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North Central Oregon Conservation Reserve Program Survey: A Summary of Results



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North Central Oregon Conservation Reserve Program Survey: A Summary of Results

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PART ONE: NORTH CENTRAL REGION SUMMARY

I. Purpose of the Survey

The Conservation Reserve Program (CRP) is a federal program for withdrawing highly erodible agricultural land from production. The voluntary land retirement program was implemented to reduce soil erosion. Secondary objectives were to reduce sedimentation, to improve water quality, to foster wildlife habitat, to curb production of surplus commodities and to provide income support for farmers. The U.S. Department of Agriculture (USDA) paid participants an annual per acre rent. The cost of putting the enrolled land into a designated grass cover was shared equally between the USDA and the individual participants. The program was initiated in the Food Security Act of 1985. Enrollment was for 10 years per contract and began in 1985. The majority of enrollment took place in 1986 and 1987. In December 1994, then USDA Secretary Espy extended the program for an additional year through 1996. This provides 1985 participants an additional year on their contracts.

Oregon has 530,766 acres in the CRP, which is 1.5 percent of the national total. Oregon ranks 19th among states for total CRP acreage. At present little is known concerning the future of the CRP or the responses of Oregon contract holders to modifications in the CRP. The north central and northeastern areas of Oregon exhibit extensive dryland grain farming and some livestock production. A survey has been administered to six contiguous counties, which contain the majority of Oregon's CRP acreage (82 percent). The survey results offer information about characteristics of program participants. It should also provide insights into participants' future land management choices and their preferences for a future CRP. This information provides policy relevant information to federal farm program managers, producers, and policy analysts for designing future farm policy.

II. Study Area

The five-county region bordering the Columbia River consists of Wasco, Sherman, Gilliam, Morrow, and Umatilla counties from west to east. The surveyed counties are identified in Figure 1. Results from Wallowa County, in the far northeastern part of the state, are reported separately. The climatic/ecological zone differences between the north central counties and Wallowa County support this separation. In addition, Wallowa County tends to have a greater percentage of cattle operations than the other five counties (USDA/ODA, 1994). The study area referred to in this report is the five county area.

The study area receives small amounts of annual rainfall. Precipitation levels vary with over 20 inches falling annually in the eastern Blue Mountains and 10 to 20 inches falling annually in the central and western portion. The study area average falls between 10 and 15 inches of precipitation annually (USDA/ODA, 1994).

Low rainfall limits crop production and favors dryland farming production techniques, although there is some irrigated farming near the Columbia River. The dryland farming systems consist of a wheat/fallow or wheat/barley/fallow rotation in order to store soil moisture. The bulk of the CRP land is located in the central and southern regions of the counties. This area is further from the Columbia River and where dryland farming predominates. Both areas tend to have shallow soils and to experience high rates of erosion. For more information about soil properties and crop management in the north central dryland farming area see the Natural Resources Conservation Service publications *Soil Survey for Umatilla County*, *Soil Survey for Sherman County*, *Soil Survey for Gilliam County*, *Soil Survey for Morrow County*, *Soil Survey for Wasco County Northern Part* and *Soil Survey for Wasco County Trout Creek-Shaniko Area*. See also *Enterprise Budget for Winter Wheat Mid Columbia Area* published by Oregon State University Extension Service.

III. Survey Methodology

The Oregon State University Federal Farm Program Survey was based on surveys from the following sources: the National Association of Wheat Growers (Abel, Daft and Earley, 1994); Soil and Water Conservation Society (Osborn, Schnepf and Keim, 1994); Idaho Landowner CRP Information Needs Project (1994); Oklahoma State University (Dicks, 1993); and the Gilliam County Oregon Soil and Water Conservation District (Gibbs, 1994). The survey was reviewed by Oregon producers, Oregon State University Extension personnel, Natural Resource Conservation Service (NRCS) personnel, Consolidated Farm Services Agency (CDSA) personnel, agronomists and production economists at Oregon State University as well as survey researchers at Oregon State University. The survey was refined and then adapted to administer to the study area. The survey population consisted of CRP contract-holders.

Notice of the administration of the survey was made in several ways. The list of CRP contract holders was obtained from the six county CDSA offices and put together by the state CDSA office. NRCS and county Extension personnel were also alerted to the administration of the survey. The Oregon Wheat League indicated the timing and purpose of the survey to member producers in the league's monthly newsletter.

The survey was administered following the Dillman technique for mail surveys (Dillman, 1978). A survey, stamped return envelope, and cover letter were initially sent to the survey sample. A reminder letter was sent one week later. A second survey, stamped return envelope and additional cover letter were sent three weeks after the initial mailing.

The survey contents consisted of questions that should be familiar to producers. Questions concerned the pre-CRP operation, their current operation, reasons for participating in the program and the anticipated post-CRP operation as well as socio-demographic information about the respondent. Policy options (CRP scenarios) were presented with dollar figures to determine at what payment level and under what contract conditions contract

holders would be interested in renewing their CRP contracts. For additional discussion concerning survey design issues see Appendix One.

IV. Survey Sample

The survey test form went out to 50 randomly selected CRP contract holders in Wallowa County (out of a total of 86 contract holders) in early 1995. The test survey provided 38 responses, a response rate of 76 percent. The CRP acreage from the test survey responses totalled 8,976 acres or 36 percent of Wallowa County's 25,016 CRP acres. The information obtained from these responses was used to refine the survey instrument that was sent to the five-county study area. The entire population of the five-county study area, 670 CRP contract holders, was surveyed in the spring of 1995. The study area yielded 505 responses, a response rate of 75 percent. The amount of CRP acreage from the survey responses sums to 293,243 of the 411,131 five-county total, or 71 percent.

The combined results for the five-county study area are reported in part one, and individual county results, including Wallowa County, are provided in part two.

PART ONE: SURVEY RESULTS FOR THE STUDY AREA

The questionnaire contained six sections. The first section of the questionnaire sought information about the current operation and land use patterns prior to the CRP contract (pre-CRP). The second section elicited reasons for entering into a CRP contract and plans for land use if the contract expires. The third section included questions about plans for raising livestock and producing crops on CRP lands (post-CRP). Section four contained questions about the costs of cropping CRP lands with respect to the Conservation Compliance Program. The policy scenarios for the future of the CRP were given in section five. Socio-demographic data pertaining to the respondent were sought in the final section.

Section 1. Current Operation and Land Use Patterns

Respondents revealed the predominant land tenure patterns as given in Table 1. The ownership patterns of the survey respondents consist of approximately three-quarters owner-operators. The ownership pattern was thought to influence acceptance or rejection of the opportunity to re-enroll in some future CRP. Renters are under pressure to derive revenue from the land to fulfill the rental agreement. If the future CRP offers less than revenue streams associated with crop production or grazing then renters may have an extra incentive to pursue production compared to owners.

Table 1. Percent of Land Under Various Ownership Patterns in the Five-County Study Area, 1995.

Land Ownership Type	Percent
Owner/Operator	73
Renter/Operator	19
Owner	8

The size of the respondent's operation ranged from 11 to 85,000 acres with the average operation equalling 3,839 acres and the median approximately 2,000 acres. The distribution of operations that fall into the given acreage sizes is shown in Table 2. CRP participants tend to represent a broad range of operation sizes with the average being weighted by the larger operations.

Table 2. Percent of Operation in Various Acreage Sizes in the Five-County Study Area, 1995.

Operation Size	Percent
1 to 500	20
501 to 2000	29
2001 to 4000	23
4001 to 7000	16
7001 and above	12

The importance of the CRP acres to participating farms was measured in two ways. One approach examines the number of CRP acres each respondent has in the program. A second approach calculates the percent of the enrollee's total operation that is put into the CRP. The amount of land respondents enrolled in the CRP ranges from 3 to 4,200 acres with the average amount being 608 acres and the median about 500 acres.¹ The percent of the CRP land in the respective acreage sizes is found in Table 3. Over half of the respondent contracts are for 251 to 1,000 acres.

¹ The average reflects the range of data and can be influenced by a few extremely high or low numbers. The median is the number at which 50 percent of the observations fall above and 50 percent fall below. Thus the median is more of a midpoint number and the measure used to indicate the typical value from a group of numbers.

Table 3. Acres of Land Enrolled in CRP per Farm in the Five-County Study Area, 1995.

CRP Acres	Percent
1 to 100	19
101 to 250	15
251 to 500	22
501 to 1000	26
1001 and above	18

The range of percent of the total operation in the CRP varies from 0.1 to 100 percent with an average of 36 percent and a median of about 25 percent. Table 4 presents ranges of percent total of CRP. Nine percent of respondents committed 100 percent or the whole farm to the CRP.

Table 4. CRP Lands as a Percent of the Operation in the Five-County Study Area, 1995.

CRP Percent of Operation	Percent
0.1 to 10	26
10 to 25	25
25 to 50	19
50 to 80	15
80 and above	15

Over half of the acreage enrolled represented less than 25 percent of the whole operation. Despite the large number of acres enrolled, CRP acreage tended not to be the predominant use of the land resource for each operation.

Fifty-two percent of respondents indicated that they were currently raising livestock. This fact provides support to the speculation that a substantial amount of post-CRP land will be used in livestock operations whether to increase herd size or to increase the AUM's per animal. Recall that CRP land was put into grass cover and kept free of weeds as part of the contract agreement. Responses to questions concerning the costs of grazing CRP land are provided in section three.

To examine further the possibility of future livestock grazing, respondents were asked to indicate how much land they had in pasture, hay, or grazing. This land currently supports or has the potential to support livestock production. The range of respondent pasture, hay, and grazing land was from 0 to 84,000 acres with an average of 2,607 acres and a median of

about 500 acres. Table 5 shows the percent of pasture, hay, and grazing land found in the respective acreage sizes for the entire operation.

Table 5. Acres in Pasture, Hay or Grazing Per Farm in the Five-County Study Area, 1995.

Acres	Percent
Under 501	49
501 to 1000	12
1001 to 2500	18
2501 to 5000	9
5001 and above	12

Eighteen percent of respondents indicated they currently had no pasture, haying, or grazing land. Of those that did, nearly half had less than 500 acres on which to support livestock production.

A second way to measure pasture, hay, and grazing lands is to determine the percent of the total operation put into such uses. The percent of the total ranges from 0 to 99 percent with an average of 37 percent and a median of about 25 percent. Table 6 presents various classes of the percent of the total operation that consists of pasture, haying, and grazing lands.

Table 6. Pasture, Hay or Grazing Lands as a Percent of the Operation in the Five-County Study Area, 1995.

Percent of Operation	Percent
0 to 25	40
25 to 50	26
50 to 75	18
over 75	16

The crop base of the total operation, by major grain type, averaged 1,268 acres in wheat base, ranging from as much as 9,405 to as little as 1 acre. The average barley base was 249 acres and ranged from 1 to 2,500 acres. These crop base numbers reflect the extent to which USDA programs would prompt the return of CRP lands into grain production.

Table 7 indicates the pre-CRP use of the land. The primary land use was wheat/fallow with wheat/barley/fallow as a secondary use.

Table 7. Types of Pre-CRP Land Use in the Five-County Study Area, 1995.

Pre-CRP Land Use Type	Percent
Wheat/fallow	78
Wheat/barley/fallow	14
Barley/fallow	5
Continuous wheat	2
Pasture/hay/graze	1

The table indicates the amount of respondent acreage that was removed from grain production when put into the CRP. This totals 290,310 acres or 99 percent of respondent CRP acres. If CRP land were to return to its pre-CRP use, nearly 300,000 acres in the study area alone would revert to grain production.

Section 2: Attitudes toward the CRP and Post-CRP Land Use

To measure farmer attitudes about the CRP, respondents were asked if they considered each item on a list of reasons "not important, important or very important" to their decision to participate in the CRP. The percentage of respondents who considered each reason important or very important is summarized in Table 8.

Table 8. Respondents' Reasons to Participate in the CRP in the Five-County Study Area, 1995.

Reason in CRP	Percent
Low yield/poor soil	70
Stable income	77
Get out of farming	12
Retirement	17
Provide wildlife habitat	62
Watershed protection	51
Soil protection	84

As shown, natural resource management issues as well as revenue considerations were important to the participation decision. Over 50 percent of the respondents indicated that watershed protection, wildlife habitat improvement, or erosion reduction were at least important to their decision to enroll in the CRP. The use of the CRP as an avenue out of farming was important only to a minority of the respondents. There is no way to verify whether these are strategic responses. It is plausible that the results indicate a desire to

provide socially acceptable responses, particularly given the environmental concerns raised during hearings on the 1985 Food Security Act (U.S. Congress, 1992).

Respondents were asked to indicate from a list of possible future uses of their CRP land what they would do if they decided not to re-enroll. The use options and the percent indicating that they would use at least part of their CRP land for the given option are shown in Table 9.

Table 9. Post-CRP Options and Percent of Respondents Engaging in Each Option in the Five-County Study Area, 1995.

Post-CRP Option	Percent
Wheat/fallow	65
Barley/fallow	25
Hay/graze	42
Leave in grass	39
Other	6

When the future uses are compared with the prior uses of CRP land (Table 7) two observations can be made. Wheat and barley production on former CRP land will predominate based on current market information. However, part of the previous acreage will be mixed with grazing and/or left in permanent grass. The "other" category consisted mostly of individuals who intended to sell or lease out some or all of their CRP acres. Even if sold, much of this latter category of land is likely to remain in livestock or grain production.

Section 3: Livestock Management

Livestock management plans and associated costs for grazing CRP land were obtained from the respondents (see Table 10). The figures given for water and fencing expenses are for those respondents intending to use CRP acreage to increase their herds. Judging from the responses, most of those respondents are already prepared for grazing the CRP acreage.

Respondents who required grazing improvements are expecting to pay about \$14,600 in order to graze land currently in the CRP. A total increase of 4,342 head of cattle is expected, based on the survey responses, as a result of grazing CRP lands after the contracts expire. This is a very small increase (3 percent) over the 161,900 head of cattle produced in 1993 in the study area (USDA/ODA).

Table 10. Costs Associated with Grazing CRP Land in the Five-County Study Area, 1995.

Use CRP to increase herd?	Yes = 21 percent
Average increase:	44 head
Water required?	Yes = 15 percent
Average cost:	\$8,550
Fencing required?	Yes = 28 percent
Average cost:	\$6,070

Section 4: Conservation Compliance Costs of Resuming Production on CRP Land

Conservation compliance plans for post-CRP production will be required of producers who return their land to crop use. This will require a number of adjustments. The percentages of respondents planning to make the changes in farming practices, in equipment, and in herbicide use that would be required to crop post-CRP land are given in Table 11.

Table 11. Adjustments Needed for Compliance if Crop Production Resume on CRP Land in the Five-County Study Area, 1995.

Change	Percent Yes	Predominant Type of Adjustment
Farming practices	25	Change to conservation tillage
Equipment acquisitions	29	Cultivation or all equipment
Additional herbicide	25	Various types

At least one in four contract holders will be expected to change input use, machinery inventory, or farming practices. About 5 percent of the total sample indicated that if faced with compliance they would opt out of all farm programs or leave farming. About 10 percent of the respondents indicated that they were in need of all new equipment due to sale or depreciation of equipment. Adjustments in changing to conservation tillage were anticipated by respondents in order to leave a greater amount of surface crop residue. The reported changes consisted of reduced or discontinued use of deep tillage (moldboard plow), increased discing or chisel plowing, and increased rod weeding. These adjustments imply changes in equipment inventories for some operators.

Costs associated with farming practice changes were not widely reported and varied greatly. For the equipment acquisitions, 79 respondents reported changes that averaged \$61,300 and ranged from several thousand to several hundred thousand dollars. For the

herbicide application, 73 respondents reported increases that averaged \$16 per acre in increased costs.

Costs Associated with using CRP land for crop or livestock production

As shown in Table 10, approximately 15 percent of the respondents will incur costs averaging about \$8,500 for water improvements for grazing CRP. Approximately 28 percent will incur costs averaging over \$6,000 for fencing. Thus the costs for putting former CRP land into livestock production might range on average from \$6,000 to over \$14,000. These costs would vary depending on the size of the area grazed. These costs do not include any costs associated with reconditioning the CRP land for livestock foraging.

Average cost estimates for bringing CRP land into production under a conservation compliance plan were provided previously. Consider the typical CRP participant that has 500 acres of CRP land. The average combined equipment and herbicide cost of bringing 500 acres of CRP land into compliance for 25 percent of the operators would equal approximately \$61,300 in equipment costs and \$8,500 in additional herbicide costs (\$17 per acre over 500 acres) for a total of nearly \$70,000. These costs do not include the cost of "breaking out" the CRP land from the grass cover.

The livestock production and the crop production under compliance options for post-CRP land use exhibit large costs for a segment of the respondents. It was hoped that respondents considered potential costs of production when they answered the payment questions for the different CRP scenarios. It is unknown whether the respondents considered those costs.

Section 5: CRP Scenarios

For each of several future CRP scenarios that were presented, the respondents were randomly given a payment level (from a range of payment levels determined from the test study) that could be accepted or rejected as the annual payment required to enroll in the described form of the CRP. A follow-up question then asks what minimum payment the respondent would be willing to accept to re-enroll. Thus, respondents were given two opportunities to decide what they would be willing to accept in order to enroll in a given form of a CRP. Respondents were then asked to indicate what percent of their currently enrolled CRP land would be re-enrolled. Finally, if no payment was acceptable then the respondent had an opportunity to indicate why.

Scenario One: CRP "As Is"

The initial scenario stated that the CRP might be renewed in its present form. The enrollees would sign up for another 10 years agreeing not to crop or graze the land. The land would be put into grass for which the USDA would pay half of the cost. Table 12 presents the payment levels and the responses to those levels.

Table 12. Extension of the Current CRP: Payment Levels and Acceptance Rates in the Five-County Study Area, 1995.

Offered Payment Level (\$) (1)	Surveys Using Payment Level (2)	Percent of Total Surveys (3)	Responses Accepting Payment Level (4)	Percent Acceptance Per Payment Level (4/2)
38	33	6.5	6	18
42	78	16	47	60
46	62	13	41	66
49	65	13	52	81
51	63	13	58	92
54	78	16	71	91
58	74	15	65	88
62	38	7.5	35	92
	491	100	375	

The annual offered payment levels ranged from \$38 to \$62 per acre per year, with the average offered payment (calculated from column one of Table 12) equalling \$50. Seventy-six percent of the respondents accepted the offered payments (the sum of column four divided by the sum of column two multiplied by 100). Note that the higher offered payment has the higher acceptance rate.

An additional 16 percent from the follow-up question were willing to accept some payment (higher than those offered) to enroll in this version of the CRP. Thus a total of 92 percent of the respondents were willing to enroll at some level of payment. The minimum acceptable payment ranged from \$0 to \$100, with an average at \$47. The average minimum acceptable payment of \$47 falls below the average accepted payment of \$51.60.

Eighty percent of the respondents would enroll all of their acreage with 97 percent enrolling over half. Thirty-three respondents refused any payment. Of those refusing any payment 48 percent preferred an alternative use of their land, while 36 percent wanted to avoid government regulation. Scenario One is the most preferred of the three options, having the highest rate of payment acceptance.

Scenario Two: CRP "Hay/Graze"

The second scenario proposed that the CRP is revised to permit haying and grazing. The contract length and other contract responsibilities remain unchanged. The payment levels and the responses to those levels are presented in Table 13.

Table 13. A CRP Permitting Haying and Grazing: Payment Levels and Acceptance Rates in the Five-County Study Area, 1995.

Offered Payment Level (\$) (1)	Surveys Using Payment Level (2)	Percent of Total Surveys (3)	Responses Accepting Payment Level (4)	Percent Acceptance Per Payment Level (4/2)
20	33	7	4	12
25	78	16	25	32
28	62	13	13	21
32	65	13	29	45
34	63	13	25	40
37	76	15	35	46
41	73	15	44	60
45	38	8	28	74
	488	100	203	

The annual offered payment levels ranged from \$20 to \$45 per acre per year, with the average offered payment (calculated from column one of Table 13) equalling \$33. Forty-two percent of the respondents accepted the offered payments (the sum of column four divided by the sum of column two multiplied by 100). Note the higher the offered payment the higher the acceptance rate.

An additional 25 percent from the follow-up question were willing to accept some payment (higher than that offered) to enroll in this version of the CRP. Thus a total of 68 percent of the respondents were willing to enroll at some level of payment. The minimum acceptable payment ranged from \$0 to \$100, with an average at \$37. The average minimum acceptable payment of \$37 exceeds the average accepted payment of \$35.

Seventy-eight percent of the respondents would enroll all of their acreage with 94 percent enrolling over half. One hundred twenty-four respondents refused any payment. Of those refusing any payment 57 percent preferred an alternative use of their land, while 16 percent wanted to avoid government regulation. The large number of payment refusals was expected since half of the respondents were neither currently raising nor intended to raise livestock if the CRP was not renewed.

Scenario Three: CRP "20 Year Conservation Easement"

The third scenario stated that the CRP might be renewed as a 20-year conservation easement with strict regulation of haying and grazing to protect soil, water, and wildlife resources. An easement is a legal agreement specified for a given period. It is attached to a

specific parcel of land regardless of ownership. The offered payment levels and the survey responses to them are given in Table 14.

Table 14. A CRP As a 20 Year Conservation Easement: Payment Levels and Acceptance Rates in the Five-County Study Area, 1995.

Offered Payment Level (\$) (1)	Surveys Using Payment Level (2)	Percent of Total Surveys (3)	Responses Accepting Payment Level (4)	Percent Acceptance Per Payment Level (4/2)
13	33	7	2	6
17	78	16	4	5
21	62	13	7	11
24	63	13	6	10
26	63	13	10	16
29	75	15	9	12
33	72	15	11	15
37	38	8	9	24
	484	100	58	

The annual offered payment levels ranged from \$13 to \$37 per acre per year, with the average offered payment (calculated from column one of Table 14) equalling \$25. Twelve percent of the respondents accepted the offered payments (the sum of column four divided by the sum of column two multiplied by 100). The higher the offered payment the higher the acceptance rate.

Due to an error in the follow-up question for the third scenario, a reliable dollar amount could not be calculated. However, an additional 15 percent who would not accept an offered payment were willing to accept some other payment to enroll in this version of the CRP. Thus a total of 27 percent of the respondents were willing to enroll at some level of payment.

Eighty percent of the respondents accepting payment for the easement option would enroll all of their acreage with 89 percent enrolling over half. Two hundred ninety-three respondents refused any payment. Of those refusing any payment 31 percent preferred an alternative use of their land, while 43 percent wanted to avoid government regulation. Refusals included worries about the length of the commitment, about the regulatory details, and the perception that the federal government would be taking part ownership of their land.

Section 6: Socio-demographic Information

Respondent ages ranged from 25 to 92 with the average age being 57 years. The level of education ranged from less than a high school education to graduate school. Seventy percent of those responding indicated they had at least some post secondary education.

Respondent gross 1993 income levels ranged from less than \$20,000 per year to over \$100,000 per year. The median gross 1993 income fell between \$60,000 and \$70,000. The responses to the percent of total income from off-farm sources showed that nearly 50 percent of the respondents derived less than 10 percent of their income off the farm. Approximately 25 percent derived over half of their income off the farm.

The debt-to-asset ratio was used to determine the financial well-being of individual operators. The debt-to-asset ratio is the outstanding farm liabilities divided by the sale price of farm assets. The responses went from a 0 debt to a 3.6 debt-to-asset ratio, with the average equalling 0.4. The ratios at the upper end suggest either severe financial insolvency or a misinterpretation of the question for a segment of the respondents.

The local rental rate of land similar to the CRP land was given as a share of the crop (25 to 50 percent with 33 as the most reported percentage) or as a cash rate (\$0 to \$700 per acre with an average of \$63). The sale price of land similar to CRP land went from \$48 to \$4,000 with an average per acre sale price of \$420.

Summary: The Representative North Central CRP Contract Holder

The "typical" CRP contract holder emerged based on the responses to the questionnaire. "Typical" implies the use of the median responses to describe a representative set of characteristics or preferences. The typical respondent tends to be 57 years old and receives at least \$60,000 of gross income annually, of which less than 25 percent comes from off-farm sources. The typical respondent would have assets that are at least twice as large as his or her debts. This individual has some post secondary education (vocational school, community college, or university).

The typical individual tends to be an owner-operator of a 2,000 acre operation. The operation would tend to have 500 acres in the CRP, which was formerly in wheat/fallow production. The remaining 1,000 acres would currently be in grain/fallow production. The operation probably has livestock and 500 acres of pasture, hay, and/or grazing land. The typical CRP contract holder values the erosion control and the stable income associated with the CRP.

Once the contract expires the typical parcel of CRP land would have multiple uses; primarily wheat and/or barley/fallow with some haying and grazing. If the CRP land is used for livestock, then over 40 additional head of cattle would be raised. The water and fencing costs for the CRP land would exceed \$10,000.

The typical operator would not face much if any change in farming practices, equipment, or herbicide use due to the regulations associated with the Conservation Compliance Program. If the individual had to make adjustments due to the Conservation Compliance Program, then increased costs would be anticipated from the employment of conservation tillage, the acquisition of cultivation equipment, and the use of herbicide.

Nearly 10 percent of the respondents put their entire operation into the CRP. Many of these producers need to replace equipment in order to resume production. These operators tend to consider renting current CRP land out, selling the operation, or having custom work performed on the CRP lands.

The typical survey respondent would prefer a CRP much like the current one. The typical respondent would want slightly more than the current payment rate (accepted payment average), yet would accept somewhat less (minimum acceptable payment). If their operation had livestock, then the haying and grazing option would also be a satisfactory option provided he or she was compensated at least \$35 per acre annually. Easements would not be a likely choice.

The average rental rate of land similar to CRP land is approximately a one-third share of the harvest. This share is paid on an alternate year basis due to the crop-fallow system. Yield variability across counties prevents a dollar estimate of the rental rate. The average reported sale price of land similar to CRP lands is \$420, which is less than the 10-year sum of average CRP land payments, \$500. Note that the results are for the entire sample and do not capture possible local differences.

Survey Results Compared with Regional and National Results

Several surveys have documented the structural and financial characteristics of CRP enrollees. The most comprehensive national survey of CRP participants was conducted by the Soil and Water Conservation Society (SWCS) in 1993 (Osborn et al., 1994). The survey results are reported both at the national and regional levels. Oregon is part of the Pacific region that also includes Washington and California. A basis of comparison between CRP contract holders in the United States, in the Pacific region, and in the study area is provided in Table 15. The table entries are averages rounded to the nearest percentage point.

The study area exceeds both the United States and the Pacific regional averages for both sizes of the farm operation and acres enrolled per CRP contract. The higher average acres in the CRP for the study area may be due to the combining of contracts held by individual respondents.

Study area respondents tend to resemble their regional counterparts in what they did with their land prior to enrolling in the CRP. Both groups anticipate putting a majority of CRP land back into wheat if they do not re-enroll.

Table 15. A Comparison of CRP Survey Results: the U.S., the Pacific Region, and the Study Area, 1995.

	United States	Pacific Region	Study Area
Percent owner/operated	71	58	73
Average CRP acres	97	254	608
Respondent age	60	57	57
Percent raising livestock	69	71	52
Average percent of total income coming from off farm sources	53	27	<25
Pre-CRP: percent land in wheat or barley	45	80	97
Post-CRP: percent land into wheat	38	72	65
Average per acre market value (\$) of land similar to CRP	548	456	420

Raising livestock is likely to be a post-CRP contract management option for those having livestock enterprises. The SWCS survey inquired about those with experience raising livestock. It is unclear to what extent "...previous personal experience grazing livestock...(Osborn et al., 1994 p. 45)" drives the decision to graze former CRP lands. The study area survey inquired whether respondents were "...currently raising livestock..." The correlation between current livestock management and future grazing of CRP land was reasoned to be stronger than that implicitly proposed in the SWCS survey. The likelihood that those currently raising livestock will expand production is greater than the likelihood that those having previous experience will start again. Currently raising livestock would be a logical subset of personal experience raising livestock and thus the study area percentages are lower as expected.

The study area respondents tend to receive less of their total income from off-farm sources than their regional or national counterparts. The study area survey provided choice categories with the median response being at 10 to 25 percent of total income (see Appendix Two). Thus less than 25 percent was the typical off-farm percentage of total income. The sale price of land similar to CRP land is lower in the study area than in either the Pacific region or the United States.

The average minimum acceptable payments for two different future CRP scenarios is indicated in Table 16. It compares levels for an extension of the current CRP and for a

grazing and haying revision of CRP. The minimum acceptable payment is a dollar amount determined by the respondent. The average was calculated from all who answered the payment questions.

Table 16. A Comparison of the Minimum Acceptable Payments for Two CRP Scenarios: the United States, the Pacific Region, and the Study Area, 1995.

	United States	Pacific Region	Study Area
<u>Current CRP</u>			
Average minimum annual per acre payment (\$)	50	49	47
<u>Hay/Graze Option</u>			
Average minimum annual per acre payment (\$)	44	45	37

The study area respondents indicated a lower minimum acceptable payment for the current program than those out of the area, regardless of the level of the offered payment. The study area respondents indicated a lower minimum acceptable payment for the haying and grazing option than those out of the area, regardless of the level of the offered payment.

PART TWO: COUNTY SUMMARIES

The five north central counties summarized in part one as well as Wallowa County are summarized individually. County similarities and differences can be seen in each of the tables.

Section 1. Current Operation and Land Use Patterns

Section one shows some basic statistics about the operations of CRP contract holders by county. Table 17 shows the amount of CRP land in each of the counties.

Table 17. Total CRP Acreage by County, 1995.

	Acres
Gilliam	68,725
Morrow	113,068
Sherman	75,893
Umatilla	99,006
Wasco	57,439
Wallowa	25,016

Given some differences in county response rates to the survey, at least 60 percent of the CRP land is accounted for by the survey responses in every county. The amount of the CRP acres that the survey responses included by county is given in Table 18.

Table 18. Percent of CRP Acres Included in Survey Responses by County, 1995.

	Percent
Gilliam	67
Morrow	80
Sherman	64
Umatilla	74
Wasco	60
Wallowa	36 ²

² Note that only 58 percent of all CRP contract holders received a survey in Wallowa County as part of the test study.

The respondents account for nearly two-thirds of the county CRP acreage with the largest representation of CRP acreage coming from Morrow County.

The percent of each county's operations that are run by owner-operators is indicated in Table 19.

Table 19. Percent of All Operations Surveyed That Are Run by Owner-Operators, 1995.

	Percent Run by Owner/Operators
Gilliam	67
Morrow	75
Sherman	64
Umatilla	71
Wasco	74
Wallowa	69

Sixty-five to 75 percent of the respondents are owner-operators. If this is consistent with the entire population of CRP contract holders, then participation in the CRP may be correlated with land ownership patterns.

Size is an important characteristic for any operation as it indicates the acreage potentially available for cropping and livestock production. The average operation size across the six counties is shown in Table 20.

Table 20. Average Size of Operation by County, 1995.

	Average Size of Respondent's Operation in Acres
Gilliam	4,020
Morrow	4,767
Sherman	3,619
Umatilla	2,955
Wasco	3,856
Wallowa	1,958

Average operation size ranges from 2,000 to 4,800 acres with the smallest operations being in Umatilla and Wallowa counties. This outcome corresponds to the higher revenue producing enterprise alternatives that are unavailable in the four other counties.

Table 21. Average Size of Respondent's CRP Acreage, 1995.

	CRP Average Acreage by County
Gilliam	746
Morrow	760
Sherman	693
Umatilla	461
Wasco	467
Wallowa	272

The average CRP size differences between counties is given in Table 21. Gilliam, Morrow, and Sherman respondents tend to have larger CRP parcels than those in Umatilla, Wasco, and Wallowa counties. The former counties lack revenue alternatives and have a larger land requirement in order to be a viable operation.

The percent of respondents who put their entire operation into the CRP and what percent CRP lands are of whole operations is shown in Table 22.

Table 22. CRP as a Percentage of the Operation and the Percent of Whole Farm CRP Enrollment, 1995.

	Percent of Respondent's Operation in CRP (County average)	Percent of Respondents with Entire (100 Percent) Operation in CRP
Gilliam	39	12
Morrow	35	8
Sherman	26	6
Umatilla	37	10
Wasco	41	12
Wallowa	24	6

Respondents in Umatilla, Gilliam, and Wasco tend to put in a larger proportion of their land base than in the other counties, with Wallowa respondents putting in the smallest percentage. Whole farm CRP enrollment ranges from 6 to 12 percent of the study area operations.

The average pasture, hay, and grazing lands across the counties for the survey respondents is provided in Table 23.

Table 23. Acreage in Pasture and Percent Raising Livestock by County for Respondents, 1995.

	Average Acres	Percent of Operation	Percent Raising Livestock
Gilliam	2,011	40	43
Morrow	2,865	39	56
Sherman	1,778	39	56
Umatilla	1,343	39	44
Wasco	2,917	47	61
Wallowa	1,320	62	71

Wasco and Wallowa respondents have the largest proportion of their operations in pasture/range, even though Wallowa has the smallest average acreage and Morrow has the largest. Wasco and Wallowa also have the largest percent of operations raising livestock. This is a reasonable outcome since these counties have areas with ridge and slope, which are costly to crop.

The average wheat and barley base acres are shown in Tables 24 and 25. Wallowa and Wasco respondents have the smallest acreages with Sherman, Gilliam and Morrow counties having the largest average barley and wheat bases. The latter counties depend on larger acreage and fewer crop types to maintain a viable farm.

Table 24. Average Wheat Base Acres for Respondents with Wheat Base and Average Barley Base Acres for Respondents with Barley, 1995.

	Wheat Acres	Barley Acres
Gilliam	1,378	228
Morrow	1,472	202
Sherman	1,395	368
Umatilla	1,083	232
Wasco	900	188
Wallowa	205	133

The predominance of wheat/fallow rotations in pre-CRP uses of land currently in the CRP is indicated in Table 25. This is attributable both to the predominance of dryland wheat production in these counties and the nonparticipation of irrigated cropland in the CRP. Aside from Wallowa and Sherman counties, three-quarters of the respondents indicated that wheat/fallow was the primary pre-CRP land use of current CRP lands.

Table 25. Percent of Respondents Having Formerly Used CRP Land in Wheat/Fallow, 1995.

	Average Percent by County
Gilliam	75
Morrow	83
Sherman	61
Umatilla	78
Wasco	79
Wallowa	42

Section 2: Attitudes toward the CRP and Future Land Use

This section distinguishes between counties for both future uses of CRP lands and reasons for participating in the CRP. The responses to attitude questions that might influence the decision to participate in the CRP are provided in Table 26. Constant revenue and soil productivity preservation were consistently the most important reasons for participating in the CRP.

Table 26. Respondents' Reasons for Participating in the CRP, 1995.

	Percent Responding Important/Very Important	
	Stable Income	Preserve Soil Productivity
Gilliam	89	84
Morrow	79	89
Sherman	76	80
Umatilla	73	78
Wasco	77	82
Wallowa	63	70

Gilliam respondents had the highest and Wallowa the lowest percentage of important/very important responses to the CRP as a means of stabilizing income. Morrow respondents had the highest and Wallowa the lowest percentage of important/very important responses to CRP as a means of maintaining soil productivity.

The main post-CRP land uses for land currently in the CRP are shown in Table 27. Wallowa and Wasco respondents gave the lowest percent of future wheat/fallow land use and the highest future haying/grazing use.

Table 27. Post-CRP Land Use (for Two Uses), 1995.

	Percent of Respondents Reporting Future Uses of CRP Land for the Following Types	
	Wheat/Fallow	Haying/Grazing
Gilliam	63	48
Morrow	72	39
Sherman	70	44
Umatilla	63	37
Wasco	57	48
Wallowa	40	80

Section 3: Livestock Management

Results in part one revealed that future livestock production on lands currently in the CRP would occur for a segment of the study area. Together, Tables 23 and 27 indicate the importance of livestock production currently, and on CRP lands if contracts expire. Section three contains questions meant to specify costs incurred if livestock production is pursued on land currently in the CRP. Information about potential livestock increases is presented in Table 28.

Table 28. Percent of Respondents Who Will Use CRP Land to Increase Their Cattle Herds and Average Herd Increase, 1995.

	Percent Responding Yes	Average Number of Head
Gilliam	29	46
Morrow	16	51
Sherman	28	38
Umatilla	17	36
Wasco	26	50
Wallowa	45	52

Wallowa respondents had the highest and Umatilla the lowest percentage of positive responses to using CRP lands to increase livestock numbers. The same result occurred for the size of the livestock increases.

As reported in the SWCS CRP survey (SWCS, 1994), fencing and water development are sources of cost for those intending to graze their CRP lands following the completion of their contracts. The CRP contract holders expecting costs and the average amount by county

for fencing and water costs on CRP lands are shown in Table 29. The averages pertain only to those requiring improvements.

Table 29. Respondents' Estimates of Water and Fencing Costs Associated with Grazing Land Currently in the CRP, 1995.

	Water Costs		Fencing Costs	
	Percent Yes	Average Cost (\$)	Percent Yes	Average Cost (\$)
Gilliam	19	9,545	29	5,721
Morrow	13	5,264	56	6,484
Sherman	18	7,906	37	6,574
Umatilla	15	6,410	26	6,283
Wasco	13	18,125	24	4,778
Wallowa	36	12,500	45	5,115

Table 29 and Table 28 show that Wallowa County CRP operators anticipate raising more livestock on their CRP lands and investing more resources to do so.

Section 4: Conservation Compliance Costs of Resuming Production on CRP Land

This section reports the main types and amounts of costs associated with the Conservation Compliance Program for lands currently in the CRP on a county specific basis. Table 30 shows the types of farming practice costs associated with the Conservation Compliance Program.

Table 30. Percent of Respondents Indicating Costs of Compliance for Resuming Production on CRP Lands: Farming Practices, 1995.

	Percent Yes	Main Source of Cost
Gilliam	21	Change to conservation tillage
Morrow	26	Too costly
Sherman	15	Constructing erosion reduction structures
Umatilla	26	Change to conservation tillage
Wasco	34	Change to conservation tillage
Wallowa	30	Too costly

Wallowa and Morrow respondents indicated that changes in farming practices to meet Conservation Compliance Program requirements would prompt getting out of grain production or the federal programs. Comments from respondents tended to indicate that changing to

conservation tillage would be too expensive due to needed equipment purchases. The respondents from other counties tended to indicate that the single most important farming practice cost would come from changing to conservation tillage. Over half of the respondents from all counties indicated that no costs would be involved in achieving compliance for CRP acreage.

Table 31 identifies the main type of equipment needed to bring CRP land into compliance if returned to crop production.

Table 31. Percent of Respondents Indicating Costs of Compliance for Resuming Production on CRP Lands: Equipment Needs, 1995.

	Percent Yes	Main Type of Equipment
Gilliam	19	Cultivation equipment
Morrow	33	Replace all equipment
Sherman	21	Various types
Umatilla	26	Cultivation equipment
Wasco	34	Cultivation equipment
Wallowa	30	Seeding equipment

Morrow respondents indicated the replacement of all equipment as the single most important change in equipment inventories due to meeting conservation compliance (see the results in Table 30). The respondents of other counties tended to indicate the need to obtain cultivation equipment necessary for conservation tillage.

The percentage of respondents anticipating additional herbicide costs if CRP land is brought into production under a conservation compliance plan is given in Table 32.

Table 32. Percent of Respondents Indicating Costs of Compliance for Resuming Production on CRP Lands: Additional Herbicide, 1995.

	Percent Yes
Gilliam	21
Morrow	33
Sherman	44
Umatilla	28
Wasco	32
Wallowa	8

Where conservation compliance requires the use of additional herbicide, a larger percentage of Morrow, Sherman, and Wasco respondents indicated costs, whereas fewer Wallowa respondents indicated costs.

Section 5: CRP Scenarios

This section provide county specific results for the same three CRP scenarios as defined in part one.

Scenario 1: CRP "As Is"

Information concerning both the percentages of acceptance for offered payments and those who gave minimum acceptable payments is provided in Table 33. Recall that respondents could accept or reject an offered payment.

Table 33. Acceptance Rates and Average Payments: CRP "As Is," 1995.

	Percent of Respondents Accepting Offered Payment	Percent of Respondents Indicating a Minimum Acceptable Payment
Gilliam	84	98
Morrow	75	94
Sherman	70	89
Umatilla	77	92
Wasco	71	84
Wallowa	N.A.	86

	Average of Offered Payments That Were Accepted	Average of Minimum Acceptable Payments
Gilliam	51	45
Morrow	52	47
Sherman	52	47
Umatilla	52	48
Wasco	51	47
Wallowa	N.A.	50

On a follow-up question, respondents could supply a minimum acceptable payment of their own. Table 33 lists both the average accepted offered payment and the average minimum acceptable payment, for individual counties. Acceptance rates for all counties were high. Gilliam respondents had the highest acceptance rate while Wasco and Sherman had the lowest. The average minimum acceptable payment levels were less than the average offered

payments that were accepted for every county. This latter result is important because it indicates that CRP contract holders are willing to accept payments that are less than the current payment level for the same program. Wallowa was the county where the test survey was administered. Open-ended questions were used to value the CRP policy options instead of set dollar amounts.

The percent of respondents who would enroll by proportion of acres is shown in Table 34. The percentage of respondents putting at least half of their CRP land into this scenario is high for all counties. Wallowa and Wasco counties have the highest refusal rates with the rest of the counties having relatively low refusal rates.

Table 34. Enrollment for Two Amounts of CRP Land: CRP "As Is," 1995.

	Percent of Respondents Preferring to Enroll All of Their CRP Land	Percent of Respondents Preferring to Enroll at Least 50 Percent of Their CRP Land
Gilliam	78	94
Morrow	74	98
Sherman	79	95
Umatilla	83	97
Wasco	85	98
Wallowa	73	100

The reason for refusal to participate in a renewal program is given in Table 35. Avoiding government intervention as well as using the land in an alternative manner were the main reasons given.

Table 35. Payment Refusals and Main Reasons: CRP "As Is," 1995.

	Percent of Respondents Refusing Any Payment	Main Reason for Refusing Any Payment
Gilliam	2	No main reason
Morrow	3	No main reason
Sherman	8	Avoid government regulation
Umatilla	6	Prefer alternative use of land
Wasco	15	Prefer alternative use of land
Wallowa	13	Avoid government regulation

Scenario 2: CRP "Hay/Graze"

The second scenario permits haying and grazing on CRP land.

Table 36. Acceptance Rates and Average Payments: CRP "Hay/Graze," 1995.

	Percent of Respondents Accepting Offered Payment	Percent of Respondents Indicating a Minimum Acceptable Payment
Gilliam	44	75
Morrow	42	70
Sherman	35	63
Umatilla	40	71
Wasco	44	71
Wallowa	N.A.	79
	Average of Offered Payments That Were Accepted	Average of Minimum Acceptable Payments
Gilliam	44	36
Morrow	42	37
Sherman	35	38
Umatilla	40	39
Wasco	44	36
Wallowa	N.A.	33

Information concerning both the percentages of acceptance for offered payments and those who gave minimum acceptable payments is provided in Table 36. Both the average accepted offered payment and the average minimum acceptable payment for individual counties are also provided. Acceptance rates for all counties were moderate, between 35 and 45 percent on offered payments. At least 60 percent and no more than 80 percent of the respondents, regardless of county, would accept some payment for this CRP scenario. This indicates that, despite even high offered payments, a segment of CRP contract holders are not interested in this option. Gilliam respondents had the highest acceptance rate while Sherman had the lowest.

The average minimum acceptable payment levels were less than the average offered payments that were accepted for every county except Sherman. This latter result is important because it indicates that a segment of CRP contract holders are willing to accept lower payments for a CRP that allows more revenue generating opportunities. There is the possibility of leasing out grazing rights given the restricted opportunities on public lands. This possibility depends on the demand in specific areas.

Table 37. Enrollment for Two Amounts of CRP Land: CRP "Hay/Graze," 1995.

	Percent of Respondents Preferring to Enroll All of Their CRP Land	Percent of Respondents Preferring to Enroll at Least 50 Percent of Their CRP Land
Gilliam	80	96
Morrow	78	95
Sherman	68	93
Umatilla	81	96
Wasco	82	93
Wallowa	77	100

The percentage of respondents putting at least half of their CRP land into this scenario is high for all counties.

Table 38. Payment Refusals and Main Reasons: CRP "Hay/Graze," 1995.

	Percent of Respondents Refusing Any Payment	Main Reason for Refusing Any Payment
Gilliam	17	Prefer alternative use of land
Morrow	19	Prefer alternative use of land
Sherman	30	Prefer alternative use of land
Umatilla	29	Prefer alternative use of land
Wasco	28	Prefer alternative use of land
Wallowa	16	Prefer alternative use of land

Sherman, Umatilla, and Wasco counties had the highest refusal rates, with Wallowa having the lowest rate. Those refusing payment prefer an alternative land use. Recall that 30 to 50 percent of all respondent operations are not raising livestock and do not anticipate future livestock production.

Scenario 3: CRP "Twenty Year Conservation Easement"

The last scenario is an easement designed to protect natural resources on and around CRP land. Information concerning both the percentages of acceptance for offered payments and those who gave minimum acceptable payments is provided in Table 39. The table also shows both the average accepted offered payment and the average minimum acceptable payment for individual counties.

Table 39. Acceptance Rates and Average Accepted Payments: CRP "20 Year Conservation Easement," 1995.

	Percent of Respondents Accepting Offered Payment	Percent of Respondents Indicating a Minimum Acceptable Payment
Gilliam	16	25
Morrow	6	31
Sherman	8	30
Umatilla	10	25
Wasco	8	17
Wallowa	N.A.	47
Average of Offered Payments That Were Accepted		
Gilliam		25
Morrow		28
Sherman		31
Umatilla		27
Wasco		27
Wallowa		N.A.

Acceptance rates for all counties ranged from 6 to 16 percent on offered payments. No more than 47 percent of the respondents, regardless of county, would accept any payment for this CRP scenario. This indicates that despite even high offered payments the majority of CRP contract holders are not interested in this option. Wallowa respondents had the highest acceptance rate.

Table 40. Enrollment for Two amounts of CRP Land: CRP "20 Year Conservation Easement," 1995.

	Percent of Respondents Preferring to Enroll All of Their CRP Land	Percent of Respondents Preferring to Enroll at Least 50 Percent of Their CRP Land
Gilliam	80	100
Morrow	79	91
Sherman	72	90
Umatilla	78	86
Wasco	100	100
Wallowa	86	100

The percent of respondents who would enroll by proportion of acres is indicated in Table 40. The percentage of respondents putting at least half of their CRP land into this scenario is high for all counties. This is consistent with the results shown in Tables 34 and 37 in that those respondents who prefer a CRP scenario want to put in a large part of their current CRP lands.

Table 41. Payment Refusals and Main Reasons: CRP "20 Year Conservation Easements," 1995.

	Percent of Respondents Refusing Any Payment	Main Reason for Refusing Any Payment
Gilliam	57	Avoid government regulation
Morrow	55	Avoid government regulation
Sherman	61	Avoid government regulation
Umatilla	61	Avoid government regulation
Wasco	59	Avoid government regulation
Wallowa	34	Avoid government regulation

Those refusing payment tend to want to avoid government regulation.

Section 6: Socio-demographic Information

County comparisons for respondents' characteristics and for land values are provided in Tables 42, 43, and 44.

Table 42. Average Age and Education Level, 1995.

	Average Respondent Age	Percent of Respondents that Have Education Beyond High School
Gilliam	56	67
Morrow	57	70
Sherman	54	70
Umatilla	57	76
Wasco	57	74
Wallowa	53	74

Table 43. Percentage of Respondents with a Given Income Level and Off-Farm Income, 1995.

	Percent of Respondents with Gross Income over \$60,000	Percent of Respondents with Less than 25 Percent Income Coming from Off-farm Sources
Gilliam	59	54
Morrow	50	68
Sherman	63	77
Umatilla	52	56
Wasco	39	51
Wallowa	50	69

Table 44. An Average Measure of Financial Well Being for Survey Respondents, 1995.

	Average Debt-to-Asset Ratio
Gilliam	0.53
Morrow	0.37
Sherman	0.32
Umatilla	0.39
Wasco	0.46
Wallowa	0.86

While respondent age and education tended to be uniform, income levels, proportion of off-farm income, and debt-to-asset ratios tended to vary across counties. Most notable is Wasco County where nearly half of the respondents obtained better than 25 percent of their income from off of the farm. This seems to correlate with the low gross income in Wasco County. Wallowa County respondents have a high debt-to-asset ratio, usually indicating solvency problems. It appears that several erroneous ratio calculations have driven the average value to a higher than expected level.

Table 45. Sale Prices for Land Similar to CRP Land, 1995.

	Average Sale Price (\$) per Acre
Gilliam	311
Morrow	357
Sherman	297
Umatilla	531
Wasco	494
Wallowa	587

Sale prices tended to vary across counties. The average undiscounted sum of CRP annual payments (\$50 per acre over 10 years) equals \$500. This exceeds the average per acre sale price of land similar to the CRP lands for the three contiguous counties; Sherman, Gilliam, and Morrow. Wallowa, Wasco, and Umatilla counties tended to have higher sale prices for land.

Summary of County Comparisons

A few patterns emerge from the comparisons of responses by individual county. Gilliam, Morrow, and Sherman counties tend to have larger operations and larger CRP parcels. These three counties have larger wheat bases and tend to anticipate putting CRP land back into wheat/fallow rotation. These counties reported the lowest sale prices for land similar to land currently in the CRP.

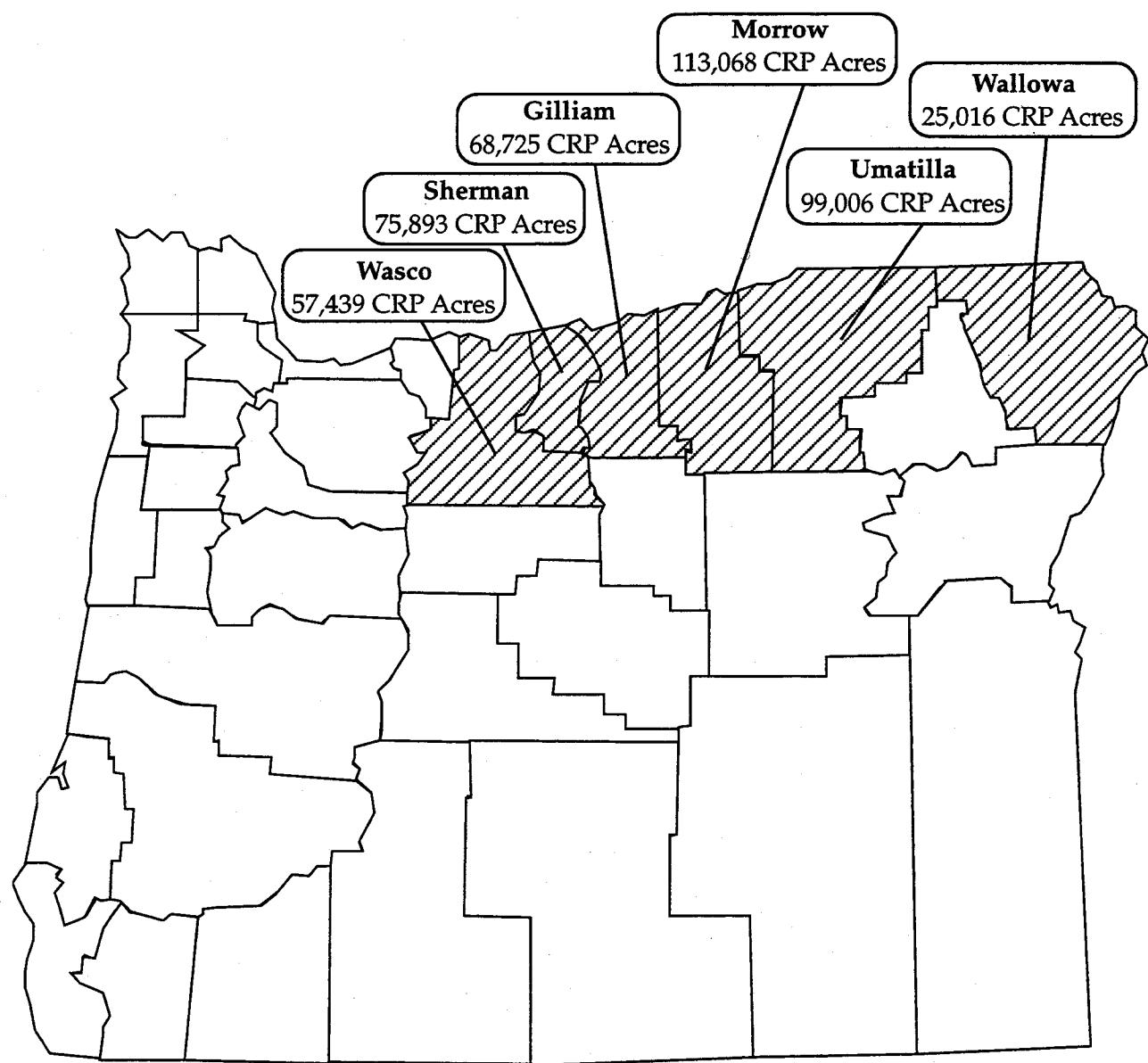
Wasco and Wallowa counties tend to have smaller CRP parcels and larger pasture, haying, and grazing acreage. The respondents have the largest percentage of respondents who are currently raising livestock. These two counties exhibit smaller wheat and barley bases per respondent operation. They are less likely to put CRP land back into wheat/fallow and more likely to hay and graze CRP land when compared to the other counties. They are more likely to use CRP lands to expand their livestock herds. They also tend to be more likely to anticipate changes in farm practices and equipment costs associated with bringing CRP land back into production in accordance with a conservation compliance plan. They are more likely than the other counties to have a lower minimum acceptable payment level for the haying and grazing CRP option.

Umatilla County is the largest wheat (both irrigated and total) producer and the largest cattle producer of the surveyed counties (USDA/ODA, 1994). It is also the largest swine and sheep producer of the six counties (USDA/ODA, 1994). Umatilla County has over a 1,000 acres in snap beans, in green peas and dry onions as well as over 11,000 acres in potatoes (USDA/ODA, 1994). It has the most diverse agricultural output of the surveyed counties.

The responses from the Umatilla CRP contract holders tended to be intermediate compared to those of the Wallowa and Wasco group and those of the Sherman, Morrow, and Gilliam group. For Umatilla County, the sizes of the operations and the amounts of CRP land are smaller as are the amounts of pasture land and percent of respondents raising cattle. About two-thirds of respondents will put the CRP land into wheat/fallow rotation and one-third will hay or graze CRP land. Umatilla reported the highest land values and cash rents of the surveyed counties.

The study area consists of the following counties listed left to right (west to east): Wasco, Sherman, Gilliam, Morrow, and Umatilla. Wallowa County is the eastern most county in Figure 1 and served as the test county for the survey instrument.

FIGURE 1. OREGON STUDY AREA, 1995



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Appendix One. Concerns about Strategic Responses

In the review process, concerns were raised about possible strategic responses to the minimum acceptable payment (or willingness-to-accept payment) for each policy option. The reviewers suspected that respondents would anchor on the \$50 payment they were already receiving, regardless of the program's future or of the changed contract conditions. The respondent might indicate a payment level to influence the perceived policy outcome or simply engage in rent seeking activities. Hence the CRP payments would be higher than the respondent's lowest acceptable level and policy changes might be made on less than accurate respondent valuations. Ideally the respondent would weigh the opportunity cost of alternative revenue streams and accept or not accept payment accordingly. The possibility of strategic responses cannot be eliminated.

Several precautions were taken in the design of the survey to minimize strategic responses. Respondents were asked about the costs associated with crop and livestock production on CRP lands. They were also reminded that in order to participate in federal farm programs they must have, and implement, an approved conservation compliance plan for the CRP land brought into production. Finally, respondents were notified that the CRP would probably be reduced in size both in re-enrollment and payment rates following the 1995 Farm Bill. All of the above were included in the survey design to get the respondent to consider opportunity costs of their valuation, i.e., their minimum acceptable payment for re-enrolling.

Appendix Two. Response Rates by Question for the Test and Full Survey Samples

<u>Survey Question</u>	<u>Number of Full Sample Responses</u>	<u>Number of Test Study Responses</u>
Land Tenure	490	35
Size of Operation	484	33
CRP Acres	481	33
Percent CRP of Total Acres	481	33
Pasture/Hay/Range Acres	482	34
Percent Pasture/Hay/Range of Total Acres	482	34
Livestock part of current operation	490	31
Wheat Base	304	30
Barley Base	306	30
Former Use of CRP Land	480	33
Attitudes Concerning CRP	490	30
Future of CRP Land	490	30
Livestock Plans and Costs	490	33
 <u>Conservation Compliance Questions</u> (Changes in Farming Practices/ Equipment/Herbicide Use)	 490	 33
 <u>Future CRP Scenarios</u> (Payment Questions)		
CRP "As Is"	487	35
CRP "Hay/Graze"	476	33
CRP "20 year Easement"	472	32
 Respondent Age	 466	 33
Highest level of Education	481	33
Respondent Income Level	451	30
Percent of Total Income from Off-Farm Sources	451	24
Debt to Asset Ratio	367	24
Local Rental Rate of Land similar to CRP land	323	24
Sale Price of land similar to CRP land	399	30
 Sample Size	 670	 50

Appendix Three. The Survey Instrument

1. Which one of the following best describes your operation that includes the Conservation Reserve Program (CRP) acres? (Circle one number).

- 1 OWNER AND OPERATOR
- 2 RENTER AND OPERATOR
- 3 OWNER, BUT NOT OPERATOR
- 4 OTHER (Specify) _____

2. How many acres is in your operation altogether? _____ ACRES

3. Given your answer to Q 2, how many acres of the farm operation are in each of the following groups? (If none, please write in a 0).

ACRES

- a. CRP _____
- b. Pasture/Hay/Range _____
- c. Cropland _____
- d. Others (Specify) _____

4. Are you currently raising livestock on your farm operation? (Circle one number).

- 1 NO
- 2 YES

5. What are the amounts, if any, of your crop base acreage in each of the following groups? (If none, write in a 0).

ACRES

- a. Wheat Base _____
- b. Barley Base _____
- c. Other Crop Base _____

6. Which one of the following best describes the primary use of your Conservation Reserve Program lands before you entered into the CRP contract? (Circle one answer).

- 1 WINTER WHEAT/SUMMER FALLOW
- 2 CONTINUOUS SPRING WHEAT
- 3 BARLEY/FALLOW ROTATION
- 4 PASTURE/HAYING/GRAZING
- 5 WHEAT/BARLEY FALLOW ROTATION
- 6 OTHER (Specify) _____

7. Farmers have many reasons for participating in the Conservation Reserve Program. Indicate if each reason was either a very important or an important or a not important reason for your participation.

<u>REASON</u>	<u>VERY IMPORTANT</u>	<u>IMPORTANT</u>	<u>NOT IMPORTANT</u>
a. Low Yields and Low Returns	1	2	3
b. Stable, Risk-Free Revenue	1	2	3
c. A Way to Get Out of Farming	1	2	3
d. A Way to Prepare for Retirement	1	2	3
e. To Provide for Wildlife Habitat	1	2	3
f. To Protect a Nearby Watershed	1	2	3
g. To Protect Soil Productivity	1	2	3
h. Other (Specify) _____	1	2	3

8. Consider your plans for the Conservation Reserve Program lands if you **do not renew** your current CRP contracts. There are a variety of options for your future management of Conservation Reserve Program lands. A few of the management options are listed below. If the Conservation Reserve Program is **not extended**, what will you do with your CRP acres? (Circle one number that best describes your choice for each option).

<u>OPTION</u>	<u>NO</u>	<u>YES</u>
a. Put into Wheat/Fallow Rotation	1	2
b. Put into Barley/Fallow Rotation	1	2
c. Hay/Graze the Land	1	2
d. Leave in Grass	1	2
e. Other (Specify) _____	1	2

Questions 9 through 11 concern **livestock costs** that **may** be associated with the use of former Conservation Reserve Program lands. **If you do not intend to graze former CRP lands skip Questions 9, 10 and 11.**

9. Do you intend to use CRP acreage to increase your herd size? (Circle one answer).

- 1 NO
2 YES

- 9a. Please estimate by how many head of cattle you will increase your herd?

_____ HEAD OF CATTLE

10. Do you require any **additional water developments** in order to graze your CRP acreage? (Circle one answer).

- 1 NO
- 2 YES

10a. Please estimate the **total cost** of the additional water developments? \$ _____

11. Do you require any **additional fencing** in order to graze your CRP acreage? (Circle one answer).

- 1 NO
- 2 YES

11a. Please estimate the **total cost** of the additional fencing? \$ _____

Questions 12 through 14 concern the costs of cropping Conservation Reserve Program lands. When Conservation Reserve Program contracts expire a **conservation compliance plan** must be in effect in order for those lands to qualify for federal farm program benefits. A **conservation compliance plan** may mean that changes in practices, equipment and herbicide use will be required. Please consider for a moment how your CRP lands were farmed before participating in the program and what kind of changes you would have to make in order to farm your CRP lands while meeting a conservation compliance plan.

12. Would farming your CRP land require you to make changes in your **farming practices** in order to meet a conservation compliance plan?

- 1 NO
- 2 YES

12a. Briefly describe the changes you would make and estimate their cost.

<u>CHANGES</u>	<u>COST</u>
a. _____	\$ _____ /ACRE
b. _____	\$ _____ /ACRE

13. Would farming your CRP land require you to make changes in your **equipment inventory** in order to meet a conservation compliance plan?

- 1 NO
- 2 YES

13a. Please describe the changes you would make and estimate their cost.

ESTIMATED

<u>EQUIPMENT</u>	<u>PRICE</u>	<u>REASON</u>
a. _____	\$ _____	_____
b. _____	\$ _____	_____

14. Would farming your CRP land require you to make changes in your **herbicide application rates** in order to meet a conservation compliance plan?

- 1 NO
- 2 YES

14a. Please describe the changes you would make and estimate their cost.

<u>HERBICIDE</u>	<u>COST (\$)</u>
a. _____	\$ _____ /ACRE
b. _____	\$ _____ /ACRE

Following 1995, the Conservation Reserve Program will permit contract extensions and/or modifications. Participants will be able to choose to keep all or part of their current contractual acreage under the extended contract.

15. If your current CRP contracts were extended for 10 more years and your crop base was protected, would you or wouldn't you be willing to accept an **annual per acre payment of** _____ for extension of the contract?

- 1 WOULD NOT ACCEPT
- 2 WOULD ACCEPT

15a. What would be the **minimum annual per acre payment** you would accept?

\$ _____

15b. Recall your answer to Q 3. How much of your CRP acreage would you re-enroll? (Circle one number).

- 1 0 PERCENT (NONE)
- 2 LESS THAN 50 PERCENT
- 3 50 TO 99 PERCENT
- 4 100 PERCENT (ALL)

15c. Which of the following is your main reason for **not accepting any** payment? (Circle one number).

- 1 PREFER ALTERNATIVE USE OF FARM LAND
- 2 WANT TO AVOID GOVERNMENT REGULATION
- 3 UNCERTAIN ABOUT FUTURE OF PROGRAM
- 3 OTHER (Specify) _____

16. If your current CRP contracts were changed to permit haying and grazing and your crop base was protected, would you or wouldn't you be willing to accept **an annual per acre payment of** _____ for extension of the contract?

- 1 WOULD NOT ACCEPT
- 2 WOULD ACCEPT

16a. What would be the **minimum annual per acre payment** you would accept?

\$ _____

16b. Recall your answer to Q 3. How much of your current CRP acreage would you re-enroll? (Circle one number).

- 1 0 PERCENT (NONE)
- 2 LESS THAN 50 PERCENT
- 3 50 TO 99 PERCENT
- 4 100 PERCENT (ALL)

16c. Which of the following is your main reason for **not accepting any** payment? (Circle one number).

- 1 PREFER ALTERNATIVE USE OF FARM LAND
- 2 WANT TO AVOID GOVERNMENT REGULATION
- 3 UNCERTAIN ABOUT FUTURE OF PROGRAM
- 3 OTHER (Specify) _____

17. **Conservation Easements** are voluntary agreements between landowners and the government to limit farming practices in order to protect the soil, wildlife and water quality. Easements are legally recorded on the deed and are binding on current and future landowners for a designated number of years. The landowner retains title to the land and to uses not prohibited by the easement. The landowner sells the easement to the government for an amount that does not exceed the market value of the acreage. Under the easement agreement participating acres must be put into continuous vegetative cover. Haying and grazing are permitted according to a management plan that prevents

overgrazing and does not allow haying until mid-July to protect soil, wildlife and water resources.

If a conservation easement program was available on a **20 year contract** would you or wouldn't you be willing to accept **an annual per acre payment of _____?**

- 1 WOULD NOT ACCEPT
- 2 WOULD ACCEPT

17a. What would be the **minimum one-time per acre payment** you would accept?

\$ _____

17b. Recall your answer to Q 3. How much of your current CRP acreage would you re-enroll? (Circle one number).

- 1 0 PERCENT (NONE)
- 2 LESS THAN 50 PERCENT
- 3 50 TO 99 PERCENT
- 4 100 PERCENT (ALL)

17c. Which of the following is your main reason for **not accepting any payment**? (Circle one number).

- 1 PREFER ALTERNATIVE USE OF FARM LAND
- 2 WANT TO AVOID GOVERNMENT REGULATION
- 3 UNCERTAIN ABOUT FUTURE OF PROGRAM
- 3 OTHER (Specify) _____

18. Please indicate your age on your most recent birthday. _____ YEARS

19. What is the highest level of education that have you received? (Circle one number).

- 1 GRADE SCHOOL
- 2 SOME HIGH SCHOOL
- 3 HIGH SCHOOL DIPLOMA/GED
- 4 VOCATIONAL/TECHNICAL SCHOOL
- 5 COMMUNITY COLLEGE (2 YEAR)
- 6 SOME COLLEGE (4 YEAR)
- 7 COLLEGE DEGREE (4 YEAR)
- 8 GRADUATE SCHOOL
- 9 OTHER (Specify) _____

20. What was you 1993 gross annual income? (Circle one number).

- 1 LESS THAN \$20,000
- 2 \$20,000 TO \$40,000
- 3 \$40,001 TO \$60,000
- 4 \$60,001 TO \$80,000
- 5 \$80,001 TO \$100,000
- 6 \$100,001 TO \$150,000
- 7 MORE THAN \$150,001

21. Considering your 1993 gross annual income, how much comes from off-farm sources? (Circle one number).

- 1 NONE, 0 PERCENT
- 2 LESS THAN 10 PERCENT
- 3 10 TO 25 PERCENT
- 4 26 TO 50 PERCENT
- 5 51 TO 75 PERCENT
- 6 MORE THAN 75 PERCENT
- 7 ALL, 100 PERCENT

22. Please consider your outstanding farm liabilities and the market value of your farm assets. A farm **debt-to-asset ratio** is calculated by dividing farm liabilities by farm assets (debts divided by assets). The debt-to-asset ratio **does not** reveal the size of the farm debt or the farm assets, it just provides a comparison.

What is your current farm debt-to-asset ratio? Estimate the ratio to the nearest tenth (For example, 0.9, 1.3 or 2.2)

_____ DEBT-TO-ASSET RATIO

23. What is the per acre local rental rate for land similar to your CRP acreage?

\$ _____ /ACRE

24. What is your best estimate of the market value (sale price) of farmland in your immediate area that is similar to the acres that you have in the Conservation Reserve Program?

\$ _____ /ACRE