

COLUSA SUBREACH PLANNING PROJECT LANDOWNER SURVEY

Prepared for the Sacramento River Conservation
Area Forum and The Nature Conservancy
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Instrument Design

ISR was provided with a list of topics that the Sacramento River Conservation Area Forum and The Nature Conservancy wanted to cover in the telephone interview with landowners in the Colusa Subreach. ISR also received the Handbook and other materials that described issues surrounding habitat restoration. With this background, ISR staff drafted an interview schedule that went through multiple revisions as a result of input from SRCAF and TNC staff and the Advisory Workgroup. The final version has six sections, covering:

- Property characteristics
- Landowner awareness of SRCAF, the Colusa Subreach Planning effort and the agencies involved
- Confidence and trust in agencies providing technical information on the environmental impact of wildlife habitat restoration
- Beliefs about the likely outcomes of habitat restoration in the Colusa Subreach
- Preferences for methods of communication between landowners and SRCAF
- Contact information for the respondent

A copy of the interview schedule is included in an appendix to this report.

Data Collection Procedures

SRCAF/TNC provided ISR with information for 138 properties inside and adjoining the levee within the Colusa Subreach. Phone numbers were provided for 114 of these properties. Interviewing began on January 20, 2005.

Contact procedure. The interviewer made five attempts to reach each landowner. If a request for a call back was received on the fifth attempt, the call was returned as requested. If the landowner was not available at the time of call, messages were left on answering machines or with others in the household or office.

Interviewing protocol. Upon reaching the respondent, the interviewer identified herself by name and her affiliation with the Institute for Social Research at CSUS. She briefly described the purpose of the call and asked to speak with the landowner who is most familiar with the management and uses of the property. (Please see the script at the beginning of the interview schedule.) If the initial respondent referred the interviewer to a tenant, manager or co-owner, the phone number was obtained and a call was made to the person recommended. If the time of initial contact with a respondent was not convenient, a callback was scheduled at a more convenient time.

Disconnected or wrong numbers were reported to TNC. TNC then tried to provide new contact information whenever possible. There were eleven properties with incorrect or disconnected phone numbers for which no new contact information was available (Table 1). If land had been sold, the interviewer attempted to obtain the new

landowner's name and phone number from the previous owner. When the attempt was unsuccessful, the sale was reported to TNC for their action. Three properties were not included in the survey because they had been sold and the new owner could not be located.

Interview responses were recorded by hand, with extensive comments entered into the computer. Coded responses were entered into a data file for analysis.

Response Rate

Contact information was ultimately available for 97 landowners. Interviews were completed with landowners from 60 properties, for a response rate of 62% (Table 2). Twenty-five landowners could not be reached and 12 declined to be interviewed.

Property Characteristics

Over two-thirds (68%) of the properties are used for agricultural purposes and 73% have some part of the property in natural vegetation (Table 3). Property size ranges from one acre (or less) to over 900 acres. The majority of respondents (89%) are private property owners; the remaining 11% represent properties owned by public agencies. Almost a third of these properties were located inside the levee (30%); another 43% were located outside the levee; and a little more than a fourth (27%) included land that was both inside and outside the levee area. The private landowners were asked if they farmed the land themselves and were given the option of having a tenant interviewed in their place. Almost two-thirds (62%) of respondents farmed the land themselves. Out of the landowners who leased their property the majority (87%) completed the interview instead of their tenant(s). Many respondents lived either on the property (43%) or in a county (Glenn & Colusa) near the project area with 23% living in a different California county.

Landowner Awareness of the Colusa Subreach Planning Effort

Almost two-thirds of respondents are familiar with the Sacramento River Conservation Area Forum (62.3%)¹. Of the 38 respondents who have heard of the Forum, a little over half (55%) receive the Forum's newsletter. (Table 4)

Awareness of the Forum is associated with location of the owner's residence, size of property and its location inside or outside the levee. Respondents who live in the region are more likely to have heard of the Forum than those who live outside of Glenn or Colusa counties or on the property (69% vs. 17%, Table 7). Similarly, those with larger

¹ During the interviewing process, the Sacramento River Conservation Area Forum was also referred to as the Forum.

plots of land and those with property inside the levees are more apt to have heard of the Forum (Tables 6 & 8).

Respondents were asked to indicate their overall perception of the Forum on a scale from 1 (very negative) to 10 (very positive). The average response was 5.11 (Table 4). This neutral position was consistent with comments made frequently by respondents that, although they supported the general idea of the Forum, they felt that interference from government organizations was keeping it from meeting its goals.

Almost two-thirds of respondents (62%) are aware of the Colusa Subreach planning project (Table 5). A similar percentage thought the planning effort involved land inside the levees; respondents expressed concern that the project would eventually extend beyond the inner levee area. One-third (34%) of the respondents correctly identified Princeton to Colusa as the north/south boundaries of the planning effort.

Knowledge of the planning project is associated with location of the owner's residence and its location inside outside the levee. Local landowners (those who live in Glenn, Colusa, and on the property) are more likely to have heard of the project than those who reside in other California counties (67% vs. 25%). Landowners who owned property inside the levee are more likely to have heard of the planning effort. Most landowners (89%) who have property within the levees said that they were aware of the planning project (vs. 35% who have land outside the levees). (Table 10)

Awareness of the Forum significantly affected whether the landowner was aware of the Colusa planning project or not. Most respondents (87%) who were aware of the Forum were also aware of the project (Table 11).

Almost half of the landowners (45%) are not familiar with the agencies that are involved in the project (Table 12). Of those who did name agencies, roughly a third responded that the California Department of Fish and Game and the U.S. Department of Fish and Wildlife are involved in the planning project (34% and 29%, respectively). During the survey many respondents frequently remarked that government and agency involvement in habitat restoration should be restricted along the river. More than half (53%) of the respondents listed various entities such as local organizations, landowners, or concerned citizens as other groups that should be actively involved in the planning for habitat restoration. There are four agencies – California Department of Water Resources, California Department of Parks and Recreation, U. S. Bureau of Reclamation, and CALFED – that very few respondents identified as agencies that were involved or should be involved in the planning project.

Confidence and Trust in Agencies Involved

Landowners were asked to indicate their level of confidence in the technical information provided by agencies Using a one to ten scale where one is very little confidence and ten is a great deal of confidence, respondents registered more confidence in information supplied by local irrigation and reclamation districts (6.78) than any other agency (Table 13). They also had substantial confidence in information supplied by hydrologists, biologists and other scientists, Glenn and Colusa County governments, and the State Reclamation Board (6.23, 6.22, and 6.13 respectively). Respondents often commented that their level of confidence in scientists depended upon the type of agency that was funding them. Respondents had less, but still above average confidence in the California Department of Fish and Game (5.95). While they were essentially neutral with respect to the California Department of Parks and Recreation (5.6), the U.S. Bureau of Reclamation (5.53) and U.S. Army Corps of Engineers (5.53), they had the least confidence in CALFED (4.0).

Levels of confidence in agencies are associated with length of property ownership, location of the owner's residence, and property location relative to the levee. Respondents who have owned their property for less time have more confidence in the information supplied by agencies than those who have owned their property for many years. Property tenure significantly affects confidence in four agencies: the California Department of Fish and Game; the California Department of and Parks and Recreation; the U.S. Fish and Wildlife Service; and the U.S. Bureau of Reclamation. Respondents who have owned their property longer have less confidence in all four agencies than those with a shorter period of ownership (Table 14). Similarly, respondents who live outside the region have more confidence than local residents in three agencies: the U.S. Fish and Wildlife Service; the California Department of Parks and Recreation; and CALFED (Table 15).

Property location, however, has a different effect on confidence in different agencies. Owners of property both inside and outside the levee have significantly more confidence in local irrigation/reclamation districts and in hydrologists, biologists and other scientists than those who only own property inside the levee (Table 16). On the other hand, this latter group has much more confidence in CALFED than owners of property on both sides of the levee.

Respondents were asked how objective they think the planning effort will be in evaluating impacts of restoration on agriculture land. They used a 10 point scale with 1 being not at all objective and 10 being very objective. Respondents were also asked how much influence they believe local landowners will have in the planning process. For this item they used a 10 point scale with 1 being no influence at all and 10 being a great deal of influence. The average response to these two questions was 4.69 and 4.91, respectively (Table 13). This position was consistent with comments made frequently by respondents that, they were hopeful the project would be objective and allow landowners a great deal of influence although they doubted that it would happen.

Opinions about Wildlife Habitat Restoration

Respondents were asked to describe the physical changes involved in wildlife habitat restoration. More than half (55%) are aware that planting native vegetation is part of habitat restoration (Table 17). About one in five respondents (21.7%) are aware that wildlife habitat restoration involves removing agricultural crops or orchards. Very few respondents are aware that wildlife habitat restoration involves removing bank protection or changing adjacent levees. Many respondents (66.7%) described a number of other activities too diverse to categorize. These respondents may have misunderstood the question or were in general unaware of the activities involved. When respondents were asked this question, many expressed the opinion that wildlife habitat restoration should not take place *at all*.

Respondents were asked whether they thought a variety of outcomes would occur as a result of wildlife habitat restoration. Increased government agency involvement was seen as the most likely outcome. Eighty-eight percent of respondents said that wildlife habitat restoration will increase the involvement of state and federal agencies in the Colusa Subreach. Moreover, three out of four respondents said that this increased governmental involvement will reduce local control of agricultural activities (Table 18).

A substantial number of respondents said that agricultural activities will be limited by new regulations protecting endangered species and that tax income for local government will decrease as private lands are purchased for public use (76% and 75% respectively). Many respondents (73%) think that increased public access will affect the safety and privacy of area residents and that habitat restoration will increase deer and rodent damage to agricultural crops.

During the course of the interview, many respondents indicated that the potential outcomes of habitat restoration on agricultural land depend on the details of the restoration project. According to many respondents, restoration outcomes will depend on the types of vegetation that are planted, how close to crops they are planted, and how public lands are maintained. Many landowners commented that changes to public access would depend on whether conservancy groups allowed access to the land that is restored. There were also respondents who said that whether trespassing increases depends on how public lands are regulated.

Perceptions about the potential results of wildlife habitat restoration vary according to a number of characteristics, including length of property ownership, property size, property location relative to the levee, and whether the property owner lives in the local area. The longer respondents have owned their property, the more likely they are to feel that agricultural income on adjoining land will decrease as a result of habitat restoration. Those who have owned their property longer are also more likely to feel that wildlife habitat restoration will make agricultural land more difficult to lease. (Table 19)

Respondents who own smaller and larger pieces of property have different opinions about a variety of potential wildlife habitat restoration outcomes. There were two potential outcomes that larger property owners perceived as more likely to happen. Compared to those who own smaller pieces of property (under 10 acres), those who own 10 or more acres are more likely to feel that wildlife populations will increase as a result of habitat restoration. Respondents who own 10 or more acres are also much more likely than those with smaller pieces of property to feel that the increased public access brought about by habitat restoration will affect the safety and privacy of area residents (Table 20).

In contrast, there were two potential outcomes that larger property owners perceived as *less* likely to happen. The more land a respondent owns, the less likely they are to feel that agricultural activities will be limited by new regulations protecting endangered species. Larger property owners are also less likely to feel that increased involvement by state and federal agencies will reduce local control of agricultural-related activities.

Perceptions about the likelihood of several possible outcomes vary depending on whether the owner's property is located inside or outside the levee. Those who own property inside the levee are more likely to feel that habitat restoration will increase wildlife populations and that hunting and fishing activities will become a more important source of revenue for the local economy. (Table 21)

Compared to those who own land inside the levee, property owners with land outside the levee are more likely feel that some of the outcomes related to agricultural land use are likely to occur as a result of habitat restoration. The perception that agricultural activities will be limited by new regulations protecting endangered species is much more prevalent among those who own property outside the levee. More than nine out of ten (92%) respondents who own land outside the levee think that this will be one of the outcomes of habitat restoration, compared to just under half (47%) of property owners with no land outside the levee.

Property owners with land outside the levees are more apt to think that the increasing involvement of government agencies will reduce local control of agriculture-related activities. They are also more likely to feel that habitat restoration will increase insect damage to agricultural crops, decrease the ability of farmers to take irrigation water from the river, and decrease agricultural income on adjoining land.

Property owners who live in the local area have somewhat different perceptions than those who live outside the area. Compared to those who live outside the area, local landowners are much more likely to believe habitat restoration will result in increased flooding on private lands, increased deer and rodent damage to agriculture crops, and increased insect damage to agricultural crops. Non-local landowners are more likely than local landowners to feel that wildlife habitat restoration will increase public access to land along the river (83% vs. 53%, respectively). (Table 22)

Methods for Exchanging Planning Information

Respondents were asked about the usefulness of a variety of ways that landowners could receive information about the planning process (Table 23). Three methods were rated as very or somewhat useful by more than 80% of respondents:

- Mailing brief, issue-specific flyers. According to more than half of the respondents (52.5%), mailing frequent, brief, issue-specific flyers would be a very useful way to communicate needed information. Almost a third (32.2%) of respondents thought that that this method would be somewhat useful.
- Providing opportunities to question experts on wildlife habitat restoration. Respondents indicated that the opportunity to speak with experts would be useful; 43.9% said that it would be very useful and 38.6% thought it would be somewhat useful.
- Establishing a community liaison or ombudsman to field questions from landowners and provide information about the planning process. Almost half (47.5%) of respondents think it would be somewhat useful to establish a community liaison and 37.3% think it would be very useful.

There was clear consensus that placing board meeting and other documents in the local library would be the least useful strategy. Nearly six out of ten respondents said it would be either less useful or not at all useful. Establishing a toll-free telephone information line was also seen as a relatively less useful method of communicating information to property owners.

Respondents were also asked how likely they would be to use six different methods to relay information to the Forum and Nature Conservancy. The least popular choices were calling a toll-free number with comments and suggestions and submitting e-mailed comments (Table 24). While no single method emerges as the single most popular choice, there are three methods that respondents appear to prefer:

- Participating in informal workshops sponsored by the Forum and The Nature Conservancy. While this was a popular method for some, opinions were mixed. This method received the most “very likely to use” responses (33.9%), but it also received the most “not at all likely to use” responses (21.3%). This suggests that for one in five respondents, other methods of communicating information should be available.
- Making oral comments at public meetings. Nearly one out of three property owners (29.5%) said they would be very likely to make oral comments at public meetings. Only 11.5% of respondents said that they would be unlikely to use this method.
- Participating in a community group to present landowner input. More than one out of six property owners would be either very likely (26.2%) or somewhat likely (26.1%) to use this method.

Table 1: Dispositions for Properties in Study Area

	Number
No phone number available	24
Disconnected or wrong number	11
Sold land, unable to locate new owner	3
Property owners listed twice ²	3
Refused interview	12
No answer, answering machine, or left message	25
Completed interview	60
Total	138

Table 2: Outcomes for Property Owners with Correct Phone Numbers

	Number	Percent
Refused interview	12	12%
No answer, answering machine, or left message	25	26%
Completed interview ³	60	62%
Total	97	100%

² The initial list of properties included three property owners who each owned two separate properties in the study area. Since the unit of analysis for this study is the property owner, only one interview was conducted with each of these property owners.

³ In general, when a property was owned by more than one person, the landowner most familiar with the management and uses of the property was interviewed. However, for one property with multiple owners, a decision was made to conduct two separate interviews because each owner—they were business partners—was familiar with different aspects of the management and uses of the property. This means that 61 interviews were conducted with landowners. Fifty-four interviews were completed with private landowners. The remaining 7 interviews were conducted with respondents representing public or non-profit agencies.

Table 3: Property Characteristics

		Percent
Respondent type	Private landowner	89%
	Public or non-profit agency	11%
	Total	100%
	<i>Number of cases</i>	60
Is property used for agricultural purposes?	Yes	68%
	No	32%
	Total	100%
	<i>Number of cases</i>	60
Is property farmed by landowner or leased? ^{4*}	Farm it myself	62%
	Lease it to others	33%
	Both	5%
	Total	100%
	<i>Number of cases</i>	39
Would you like to have the tenant or lessee contacted and interviewed in your place? ³	Yes	13%
	No	87%
	Total	100%
	<i>Number of cases</i>	15
Is any part of this property located in natural vegetation?	Yes	73%
	No	27%
	Total	100%
	<i>Number of cases</i>	59
Where do you live? ³	On the property	43%
	Glenn county	5%
	Colusa county	30%
	Another California County	22%
	Total	100%
	<i>Number of cases</i>	60
How many years have you owned this property?	1-9 years	30%
	10-25 years	30%
	More than 25 years	40%
	Total	100%
	<i>Number of cases</i>	58
Property location relative to levee	Inside levee	30%
	Outside levee	43%
	Both	27%
	Total	100%
<i>Number of cases</i>	60	
Property size	Less than 10 acres	30%
	10-99 acres	30%
	100 or more acres	40%
	Total	100%
	<i>Number of cases</i>	60

⁴ These questions were only asked during interviews with private landowners.

Table 4: Awareness and Perception of the Sacramento River Conservation Area Forum

		Percent
Have you heard of the Sacramento River Conservation Area Forum?	Yes	62.3%
	No	34.4%
	Not sure	3.3%
	Total	100.0%
	<i>Number of cases</i>	38
Do you receive the Forum's newsletter?	Yes	55.3%
	No	39.5%
	Not sure	5.3%
	Total	100.0%
	<i>Number of cases</i>	38
Overall, what is your perception of the Forum? (on a scale from 1 to 10, with 1 being very negative and 10 being very positive)	Mean	5.11
	Standard deviation	2.58
	<i>Number of cases</i>	37

Table 5: Awareness of the Colusa Subreach Planning Project

		Percent
Have you heard of the Colusa Subreach planning effort to develop strategies for wildlife habitat restoration along the Sacramento River?	Yes	62.0%
	No	33.0%
	Not sure	5.0%
	Total	100.0%
	<i>Number of cases</i>	61
Do you know whether the planning effort involves land inside the levee, outside the levee, or both?	Inside the levee	63.2%
	Outside the levee	2.6%
	Both inside/outside	31.6%
	Other	2.6%
	Total	100.0%
<i>Number of cases</i>	38	
Could you describe what the geographic boundaries are for the planning effort?	Princeton to Colusa	34.2%
	Whole Sacramento River	2.6%
	Red Bluff to Colusa	10.5%
	Other	15.8%
	I don't know	36.8%
	Total	100.0
<i>Number of cases</i>	38	

Table 6: Awareness of the Sacramento River Conservation Area Forum by Property Size

		Property Size			Total
		Less than 10 acres	10-99 acres	100 or more acres	
Have you heard of the Sacramento River Conservation Area Forum? p = .05	Yes	44%	61%	76%	62%
	No	56%	39%	16%	34%
	Not sure	0%	0%	8%	3%
	Total	100%	100%	100%	100%
<i>Number of cases</i>		18	18	25	61

Table 7: Awareness of the Sacramento River Conservation Area Forum by Residence of Respondent

		Residence of Respondent ⁵		Total
		Local	Non-Local	
Have you heard of the Sacramento River Conservation Area Forum? p = .005	Yes	69%	17%	57%
	No	29%	75%	39%
	Not sure	2%	8%	4%
	Total	100%	100%	100%
<i>Number of cases</i>		42	12	54

Table 8: Awareness of the Sacramento River Conservation Area Forum by Property Location Relative to Levee

		Location of Property			Total
		Inside Levee	Outside Levee	Both	
Have you heard of the Sacramento River Conservation Area Forum? p = .003	Yes	67%	38%	94%	62%
	No	28%	58%	6%	34%
	Not sure	6%	4%	0%	3%
	Total	100%	100%	100%	100%
<i>Number of cases</i>		18	26	17	61

⁵ Local includes on the property or somewhere else in Glenn or Colusa county. Non local includes respondents who live in a different California county.

Table 9: Awareness of the Colusa Subreach Planning Effort by Residence of Respondent

		Residence of Respondent		Total
		Local	Non-Local	
Have you heard of the Colusa Subreach planning effort to develop strategies for wildlife habitat restoration along the Sacramento River? p = .017	Yes	67%	25%	57%
	No	31%	58%	37%
	Not sure	2%	17%	6%
	Total	100%	100%	100%
<i>Number of cases</i>		42	12	54

Table 10: Awareness of the Colusa Subreach Planning Effort by Property Location Relative to Levee

		Location of Property			Total
		Inside Levee	Outside Levee	Both	
Have you heard of the Colusa Subreach planning effort to develop strategies for wildlife habitat restoration along the Sacramento River? p = .003	Yes	89%	35%	76%	62%
	No	11%	54%	24%	33%
	Not sure	0%	12%	0%	5%
	Total	100%	100%	100%	100%
<i>Number of cases</i>		18	26	17	61

Table 11: Awareness of the Colusa Subreach Planning Effort by Awareness of the Sacramento River Conservation Area Forum

		Have you heard of the Sacramento River Conservation Area Forum?			Total
		Yes	No	Not sure	
Have you heard of the Colusa Subreach planning effort to develop strategies for wildlife habitat restoration along the Sacramento River? p = .000	Yes	87%	19%	50%	62%
	No	11%	76%	0%	33%
	Not sure	3%	5%	50%	5%
	Total	100%	100%	100%	100%
<i>Number of cases</i>		38	21	2	61

Table12: Perceptions Regarding Agencies that *Are* and *Should Be* Involved in the Planning Effort

	Agencies that <i>are</i> involved %	Agencies that <i>should be</i> involved %
I don't know	45	2
CA Department of Fish and Game	34	5
The Nature Conservancy	24	0
CA Department of Parks and Recreation	10	0
CA Department of Water Resources	13	0
State Reclamation Board	11	5
U.S. Army Corps of Engineers	0	7
U.S. Bureau of Reclamation	8	0
U.S. Fish and Wildlife Service	29	0
CALFED	5	0
Board of Supervisors in Colusa or Glenn county governments	5	11
Cities and communities in the area	5	7
Local districts responsible for levees and reclamation, flood control and drainage, resource conservation, and irrigation or water	13	0
Other	53	82
<i>Number of cases</i>	38	38

Percentages do not sum to 100 because categories are not mutually exclusive.

Table 13: Confidence and Trust in Agencies Involved in the Planning Effort

		Mean	N
<p>Many local, state and federal agencies supply technical information about the environmental impact of wildlife habitat restoration. I'm going to read you a list of agencies and I'd like you to tell me, in general, how much confidence you place in the information they provide. Use a scale from 1 to 10 where 1 is very little confidence and 10 is a lot of confidence.</p>	CA Department of Fish and Game	5.95	57
	CA Department of Parks and Recreation	5.60	53
	State Reclamation Board	6.13	55
	CA Department of Water Resources	6.02	57
	U.S. Army Corps of Engineers	5.53	53
	U.S. Bureau of Reclamation	5.53	47
	U.S. Fish and Wildlife Service	5.29	51
	Colusa and Glenn county governments	6.22	34
	CALFED	4.00	51
	Local irrigation or reclamation districts	6.78	55
<p>How much confidence do you place in the information supplied by hydrologists, biologists and other scientists? (1 indicates very little confidence and 10 indicates a lot of confidence)</p>		6.23	52
<p>In the planning for wildlife habitat restoration and flood protection strategies in the Colusa Subreach, how objective do you think the Colusa Subreach Planning effort will be in evaluating the impacts of restoration on agricultural land? Use a scale from 1 to 10, with 1 being not at all objective and 10 being very objective.</p>		5.95	51
<p>How much influence do you believe local landowners and other local interests will have in the planning process for wildlife habitat restoration and flood protection strategies in the Colusa Subreach? Use a scale from 1 to 10, with 1 being no influence at all and 10 being a great deal of influence.</p>		5.60	58

Table 14: Level of Confidence in Agencies Involved in the Planning Effort by Years of Ownership

		Years of Ownership			Total
		1-9	10-25	26+	
CA Department of Fish and Game p = .033	Mean	7.33	5.68	4.95	5.95
	Standard deviation	2.28	2.83	3.09	2.89
	<i>Number of Cases</i>	18	19	20	57
CA Department of Parks and Recreation p = .052	Mean	6.78	5.22	4.76	5.60
	Standard deviation	1.90	2.21	3.25	2.60
	<i>Number of Cases</i>	18	18	17	53
U.S. Bureau of Reclamation p = .033	Mean	6.81	5.20	4.56	5.53
	Standard deviation	2.40	2.24	2.56	2.54
	<i>Number of Cases</i>	16	15	16	47
U.S. Fish and Wildlife Service p = .023	Mean	6.24	6.06	3.72	5.29
	Standard deviation	2.88	2.91	2.93	3.08
	<i>Number of Cases</i>	17	16	18	51

Table 15: Level of Confidence in Agencies Involved in the Planning Effort by Residence

		Residence of Respondent		Total
		Local	Non-local	
CA Department of Parks and Recreation p = .026	Mean	5.00	7.00	5.43
	Standard deviation	2.27	3.02	2.55
	<i>Number of Cases</i>	37	10	57
U.S. Fish and Wildlife Service p = .043	Mean	4.58	6.89	5.04
	Standard deviation	2.96	2.98	3.07
	<i>Number of Cases</i>	36	9	45
CALFED p = .006	Mean	2.73	5.67	3.36
	Standard deviation	1.88	2.94	2.42
	<i>Number of Cases</i>	22	6	28

Table 16: Level of Confidence in Agencies and Scientists Involved in the Planning Effort by Location of Property Relative to Levee

		Location of Property			Total
		Inside Levee	Outside Levee	Both	
CALFED p=.009	Mean	5.45	4.00	2.10	4.00
	Standard deviation	2.57	2.68	1.85	2.73
	<i>Number of cases</i>	13	11	10	34
Local irrigation or reclamation districts p=.025	Mean	5.50	7.14	7.71	6.78
	Standard deviation	2.63	2.10	2.05	2.40
	<i>Number of cases</i>	16	21	14	51
Hydrologists, biologists and other scientists p=.003	Mean	6.00	6.50	6.65	6.23
	Standard deviation	2.78	2.55	2.42	2.66
	<i>Number of cases</i>	16	22	17	55

Table 17: Knowledge of Physical Changes Involved in Wildlife Habitat Restoration

	Percent	
What physical changes do you think are involved in the planning for wildlife habitat restoration?	Planting native vegetation	55.0
	Removing agricultural crops or orchards	21.7
	Don't know	15.0
	Removing bank protection	1.7
	Changing adjacent levees	1.7
	Other	66.7
<i>Number of cases</i>		<i>60</i>

Percentages do not sum to 100 because categories are not mutually exclusive

Table 18: Opinions Regarding Possible Outcomes of Habitat Restoration

Do you think the following outcomes will happen if wildlife restoration takes place?	Yes %	No %	It depends %	I don't know %	Total %	Number of cases
Wildlife restoration will increase involvement by state and federal agencies	88	7	0	5	100	59
Agriculture activities will be limited by new regulations protecting endangered species	76	19	3	2	100	59
Increasing involvement by state/federal agencies will reduce local control of agriculture-related activities	75	20	2	3	100	59
Tax income for local government will decrease as private lands are purchased for public use	75	22	0	3	100	59
Increased public access will affect safety and privacy of area residents	73	20	3	3	100	59
Deer and rodent damage to agricultural crops will increase	73	19	5	3	100	59
More trespassing will occur on private property	70	17	10	3	100	59
Wildlife populations will increase	71	17	5	7	100	59
Public access to land along the river will increase	64	26	9	2	100	59
The ability of farmers to take irrigation water from the river will decrease	60	29	0	10	100	59
Agricultural income on adjoining land will decrease	59	25	12	3	100	59
Insect damage to agriculture crops will increase	59	33	4	6	100	59
Agricultural land will be more difficult to lease	58	29	10	3	100	59
Increased flooding will occur on private lands in the subreach	53	32	9	7	100	59
Property values will decrease	44	37	12	7	100	59
Hunting and fishing activities will become a more important source of revenue for the local economy	37	49	5	9	100	59
Fish populations will increase	31	30	3	7	100	59
Some species may be removed from the threatened and endangered list	32	54	5	9	100	59
Recreation related uses may become a greater source of supplemental income for farmers	29	64	3	3	100	59
Public access to land along the river will decrease	21	76	3	0	100	59

Table 19: Opinions Regarding Possible Outcomes of Habitat Restoration by Years of Ownership

		Years of Ownership		
		1-10	11-25	26+
Agricultural income on adjoining land will decrease p = .026	Yes	32%	63%	81%
	No	37%	32%	10%
	It depends	26%	0%	10%
	I don't know	5%	5%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	19	19	21
Agricultural land will be more difficult to lease p = .002	Yes	26%	68%	76%
	No	58%	26%	5%
	It depends	5%	5%	19%
	I don't know	11%	0%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	19	19	21

Table 20: Opinions Regarding Possible Outcomes of Habitat Restoration by Property Size

		Property Size		
		Less than 10 acres	10-99 acres	100 or more acres
Wildlife populations will increase p = .035	Yes	59%	72%	79%
	No	35%	11%	8%
	It depends	0%	17%	0%
	I don't know	6%	0%	13%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	18	24
Increased public access will affect the safety of residents p = .002	Yes	35%	94%	83%
	No	47%	0%	17%
	It depends	6%	6%	0%
	I don't know	12%	0%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	18	24
Agricultural activities will be limited by new regulations protecting endangered species p = .012	Yes	88%	78%	67%
	No	6%	11%	33%
	It depends		11%	0%
	I don't know	6%	0%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	18	24
Increasing involvement by state and federal agencies will reduce local control of agriculture-related activities p = .013	Yes	88%	78%	63%
	No	0%	22%	33%
	It depends	0%	0%	4%
	I don't know	12%	0%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	18	24

Table 21: Opinions Regarding Possible Outcomes of Habitat Restoration by Property Location Relative to Levee

		Location of Property		
		Inside Levee	Outside Levee	Both
Wildlife population will increase p = .035	Yes	82%	68%	65%
	No	18%	24%	6%
	It depends	0%	8%	6%
	I don't know	0%	0%	24%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	25	17
Hunting and fishing activities will become a more important source of revenue for the local economy p = .019	Yes	71%	20%	29%
	No	24%	64%	53%
	It depends	6%	8%	0%
	I don't know	0%	8%	18%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	25	17
Agricultural activities will be limited by new regulations protecting endangered species p = .012	Yes	47%	92%	82%
	No	47%	4%	12%
	It depends	6%	0%	6%
	I don't know	0%	4%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	25	17
Increasing involvement by state and federal agencies will reduce local control of agriculture-related activities p = .013	Yes	53%	88%	76%
	No	47%	4%	18%
	It depends	0%	0%	6%
	I don't know	0%	8%	0%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	25	17
Insect damage to agricultural crops will increase p = .023	Yes	41%	72%	58%
	No	59%	20%	18%
	It depends	0%	0%	12%
	I don't know	0%	0%	12%
	Total	0%	0%	8%
	<i>Number of cases</i>	17	25	17
The ability of farmers to take irrigation water from the river will decrease p = .036	Yes	50%	76%	60%
	No	50%	16%	29%
	It depends	0%	0%	6%
	I don't know	0%	0%	10%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	25	17
Agricultural income on adjoining land will decrease p = .020	Yes	47%	60%	71%
	No	53%	24%	0%
	It depends	0%	12%	24%
	I don't know	0%	4%	6%
	Total	100%	100%	100%
	<i>Number of cases</i>	17	25	17

Table 22: Opinions Regarding Possible Outcomes of Habitat Restoration by Residence of Respondent

		Residence of Respondent	
		Local	Non-Local
Increased flooding will occur on private lands in the subreach p = .007	Yes	63%	25%
	No	17%	67%
	It depends	12%	0%
	I don't know	7%	8%
	Total	100%	100%
	<i>Number of cases</i>	<i>41</i>	<i>12</i>
Deer and rodent damage to agricultural crops will increase p = .054	Yes	80%	58%
	No	15%	17%
	It depends	5%	8%
	I don't know	0%	17%
	Total	100%	100%
	<i>Number of cases</i>	<i>41</i>	<i>12</i>
Insect damage to agricultural crops will increase p = .042	Yes	68%	42%
	No	24%	33%
	It depends	5%	0%
	I don't know	2%	25%
	Total	100%	100%
	<i>Number of cases</i>	<i>41</i>	<i>12</i>
Public access to land along the river will increase p = .035	Yes	53%	83%
	No	35%	8%
	It depends	13%	0%
	I don't know	0%	8%
	Total	100%	100%
	<i>Number of cases</i>	<i>41</i>	<i>12</i>

Table 23: Usefulness of Methods of Receiving Communication from the Forum and The Nature Conservancy

What are the most useful ways for you to receive communication from the Forum and The Nature Conservancy?	Very Useful %	Some-what useful %	Less useful %	Not at all useful %	Total %	Number of cases
Mailing frequent, brief, issue-specific flyers	52.5	32.2	6.8	8.5	100.0	59
Providing opportunities to question experts on wildlife habitat restoration	43.9	38.6	5.3	12.3	100.0	57
Establishing a community liaison	37.3	47.5	11.9	3.4	100.0	59
Holding occasional general informational public meetings	33.9	45.8	5.1	15.3	100.0	59
Establishing a website that summarizes Forum activities and decisions	28.8	35.6	11.9	23.7	100.0	59
Providing opportunities for site visits	28.1	56.1	1.8	14.0	100.0	57
Newspaper articles	23.7	42.4	16.9	16.9	100.0	59
Mailing infrequent, more comprehensive newsletters	20.3	50.8	18.6	10.2	100.0	59
Holding frequent, issue-specific public meetings	24.6	47.4	14.0	14.0	100.0	57
Establishing a toll-free telephone information line	15.5	43.1	19.0	22.4	100.0	58
Placing Board minutes and other documents in the local library for easy public access	5.1	35.6	27.1	32.2	100.0	59

Table 24: Likelihood of Using Methods to Communicate Information to the Forum and The Nature Conservancy

How likely would you be to use the following methods to communicate with the Forum and The Nature Conservancy about the planning process?	Very likely %	Some-what likely %	Less likely %	Not at all likely %	Total %	Number of cases
Participating in informal workshops sponsored by the Forum and The Nature Conservancy	33.9	31.1	23.0	21.3	100.0	58
Making oral comments at public meetings	29.5	24.6	29.5	11.5	100.0	58
Participating in a community group to present landowner input	26.2	36.1	13.1	14.8	100.0	55
Submitting e-mailed comments	34.5	15.5	27.6	22.4	100.0	58
Submitting written comments	25.9	31.0	25.9	17.2	100.0	58
Calling a toll-free number with comments and suggestions	18.0	21.3	36.1	19.7	100.0	58