and phone number so that they can do that.

Are there any other phone numbers where we can reach you? Could I please also have your e-mail address?

6.2.24 FINAL STATEMENT

In this final section the interviewer informed the respondent that scientists are still studying the 2010 spill and that when these studies are done the scientists may conclude that the effects of the 2010 spill are different than those described in the interview.

The interviewer also informed the respondent that the government is considering a number of different programs for the Gulf and thanked the respondent for providing their input on the program described in the interview.

The interviewer concluded by expressing the hope that the respondent would take a few minutes to speak with a supervisor if they called.

> Before we end our conversation, I want to mention that scientists are still studying the 2010 oil spill.[14]
>
> When the scientists finish their studies, they may conclude that the effects are different from what I described today. Also, the government is considering various programs for the Gulf, and we appreciate your input on this one.
>
> Finally, if somebody does contact you to check that I talked to you today, I hope you'll please talk with them. It will only take a minute, and it will be a big help if you do so.
>
> Thank you.

[14] If the interviewer is conducting Version A of the questionnaire, he / she adds the following statement: "For example, they are continuing to study the effects on deepwater coral, turtles, and dolphins."