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ABERDEEN AND BILLINGS AREAS



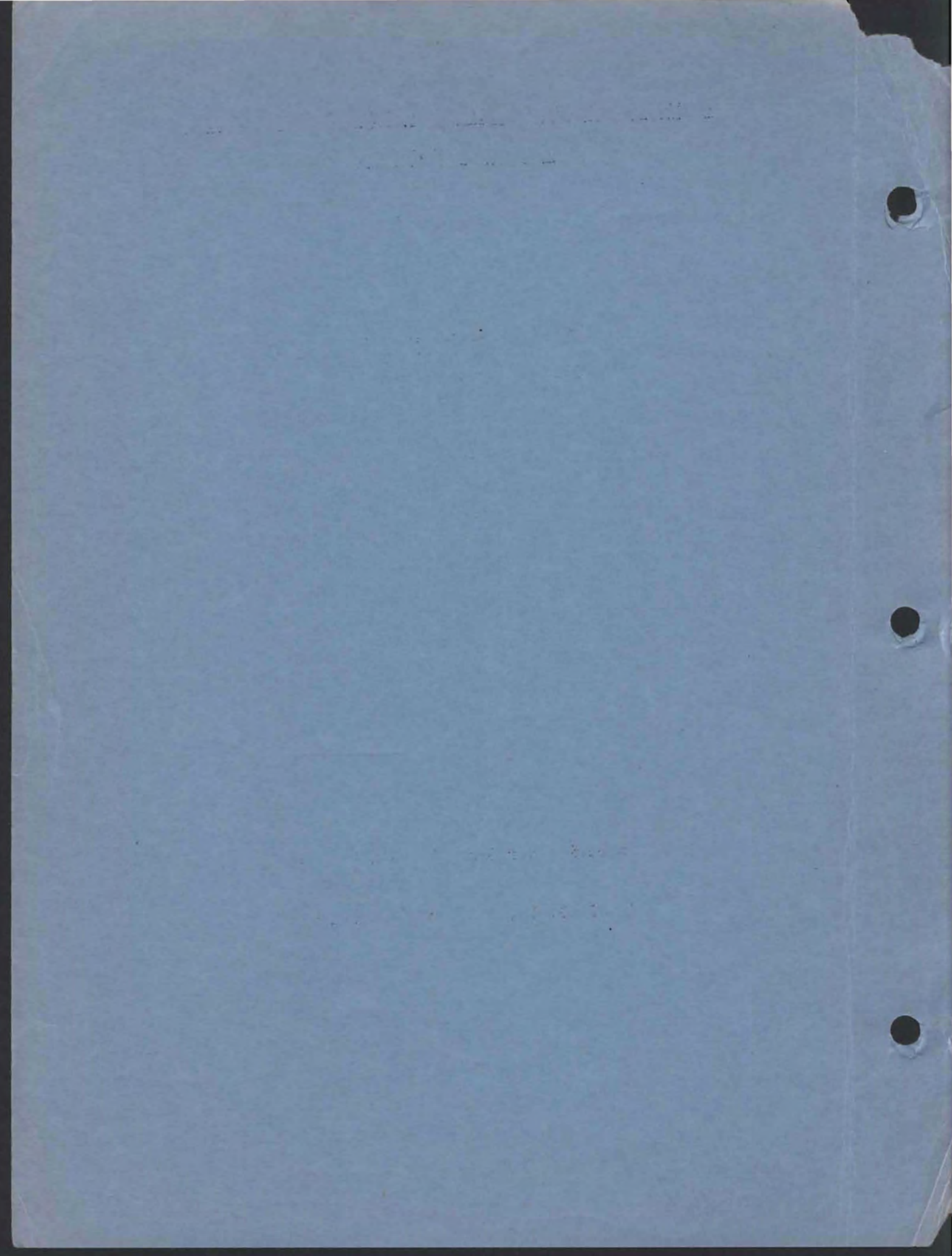
REPORT OF SOCIO-ECONOMIC SURVEY - 1951
STANDING ROCK INDIAN RESERVATION
NORTH DAKOTA AND SOUTH DAKOTA

124

Missouri River Basin Investigations

REPORT NO. 124 November 9, 1951

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REPORT OF SOCIO-ECONOMIC SURVEY - 1951
STANDING ROCK INDIAN RESERVATION
NORTH DAKOTA AND SOUTH DAKOTA

This report is issued as part of the
program of the Department of the
Interior for development of the
Missouri River Basin.

Missouri River Basin Investigations
Bureau of Indian Affairs, Billings, Montana

REPORT NO. 124 November 9, 1951

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I. INTRODUCTORY STATEMENT

1) Purpose of the Investigation

The study or analysis which follows is concerned primarily with the effects of the Oahe Dam and Reservoir ^{1/} on the economy and social organization of the Standing Rock Indians. It deals not only with the immediate losses which will be sustained by the families living within the taking area, but also with the impact on the economy of the population living on the residual reservation which will result from the relocation of families. This study is concerned, not with the benefits that may result from the Oahe project, but with the flooding of Indian lands by the reservoir, and the resulting loss and injury to the economy and social organization of the Standing Rock Sioux Indians in North Dakota and South Dakota.

Public Law 870 - 81st Congress authorizes the negotiation and ratification of separate settlement contracts with the Sioux Indians of Cheyenne River Reservation in South Dakota and of Standing Rock Reservation in North Dakota and South Dakota for Indian lands and rights acquired by the United States for the Oahe Dam and Reservoir, Missouri River Development, and for other related purposes. ^{2/} The Act provides for the appraisal and purchase of the Indian lands and improvements, for the relocation of Indian cemeteries and for final and complete settlement of all claims by the Indians and tribes against the United States arising because of the construction of the Oahe project. Section 2(b)(2) of the Act also provides for payment of:

"Costs of relocating and re-establishing the tribe and the members of each tribe who reside upon such lands so that their economic, social, religious, and community life can be re-established and protected; Provided that such costs of relocating and re-establishing the tribe and the members of each tribe who reside upon such lands shall not result in double compensation for lands and properties to the tribe and members of each tribe."

The contract does not limit payment to the above items. Section 4 of the Act provides:

"The specification in Section 2 and 3 hereof of certain provisions to be included in each contract shall not operate to preclude the inclusion in such contracts of other provisions beneficial to the Indians who are parties to such contracts."

^{1/} A description of the Oahe Dam and Reservoir appears in Appendix A of this report.

^{2/} See Appendix B for a copy of Public Law 870.

This report includes survey findings pertinent to the determination of the feasibility of resettling on the residual reservation of those families living within the reservoir area. It includes also an analysis of data pertinent to the estimation of costs of relocating and re-establishing the tribe and its members so that their economic, social, religious and community lives will be protected, as required by Section 2 of the Act.

2) Method and Scope of Investigation

a) Family survey of resident families

During the summer of 1951, three interviewers, all members of the Missouri River Basin Investigations staff, visited the homes of 582, or approximately 86 percent, of the resident families on the Standing Rock Reservation. A respected resident of the district accompanied each interviewer, introduced him to the people and served as his guide and interpreter. All of the interviews, however, were conducted and recorded by the three experienced interviewers. A copy of the schedule used in the survey is contained in Appendix C of this report.

The sample of the population included in the survey is not without bias. Because of the accessibility of their homes, 97 percent of the families whose principal income is from regular employment at the agency ^{3/} were interviewed. Only 28 percent of the families whose heads are non-Indian were visited. Coverage of the remainder of the resident population was approximately 80 to 90 percent in each of the geographical districts and each of the blood quantum groups. Table 1 shows the number of families in each of the five groups, as identified in this report, the number of families and households in each of the seven geographic districts on the reservation, and the percentage of coverage in each group and district.

b) Use of annual reports of the Standing Rock Agency

Agency reports were consulted to obtain data concerning reservation resources and their present use. The records of the Extension Branch were consulted as authority for the number of cattle owned by each individual and his indebtedness to the tribe. To insure accurate data with regard to the relief assistance granted to each family, the agency welfare records were used as the source of information concerning this type of income. Census records were used to complete data concerning the ages of members of families who were not interviewed.

^{3/} This group includes only those agency employees enrolled at the Standing Rock jurisdiction.

Table 1

Number of Families Included in 1951 Socio-Economic Survey
Standing Rock Reservation-North and South Dakota

District	Number Resident Families -1951..	Percent of Total Resident Population	Number of Households	Number of Families Interviewed	Number of Families Not Interviewed	Percent of District or Group Interviewed
Bull Head	99	14.6	97	68	31	68.7
Little Eagle	114	16.8	102	98	16	86.0
Makpala	104	15.3	89	93	11	89.4
Kenel	60	8.8	56	60	0	100.0
Agency	149	21.9	136	136	13	91.3
Cannonball	117	17.2	114	92	25	78.6
Porcupine Reservation	37	5.4	34	35	2	94.6
Total	680		628	582	98	85.6
Group	Head of Family					
I	Govt. Employee	38	38	37	1	97.4
II	Non-Indian or Non-Indian wife	40	40	11	29	27.5
III	1/2 blood or less	97	87	84	13	86.6
IV	More than 1/2 blood	461	422	414	47	89.8
V	Non-enrolled Indian	44	41	36	8	81.9

II. THE STANDING ROCK RESERVATION AND ITS POPULATION

1) Location and Date of Establishment 4/

The Standing Rock Reservation is located in North Dakota and South Dakota, just west of the Missouri River. It includes all of Corson County, South Dakota, and of Sioux County, North Dakota, plus small strips in three adjoining counties. A map of the reservation, which appears as the frontispiece of this report, shows the seven districts and the location of the principal communities on the reservation.

The Standing Rock Sioux Indians were included in the Treaty of 1868, and the boundaries of the reservation were definitely established by the Act of March 2, 1889, when allotments were also authorized. Presidential Proclamations of 1909 and 1915 opened parts of the reservation to settlement by non-Indians. The tribe accepted the Indian Reorganization Act, but did not adopt a constitution or ratify a charter under that Act. Tribal affairs are administered by an elected Tribal Business Council.

2) Population

In the summer of 1951, there were 680 independent families living in 628 households on the Standing Rock Reservation. It is recognized that the number of resident families during the summer months is somewhat smaller than during the winter months because of the number of families who leave the reservation for seasonal employment. In this survey, "family" is defined as an independent economic group. Thus, a father and son living together and sharing income are treated as a single family. On the other hand, two families, regardless of relationship, occupying a single house but not sharing family incomes, are regarded as independent families.

The enrolled resident population of the Standing Rock Reservation, at the time of the survey was 2,774. Also living in the households of resident Indian families are 115 non-enrolled adults, all of whom have married Standing Rock Sioux. Forty of these are non-Indians and 75 are Indians from other jurisdictions. A few of the children in the families who have intermarried are not enrolled at this jurisdiction. Additional data concerning the population, their residence, sex and marital status are to be found in Table 2.

3) Age Distribution of the Population

Forty-five percent of the resident population are under 16 years of age; seventy percent under 36 years. The median age of the resident population is 20.1 years, exactly 10 years below the national age median. 5/

1/ A more complete description of the topography and climate of the reservation appears in Appendix D of this report.

5/ Preliminary Report of 1950, U. S. Census.

TABLE 2

RESIDENT POPULATION, 1951
Standing Rock Reservation, North and South Dakota

DISTRICT	Number Families	Number Households	Individuals		Home Site				Head of Family		Marital Status								
			Male	Female	Community		Rural		Male	Female	Married	Single	Widow(ers)		Divorced				
					No.	%	No.	%					No.	%		No.	%		
BULL HEAD	99	97	301	199	49	50.0	50	50.0	85	14	73	73.0	3	3.0	18	18.0	5	5.0	
LITTLE EAGLE	114	102	249	240	39	34.0	75	66.0	94	20	86	76.0	4	3.5	17	15.0	7	6.5	
WAKPALA	104	89	200	204	29	28.0	75	62.0	87	17	66	63.6	7	6.7	19	18.2	12	11.5	
KENEL	60	56	135	140	23	38.3	37	61.7	53	7	43	71.7	2	3.3	9	15.0	6	10.0	
AGENCY	149	136	329	341	97	65.7	52	34.3	123	26	100	66.6	7	5.3	31	20.8	11	7.3	
CANON-MAIL	117	114	243	245	48	41.0	69	59.0	102	15	89	76.1	5	4.3	19	16.2	4	3.4	
FORCUPINE	37	34	84	79	9	24.4	28	75.6	29	8	25	69.6	0	0	10	25.0	2	5.4	
RESERVATION TOTAL	680	628	1441	1448	294	43.2	386	56.8	573	107	482	71.0	28	4.1	123	18.0	47	6.9	
GROUP																			
I	38	38	105	100	33	86.8	5	13.2	34	4	33	87.0	0	0	1	3.0	4	10.0	
II	40	40	85	75	30	75.0	10	25.0	38	2	38	94.8	0	0	1	2.6	1	2.6	
III	97	87	202	185	42	43.3	55	56.7	81	16	66	68.2	7	7.2	16	16.4	8	8.2	
IV	461	422	948	980	168	36.4	293	63.6	385	76	306	66.5	21	4.5	101	21.9	33	7.1	
V	44	41	101	108	21	47.7	23	52.3	39	5	37	63.8	0	0	4	9.0	3	7.2	
INDIAN	680	628	1441	1448	294	43.2	386	56.8	577	103	480	70.7	28	4.1	123	18.0	49	7.2	

Figure 1, which shows the age distribution of the resident population, indicates that the number of males in the age group upon whom the maximum economic burden falls is extremely small. If each male between 16 and 55 years of age were employable, and the burden of supporting the total population were shared equally, each one would carry the responsibility for approximately 4.7 persons. Many persons in this age group are unemployable either because of physical disability or because they are still attending school, but there are also employable males who are more than 56 years of age.

4) Social Conditions and Cultural Status

a) Location of homes

Indian homes on the Standing Rock Reservation are located principally in seven geographical districts, largely along the Grand, Missouri and Cannonball Rivers and toward the eastern boundary of the reservation. In each of these districts a large number of families live within close proximity to a trading post, school, or agency facilities. Some families maintain two homes, one a winter home near a school, and one a summer home in a rural area. During the summer of 1951, 43 percent of the families were living in communities and 57 percent on scattered tracts of land. Some home sites in the rural areas are chosen because of participation in the livestock production program and some because of greater opportunity for gardening, but many families live on quite isolated tracts simply because of their equity in the land and house. Other obvious factors influencing place of residence are potable water, nearness to relatives or friends, and location with reference to school bus routes.

The Standing Rock Sioux are unusually mobile, but this mobility is confined almost entirely to a single district of the reservation. Thirty-nine percent, or 224 of the families interviewed, have lived in their present homes five years or less. A considerable number of the cabins, houses, and single rooms, occupied by families living in the communities are rented. Log houses are frequently torn down, moved to a more convenient location, and rebuilt. Fifty-two families who own no homes of their own are living with relatives or friends, some moving so frequently that it can only be said that they are without fixed place of abode.

b) Type and size of homes

Table 4 shows family size in relation to the number of rooms in homes on the reservation. The poor quality and entirely inadequate housing on the Standing Rock Reservation indicate that the population suffers from an extremely low level of living. The Indian homes on

Figure 1
AGE-SEX DISTRIBUTION
Resident Population (Summer, 1951) Standing Rock Reservation

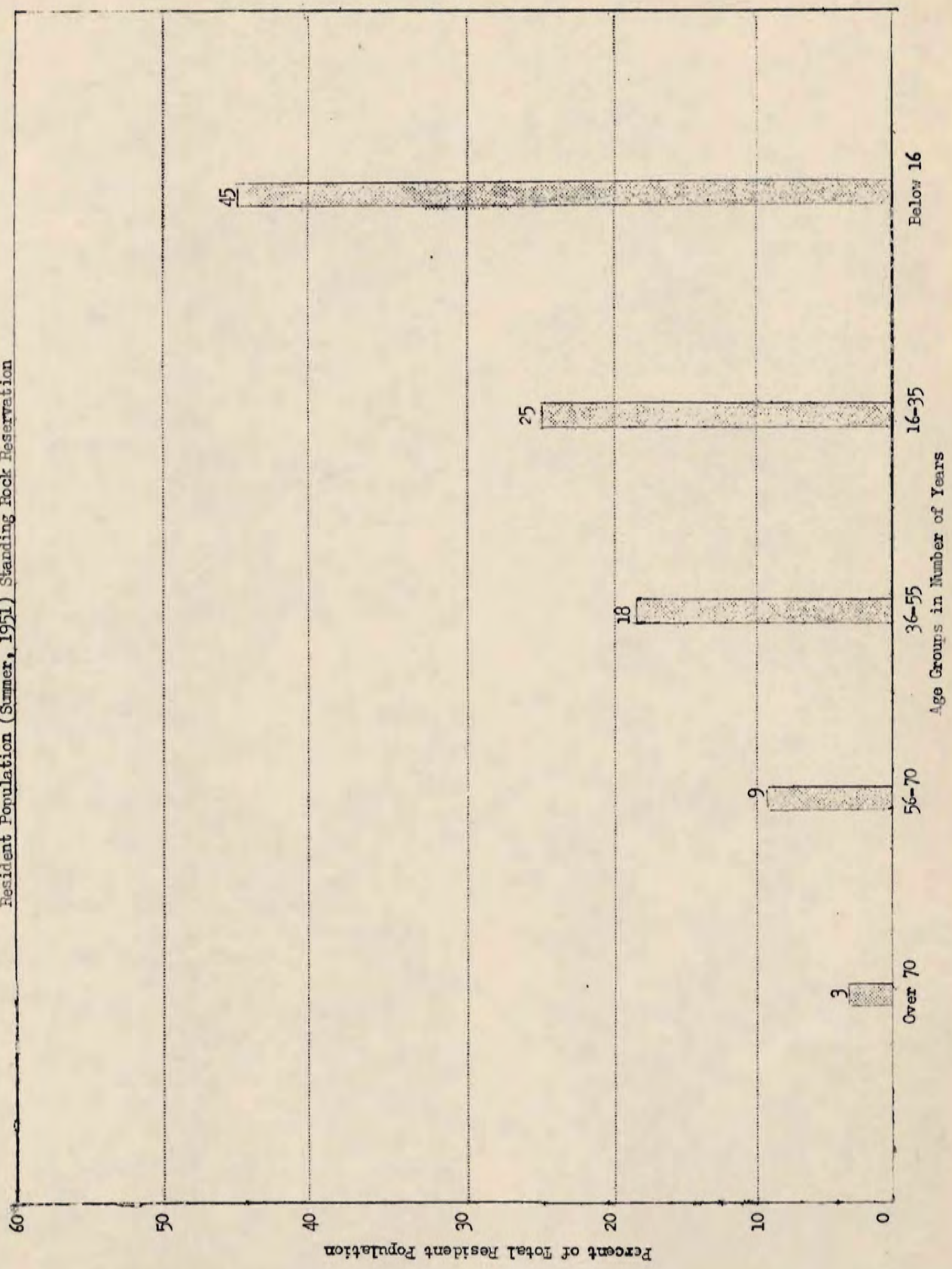


TABLE 3

AGE - SEX DISTRIBUTION
TOTAL RESIDENT POPULATION (Summer, 1951) STANDING ROCK RESERVATION

DISTRICT	Over 70 Years		56-70 Years		36-55 Years		16-35 Years		Below 16 Years		Total	%						
	M	F	M	F	M	F	M	F	M	F								
BULL HEAD	8	3	25	20	42	34	76	19	48	59	107	27	78	83	161	40	400	100
LITTLE EAGLE	9	4	21	16	48	48	96	20	65	70	135	28	106	102	208	43	489	101
WAKPALA	10	9	24	15	35	36	71	18	44	47	91	23	87	97	184	45	404	101
KENEL	9	2	15	8	16	19	35	13	33	34	67	24	62	77	139	51	275	100
AGENCY	9	14	28	21	61	56	117	17	88	85	173	26	143	165	308	46	670	99
CANNONBALL	9	8	24	19	42	43	85	17	59	63	122	25	109	112	221	45	488	100
POWCUPINE	1	1	9	9	16	16	32	20	20	18	38	23	38	35	73	45	163	100
RESERVATION TOTAL	55	41	146	108	260	252	512	18	357	376	733	25	623	671	1294	45	2889	100

Median Age in Years (Total Reservation Population)

Males	21.4	Females	18.8	Total	20.1
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TABLE 4
HOUSING OF FAMILIES
STANDING ROCK RESERVATION - 1951

DISTRICT	Type of Construction:		Living in	Living in	Living with	Living in	Living in	No Information
	Log	Frame*	Tents (Yr. round)	in Trailer	others (No homes)	Govt. Qtrs.	Mission Qtrs.	
BULL HEAD	56	13	1		2			25
LITTLE EAGLE	43	34	3		12	4	4	22
WAKPAIA	39	40	0	1	15		2	9
KENNEL	38	16	1		4	1		1
AGENCY	45	79	1	1	13	15		10
CANNONBALL	68	18	2		3	1	1	26
POECUPINE	10	21			3	1	1	3
RESERVATION TOTAL	299	221	8	2	52	22	8	96

* Includes 30 Gov't owned and Mission owned houses.

SIZE OF HOUSE IN RELATION TO FAMILY

Number of Persons in Family *	Number of Rooms in House								Govt. Houses	Mission House	Size of House not known	Total Houses
	1	2	3	4	5	6	7	8				
1	25	15	5						0	0	13	58
2	45	20	4	7	1	1			2	1	18	99
3	40	31	6	2			1		4	3	13	99
4	31	28	8	2	2	1			2	1	13	88
5	23	29	7	6	3				4	0	10	82
6	18	25	8	4					0	0	8	63
7	18	16	6	4	2		1		6	3	3	58
8	14	15	6	1	2	1			2	0	3	44
9	3	6	4	3				1	2	1	1	21
10	3	3	2									8
11		2	1		1							4
12	1	2										3
13		1										1
TOTALS	221	193	57	29	11	3	1	1	22	8	82	628

* This number does not include homeless individuals living in these households more or less permanently.

the Standing Rock Reservation are chiefly of log or frame construction. Many families use a tent either for temporary housing or as sleeping quarters for part of the family. Eight families live in tents the year round.

The quality of the log house is, in general, poor. Most of the logs used, even in the newer houses, are aged and cracked. Though almost all of the log houses have wooden flooring, the lumber is ordinarily old and of poor quality. Few floors are covered. Roofing is either of rough boards covered with tar paper held in place by earth, or covered with heavier composition material. Most of the log houses are one or two room structures.

The majority of the frame houses are not only old but in extremely poor repair. Shingles are loose or missing. Windows are broken and boarded up. Siding is warped and unpainted. The newer houses, classified as frame, are usually small shacks covered with tar paper or imitation brick veneer. Few of the frame houses can be rated as superior to the average log house.

Approximately 80 percent of the Indian homes visited are of only one or two rooms. In addition to an average of 4.6 persons who live permanently in each of the Indian households, one or more homeless individuals or families often share the shelter more or less permanently. The average number for all households in the country in 1950 was 3.1. In farm households the average was 3.5, but the average number of rooms in these farm units was 5.1 as compared with an average of 1.9 rooms in these Indian homes.

c) Water and sanitation

More than half of the families on the reservation have satisfactory wells within a short distance of their homes. A few of these wells are without pumps and the water must be drawn by bucket. In the communities a single well is the source of supply for many households. Approximately one-third of the families are dependent on rivers and creeks for their drinking water.

About 11 percent of the families live more than one mile from the source of supply for their domestic water. With few exceptions, only those families living in Government or Mission-owned quarters enjoy the convenience of water in the house, but 79 percent of the population live within 1/2 mile from the source of supply of their drinking water. Table 5 contains data on availability of domestic water in the various reservation districts.

Out-buildings are often shared by several families in a community, or are completely lacking in some of the rural areas. A make-shift

ILLUSTRATIONS



#1

A tent is sometimes used as sleeping quarters for part of the family.



#2

Most of the log houses are one or two room structures.

ILLUSTRATIONS



#3

The majority of the frame houses are in extremely poor repair.



#4

The newer frame houses are usually small shacks covered with tar paper or imitation brick veneer.

TABLE 5

DOMESTIC WATER: SOURCE OF SUPPLY AND DISTANCE FROM HOUSE
 Standing Rock Reservation, 1951
 (Percentages)

DISTRICT	Source of Supply				APPROXIMATE Distance from House (Miles)								
	Spring	Well	Creek	River City	In House	Near House	1/2	1	2	3	4	5 or More	
BULL HEAD	7	27	66	0	0	64	33	3	0	0	0	0	
LITTLE EAGLE	18	24	49	9	5	27	37	12	6	5	5	3	
WAKPALA	17	54	26	3	3	28	30	11	15	4	6	3	
KENEL	7	55	38	0	0	29	39	16	10	4	2	0	
AGENCY	7	62	5	25	25	56	16	2	0	0	0	1	
CANNONEBALL	4	54	41	1	1	38	29	19	8	2	3	0	
PORCUPINE	6	21	13	0	0	49	42	9	0	0	0	0	
RESERVATION													
TOTAL	10	49	33	8	7	43	29	10	5	2	3	1	
GROUP	Head of Family												
I	Govt. Employee	3	34	6	57	60	31	6	3	0	0	0	0
II	Non-Indian or Non-Indian wife	7	36	0	7	7	65	21	0	0	7	0	0
III	1/2 blood or less	14	57	18	11	8	53	14	11	5	1	4	4
IV	More than 1/2 blood	10	46	41	3	3	39	36	11	6	2	2	1
V	Non-enrolled Indian	11	60	29	0	0	56	26	9	6	0	3	0

toilet or a crude structure without a door is not uncommon. The shortage of toilets has created a serious sanitation problem for some of the churches because of the large number of families who depend on their outdoor facilities.

d) Personal property

in the 1951 survey

The interior, as well as the exterior, of most of the homes on the Standing Rock Reservation reflects a low standard of living. In 30 percent of the households visited, the number of chairs or benches is fewer than the number of persons living in the household, or the number of beds is less than one bed for each two persons. The furnishings in these households are classified as "bare". The furnishings in 47 percent of the homes are classified as "minimum". These include a sufficient quantity of beds and chairs to accommodate the members of the household, a table, stove, and possibly a cupboard, but little else. In 21 percent the furnishings are classified as "adequate" because they include some labor-saving convenience such as a sewing or washing machine in addition to the minimum furniture. In only eleven households, or less than two percent, are the furnishings classified as "superior", meaning that they are of a quality and quantity which most rural non-Indian families would regard as reasonably adequate. These data do not include the households of Government-employees using Government-owned furniture. Table 6 contains a detailed analysis of the home furnishings and personal property owned by families in each district of the reservation.

More than one-third of the homes on the reservation are without a radio. In the Wakpala, Agency, and Porcupine Districts more than 70 percent of the families own radios as compared to a maximum of 54 percent in any of the other districts. This suggests that there may be a close relationship between ownership of a radio and preference for the use of English in the home. It is quite possible that acquisition of a radio is sufficiently valued by those who speak English that they are more willing to spend money to purchase one than are those for whom many of the broadcasts would have less interest.

Forty-two percent of the families own an automobile, though 65 percent of these vehicles are ten or more years of age. The automobile has largely replaced the team and wagon as a means of conveyance. Many families are without means of transportation from their homes to shopping centers or to the agency and are forced to spend a considerable portion of their incomes for the hire of cars. The expense of operating and maintaining cars is thus borne not only by their owners but by the non-owners as well.

TABLE 6

PERSONAL PROPERTY
STANDING ROCK RESIDENT FAMILIES, 1951

DISTRICT	Household Furnishings (Percentages)		Families Owning:		Automobiles		(Percent of cars)							
	Bare Minimum	Adequate Superior	Radios Number %	Power Washers Number %	Total Number %	15 or more	10-14	5-9	0-4					
BULL HEAD	37	57	38	54	25	36	24	56	16	4				
LITTLE EAGLE	41	23	43	54	38	48	24	53	13	10				
WAKPALA	21	31	58	73	32	40	12	47	18	23				
KENNEL	33	56	29	53	23	42	4	74	8	14				
AGENCY	23	59	92	73	60	46	20	25	18	37				
CANNONBALL	32	45	36	41	19	22	25	60	5	10				
PORCUPINE	17	73	21	70	17	57	6	53	29	12				
RESERVATION TOTAL	30	47	317	62	139	27	214	42	18	16	19			
GROUP	HEAD OF FAMILY													
I	24	41	35	0	34	89	25	66	29	76	3	31	28	38
II	0	50	28	22	12	86	9	64	14	100	0	43	7	50
III	7	49	34	10	56	80	34	47	44	63	7	52	18	23
IV	33	48	18	1	198	53	60	16	114	31	25	51	13	11
V	43	37	20	0	17	49	11	79	13	93	39	30	23	8

* Government homes were excluded in this analysis.

e) Cultural status

There are no clear-cut cultural groups on the Standing Rock Reservation. In each of the seven districts of the reservation at least two-thirds of the resident population claim to be full-blood Sioux. Culturally, an even larger percentage of the population is identified with this dominant group. A reluctance of some individuals to admit any quantum of non-Indian blood was apparent to the interviewers. This appears to reflect a desire for acceptance in the full-blood group. It in no way indicates that the full-blood group has retained the basic values of the old Sioux culture. Group solidarity is based, rather, on attitudes which stem from a period of cultural confusion and economic failure. Attitudes are colored with bitterness and mistrust of the "white man", the "Government", and the Indian who deviates conspicuously in his mode of living.

The behavior code of the Standing Rock Sioux has been strongly influenced by the activities of the Congregational, Roman Catholic, and Episcopal Missions. Civil ceremonies rather than common-law marriages are required by the tribe. Welfare assistance to unmarried mothers is strongly disapproved by the majority who interpret it as rewarding an illegal union.

Most of the Standing Rock Sioux are bilingual. In 45 percent of the homes English is spoken all or most of the time. In 25 percent, the Sioux language is preferred. In the remaining 30 percent, English and Sioux are used about equally. The correlation between language preference and the age of the individual is high, the older persons speaking mostly Sioux and the younger, English. Language preference appears to be influenced also by other factors. In the Porcupine and Agency Districts where contacts with non-Indians are numerous, and in the Wakpala District where the Indian children attend a public school, the percentages of homes in which English is spoken most of the time are relatively high. The data included in Table 7 indicate that a maximum of 25 percent of the families living on the Standing Rock Reservation are tied to the reservation because they lack the ability to communicate freely with non-Indians.

Table 7

Language Spoken in the Home
Standing Rock Reservation

DISTRICT	Percent of Families Speaking Mostly or Only English	Percent of Families Speaking English and Sioux Equally	Percent of Families Speaking Mostly or Only Sioux
Bull Head	41	40	19
Little Eagle	33	28	39
Wakpala	59	19	22
Kenel	23	49	28
Agency	57	29	14
Cannonball	29	30	40
Porcupine	80	6	14
RESERVATION TOTAL	45	30	25

f) Educational background of family heads

The achievement of the Standing Rock Sioux has doubtless been retarded by a lack of formal training. Table 8 shows the number of years of school attendance of family heads. Six percent of the family heads interviewed have never attended school. More than one-half of the family heads have had less than an elementary school education, the median number of years of school attendance being 7.3. Only 12 percent of the family heads completed as many as eleven grades in school, and about two percent have had training beyond the senior high school. The number of years of school attendance is slightly higher for the family heads who are no more than 1/2 blood Indian and for those employed at the agency. In the group intermarried with non-Indians none of the family heads have had training beyond the senior high school, but neither have any had fewer than five years of formal education. It is possible, and highly probable, that the members of the tribe who have migrated to jobs away from the reservation are also those who received a greater amount of formal training.

Table 8

Number of Years of School Attendance of Family Heads
 Standing Rock Reservation—North and South Dakota
 (Percentage of Groups)

District	Median	None	1-2	3-4	5-6	7-8	9-10	11-12	More than 12	
Bull Head	6.0	9	4	21	38	21	9	6	2	
Little Eagle	7.6	8	5	9	18	30	17	11	2	
Wakpala	7.1	5	3	13	15	26	21	14	3	
Kenel	7.5	7	3	13	20	31	16	10	0	
Agency	7.4	3	6	9	26	28	16	8	4	
Cannonball	7.2	3	7	9	25	34	13	9	0	
Porcupine	7.1	6	3	14	25	35	11	6	0	
Reservation Total	7.3	6	5	12	23	27	15	10	2	
Group	Head of Family									
I	Gov. Employee	9.1	0	2	0	10	35	32	16	5
II	Non-Indian or Non-Indian wife	7.9	0	0	0	15	68	0	7	0
III	1/2 blood or less	7.5	4	4	5	19	24	24	16	4
IV	More than 1/2 blood	5.8	7	3	14	28	28	11	7	2
V	Non-enrolled Indian	7.2	0	5	17	17	34	17	10	0

III. RESERVATION ECONOMY

1) Land Base and Its Present Use

The most important natural resources of the Standing Rock Indians are their 940,914 acres of grazing land, 22,300 acres of timber, and 74,461 acres of dry farm land. These 1,037,675 acres are the trust lands remaining from the original 2,332,483-acre reservation. As to ownership this trust land is divided as follows:

Allotted	859,700 acres
Tribal	166,955 "
*Government-owned	<u>11,020 "</u>
Total	1,037,675 acres

*Use controlled under lease to tribe

As to occupancy and use, the reservation is divided into two general areas: (a) the Consolidation Area in which most of the Indians make their homes; (b) the remainder of the reservation where the Indian-owned lands are so checker-boarded with patented lands that they are not readily usable by the Indian owners.

The Consolidation Area, which lies along and adjacent to the Missouri, Grand and Cannonball Rivers, ^{6/} comprises about 45 percent of the gross area of the reservation. It is composed largely of range land. More than 85 percent of the range lands used by Indians in 1950 lie within the Consolidation Area. Seven Indian villages and numerous scattered homesites are located within the area.

Most of the 74,461 acres of Indian-owned dry farm lands and about 245,000 acres of Indian range lie outside of the Consolidation Area. These lands, located in the southern part of the reservation and along the main and branch lines of the Milwaukee Railway, and in the western portion of the reservation, are largely small scattered tracts. Their principal value to their Indian owners is as the source of lease income.

Actual use of reservation lands in 1950 by Indians and by non-Indians is reflected in Table 9, which follows:

^{6/} See Reservation map - Frontispiece

Table 9

Use of Indian Trust Lands by Indians and by Non-Indians
on the Standing Rock Reservation, 1950*

Type of Use	Indian acres	Non-Indian acres	Total acres
Crop land	1,940	72,521	74,461
Grazing permits	233,675	491,440	725,115
Free grazing	114,444		114,444
Grazing leases		83,956	83,956
Native hay	19,000		19,000
Indian homesteads, timber, etc.	20,699		20,699
TOTAL	389,758	647,917	1,037,675

*Source: 1950 Extension and Forestry and Grazing Reports

In 1950, Standing Rock Indians used 1,940 acres of their 74,461 acres classed as dry farm land and non-Indians used most of the remainder, though accurate figures are not available. Indians put up native hay on 19,000 acres, much of which also was used for grazing purposes. As to use of grazing lands in 1950, agency records show 348,119 acres used by Indians and 575,396 acres under permit or lease to non-Indians. Indian meadows and a few idle acres account for the remainder of the grazing land. A few of the timber allotments are used as homesites by Indian families. Indians, therefore, utilized approximately 38 percent, and non-Indians 62 percent, of the reservation lands in 1950.

2) Income

In 1950, the aggregate income for 582 of the 680 Indian families residing on the Standing Rock Reservation was \$736,179. The median income of the group interviewed was \$992, the average, \$1,351. Sales of livestock, welfare and relief payments, and labor were the principal sources of income, as is shown in Table 10.

The lowest 10 family incomes ranged from \$50 to \$160, and averaged \$95. Source of these ten meagre incomes was relief in four cases, wages in three, leases in two, and livestock sales in one. Eight of the family heads with the lowest incomes are full-blood Indian, one is 1/2 blood, and one an Indian who is not enrolled at this jurisdiction.

The highest ten incomes averaged \$8,416, with a range from \$5,016 to \$28,150, though only two totalled more than \$10,000. ^{7/} All but one

^{7/} The incomes of a number of families whose heads are non-Indian are not included in these data. Several of these are reputed to be more prosperous than most of the families interviewed.

TABLE 10
STANDING ROCK RESERVATION
AMOUNTS OF FAMILY INCOME BY PRINCIPAL SOURCES - 1950

PRINCIPAL SOURCE OF INCOME	TOTAL ANNUAL INCOME	AMOUNTS OF RELIEF ASSISTANCE						SALES OF LIVESTOCK	LEASES	PENSIONS, LAND SALES MISCELLANEOUS, ETC.
		Agency	Old Age	ADC	Blind	Total Relief	WAGES			
RELIEF	\$163,631	\$43,829	\$40,652	\$44,885	\$4,326	\$133,692	\$ 12,207	\$12,907	\$ 4,825	
Average	794	276	496	916	361	649	210	89	536	
Number of Families	206	159	82	49	12	206	58	145	9	
WAGE WORK	118,495	714	1,826	0	0	2,540	108,283	1,999	1,999	
(Govt)	3,118	71	457	0	0	195	2,850	87	646	
Number of Families	38	10	4	0	0	13	38	4	3	
WAGE WORK	133,240	12,896	1,434	960	0	15,290	98,220	8,206	11,524	
(Miscellaneous)	1,089	139	359	480	0	164	780	104	549	
Number of Families	126	93	4	2	0	93	126	79	21	
LIVESTOCK	289,090	19,503	2,542	2,160	0	24,205	14,815	9,742	9,739	
PRODUCTION	2,036	181	508	720	0	216	380	137	487	
Number of Families	142	108	5	3	0	112	39	71	20	
MISCELLANEOUS	81,723	5,586	5,705	576	0	11,867	4,798	14,264	50,794	
(Pensions, Leases, etc.)	1,167	124	475	576	0	232	228	274	861	
Number of Families	70	45	12	1	0	51	21	52	59	
RESERVATION	\$786,179	\$82,528	\$52,159	\$48,581	\$4,326	\$187,594	\$238,323	\$47,118	\$78,821	
GRAND TOTAL	1,351	199	487	883	361	392	845	127	704	
Number of Families	582	415	107	55	12	475	282	370	112	

* Includes all cattle owners whose total income was reported with the exception of seven agency employees who also have contracts for repayment cattle. Twenty-three of the families included in this group received their cattle so recently that they had no income from their herds in 1950. No income figures are available concerning the incomes of 39 operators who were not interviewed. Twenty-four of these are non-Indians or married to non-Indians.

of these high income families own cattle. In three instances the cattle income is supplemented by wages. The income of one family is from wages only. In this group are two Government employees, two non-Indians married to members of the tribe, five who are 1/2 blood or less, and two full-bloods.

The largest single source of income was wages (\$238,323), but the earnings of 38 agency employees account for approximately one-half of this amount. Total receipts from livestock sales of the families interviewed was \$234,323. This is a gross amount from which grazing fees and other operating expenses must be deducted. It does not, however, include receipts from sales of animals found to have Bangs disease since money for them was held for the purchase of cows to replace those sold.

Agency relief funds issued on the Standing Rock Reservation during 1950 totalled \$104,694. Only \$82,528 of this amount was granted to the families interviewed during the survey. Thirty-seven other families, living on the reservation but not interviewed, received \$7,293. A total of \$14,873 was granted to 139 individuals who were absent from the reservation during the summer months or whose names do not appear on the census rolls. It should be pointed out that the 1950 agency relief expenditures were not limited to cases in need of assistance because of physical disability. Until recently certain community services such as tribal police, relief committee work, etcetera, have been remunerated from the relief fund. Relief allowances were therefore not clearly distinguished from certain types of wage income. Present policy limits the use of relief funds to emergency assistance and to persons whose disability is certified by doctors.

The total amount of categorical relief, i.e., Old Age Assistance, Aid to Dependent Children, and Aid to Needy Blind, distributed to the families interviewed was \$105,066. The number of families who received this type of assistance is much smaller than the number who received direct relief from the agency. No records are available to indicate the amount of categorical relief issued to families who were not interviewed.

Many families reported more than one source of income. For 206 families or 35 percent of the group, relief payments formed the principal source of income, though 471 families, or 81 percent of the entire group, received direct assistance of one type or another during the year. Labor was the principal source of income for 164 families. Of the 142 full-time livestock operators interviewed, 119 received cash from sales. Only 20 families depended primarily on lease rentals for a living but 370 families of the 582 interviewed received some income of this kind. Dependency allotments to families of men in the armed forces and various types of pensions provided most of the income for 50 families.

Table 11 shows that principal sources of income are not of equal importance in the seven geographical districts of the reservation nor in

Table 11

Principal Source of Income
Standing Rock Reservation - North and South Dakota

(Percent of Families)						
District		Relief	Wage Work	*Livestock Production	Pensions, Lease, Army Allotment	Land Sale or Dispersion of Livestock
Bull Head		41.0	17.0	39.0	3.0	0
Little Eagle		30.0	29.0	24.0	17.0	0
Wakpala		32.2	23.6	34.6	6.4	3.2
Kenel		41.6	15.0	31.8	10.0	1.6
Agency		29.0	36.5	24.0	9.0	1.5
Cannonball		49.9	16.7	10.7	21.7	1.0
Porcupine Reservation		31.8	20.0	37.1	11.1	0
Total		35.6	26.4	25.7	11.3	1.0
Group	Head of Family					
I	Govt. Employee	0	81.6	18.4	0	0
II	Non-Indian or Non- Indian wife	14.2	21.3	57.4	7.1	0
III	1/2 blood or less	13.2	10.8	56.9	19.1	0
IV	More than 1/2 blood	43.7	22.6	21.1	10.9	1.7
V	Non- enrolled	39.1	33.2	16.6	11.1	0

*Persons actively engaged in the cattle program are included in this group, regardless of the amount of cash income from livestock in 1950.

the different groups classified according to quantum of Indian blood of the family head. Wage income is the most important source of income in the Agency District only. This is obviously because of the inclusion in that district of members of the tribe who are employed at the agency. The percentage of families dependent principally on relief is highest in the Cannonball District where the number with income from livestock is relatively low. The percentage actively engaged in livestock production is highest in the Bull Head District, yet the number of families in that district who are largely dependent on relief is above the average for the reservation.

3) Programs

a) Livestock production

Since that part of the reservation which the Indians occupy is almost exclusively a grazing area it is only natural that livestock production should play an important role in the reservation economy. A total of 212 families, 8/ or approximately 30 percent of the resident Indian families, are engaged in the cattle business to a greater or less extent. Numbers of Indian-owned beef cattle increased from 927 head in 1933 to 8,780 in 1948 and have since declined to 7,665 head of which fewer than 5,000 were producing cows, as of December 31, 1950. The total number of cattle reported on June 30, 1951 is larger because it includes calves which will be sold later in the year. It does not indicate an increase in the number of producing cows. This total includes 4,019 heifers which have been loaned on repayment-in-kind contracts between individuals and the tribe.

The average 1950 income of the livestock operators was approximate twice the average of all other reservation families with the exception of those who shared in the wage income from agency employment. The range of the agricultural incomes reflects extremes in the sizes of the enterprises and in the degree of economic security attained by the operators. Twenty-three of the families participating in the livestock production program had no income from their herds in 1950. Many of these had received their initial cattle loans recently and thus far have acquired no personal equity in the herd. At the other extreme are the high incomes which resulted from individual sales, totalling in one case more than \$28,000. Forty-two individuals own 50 or more cattle in addition to the number which they owe under repayment contracts. Ownership of cattle, all classes, is shown by Table 12, which follows.

Despite the importance of the livestock program in the Indians' economy it has certain weaknesses that need to be pointed-out for

8/ The Agency Extension Report for Dec. 31, 1950, showed 234 cattle-owners. In some of the 212 families included in this survey more than one individual owns cattle.

Table 12

Cattle Ownership
Standing Rock Reservation

DISTRICT	No. owning cattle		*Number owing heifers	Number heifers owed	Number of owners by herd size				Less than 0
	*Herd size reported	Number cattle owned			100 or more	50-99	25-49	0-24	
Total	Total	Total	Total	Total	Total	Total	Total	Total	
BULL HEAD	51	2149	36	906	2	9	9	15	7
LITTLE EAGLE	29	1316	23	470	1	6	6	11	9
WAKPALA	37	2071	37	628	4	5	12	8	11
KENEL	22	983	24	495	0	4	5	9	5
AGENCY	47	2053	39	1024	1	7	13	11	6
CANNONBALL	11	450	10	251	0	0	5	2	4
PORCUPINE	15	769	8	245	1	1	2	5	4
RESERVATION TOTAL	212	9791	177	4019	9	33	52	61	46
GROUP									
I	9	336	9	255	0	3	2	3	2
II	30	2172	27	578	3	4	4	3	5
III	57	3310	36	1052	5	10	17	19	10
IV	106	3468	92	1938	1	15	27	33	29
V	10	505	13	196	0	1	2	3	0
TOTAL	212	9791	177	4019	9	33	52	61	46

* The owners of these herds are for the most part, relatively large operators. They have Indian grazing permits but they operate without the supervision of the Extension Branch. They have no repayment cattle and usually sell independently.

** This includes all cattle, all classes, reported by the Extension Branch, June 30, 1951, plus a few herds owned by persons interviewed, who operate independently of the Extension Branch.

these weaknesses are basic obstacles to maximum accomplishment.

(1) The herds are generally small. Eighty percent of the cattle owners have but 40 head or less, and few have more than 100 head, the number usually considered necessary for full family support and for debt repayment.

(2) The Indian range units are small and cattle operations are relatively unstable. The average size of the 137 Indian range units in 1950 was 1,746 acres, of which only 19 percent is owned or directly controlled by the permittee. Moreover, one-third of the Indian permittees own no land in their grazing units. Non-Indian units average more than twice the size of the Indian units and 45 percent of the grazing land in them is owned or otherwise controlled by the user. Very few of the non-Indian permittees lack an ownership interest in their range units.

(3) There is but limited participation in the livestock production program by the full-blood group. The group whose family heads are reported as more than 1/2 Indian comprise two-thirds of the resident population, but own only 35 percent of the cattle of which more than 55 percent are owed to the tribe. The comparatively small number of families whose heads are non-Indian, married to a non-Indian, or whose quantum of Indian blood is 1/2 or less, own more than 56 percent of the cattle, of which about 30 percent are owed to the tribe. The remaining 9 percent of the cattle are owned by Government employees and families whose heads are Indians enrolled at some other jurisdiction. Fewer than one-fourth of the full-blood residents are participating in the livestock program whereas approximately two-thirds of the families whose heads are 1/2 Indian or less, or non-Indian, are in the cattle business.

(4) The interval between initial effort involved in establishing a livestock enterprise and the first reward is approximately two years. Most of the cattle issued as a part of the repayment program are yearling heifers. Even though these heifers are bred to calve at the age of two years, they must be cared for and fed for many months before the first possible cash sale. Actually, few of the heifers produce calves which are ready for sale by the end of the second year of the enterprise. Unless the operator has income from some other source during the first few years after he receives his first issue of cattle, he cannot afford to give the cattle the care which they require. Many, whose supplemental income is inadequate to carry them through this long initial period, report discouragement, privation, and insecurity.

(5) Few Indians own the machinery necessary for efficient ranch operation. Only 18 percent of the livestock operators interviewed



#5

The herds are generally small. (The entire herd of an operator whose only equipment was his saddle horse.)



#6

Ranch headquarters of this same operator.

own power hay equipment. In the full-blood group, the percentage owning power equipment is only 11 as compared to 54 percent in the group who have intermarried with non-Indians. Eighteen, or 11 percent of the livestock operators interviewed own no equipment of any kind and must borrow or rent equipment for their haying operations. The horse-drawn equipment owned by the remaining 71 percent is, for the most part, old and in poor condition.

b) Credit

In developing farm and ranch activities to their present level, Standing Rock Indians have made use of two main sources of credit. In 1944 the tribe borrowed \$100,000 of revolving credit funds from the United States and later secured an additional \$50,000 from the same source. Tribal moneys were added to bring the loan fund to \$230,000. Through June 30, 1951, the tribe had made 344 loans aggregating \$313,766, of which more than two-thirds was advanced for the purchase of livestock and farm machinery. There were 137 active loans on June 30, 1951, with an outstanding balance of \$149,603, and advances to tribal land and cattle enterprises totalling \$72,364. Forty-eight loans aggregating \$64,406 were made in fiscal year 1951. Indians also use bank credit, particularly for short-term operating loans.

The tribe also borrowed beef cattle from the Government which are included in the number that have been loaned to members on a repayment-in-kind basis. Repayment contracts are in effect with 177 active borrowers. Twenty-seven additional contracts for 160 head are delinquent. During the year ended June 30, 1951, 1,154 head were repaid and reissued locally.

c) Tribal Land Enterprise

Through the Tribal Land Enterprise, established in September 1947, the council is able to block out ranch units and allocate or assign them to individual ranchers for their use. Other purposes of the Enterprise are to bring fee patent land in the Consolidation Area into Indian trust ownership at the expense of losing title to land outside the Area, and to put the more complicated Indian estates into tribal ownership. In the four years since the program was undertaken 116 tracts totalling 24,097 acres have been sold to the tribe and sales between Indians have accounted for 19,118 acres. Exchanges and assignments have brought the total transactions to 282 and the acres involved to 65,207.

IV. EFFECTS OF THE OAHE PROJECT

1) The Population to Be Relocated

a) Number and size of families

There are 170 Indian families living below the taking line of the Oahe Reservoir on the Standing Rock Reservation. ^{9/} One hundred sixty-four of these families were interviewed during the reservation-wide socio-economic survey undertaken during the early summer of 1951. Seven families have no homes and live with relatives or friends. One family lives in a church and three in tents, hence the data here reported cover 156 households and 153 fixed dwellings.

This group includes 732 people and the average size of family is 4.5 persons. The population to be moved is predominantly full-blood Indian. Of the 164 family heads interviewed, 123 are listed as full-bloods, 27 are from 1/2 to 7/8 Indian, and 4 are 1/4 Indian. Ten are non-members of the Standing Rock Sioux tribe who are married to women enrolled at this jurisdiction.

b) Present economic status and means of livelihood

In 1950, aggregate income for 163 of the 170 Indian families living below the taking line was \$201,028, with an average of \$1,233 and a median income of \$920. Sales of livestock, welfare and relief payments, and labor were the principal sources of income as is shown in Table 13.

Table 13

Income, by Sources and Amounts, of 163 Indian Families within the Oahe Reservoir Area, Standing Rock Reservation, 1950

Source of Income	Number of families sharing income	Amount	Percent of Total
Sales of crops and livestock	47	\$69,639	35
Welfare and relief	135	57,979	29
Labor	74	34,552	17
Pensions, army allotments, etc.	27	18,451	9
Lease rentals	112	14,069	7
Other (including 3 land sales for \$5000)	10	6,338	3
TOTAL		\$201,028	100

^{9/} A list of families living within the taking line on June 30, 1951 appears in Appendix E. Because of the mobility of the population, the list will need frequent revision.

Many families had more than one source of income. For example, 47 families shared the agricultural income, but for only 33 did such receipts amount to more than 50 percent of the family income. Seventy four families had a member employed for all or part of the year, yet for only 29 families did wages account for more than one-half the total income. Table 14 shows the distribution of families by principal sources of income.

Table 14

Distribution by Principal Source of Income of 163 Indian Families whose Homes are Within the Oahe Reservoir Area, Standing Rock Reservation, 1950

Principal source of income	Number of families	Percent of total	Average income 1950
Livestock	33	20	\$2,263
Leases	4	3	519
Labor	29	18	1,151
Welfare & relief	64	39	812
Pensions, Army allotments, etc.	15	9	1,117
Three or more sources, no one contributing 50%	18	11	1,233
TOTAL	163		

Significant facts regarding the economic status of the group are: (a) the average income of 33 of the families engaged in livestock production is approximately twice the average family income from any other source, (b) the low median income \$920, (c) 82 percent of all families received welfare or relief payments during the year, (d) the high average of these relief payments (\$432), and (e) the large number (40 percent of all families) for whom categorical or agency relief constituted the principal source of income.

2) Size of the Removal Problem

It has been noted that 170 Indian families live below the taking line of the reservoir. The 164 families interviewed include 732 people and own 153 houses. Of the houses to be moved or replaced, 47 are of frame construction and 106 are built of logs. Fifty-three of the houses have one room, 70 have two rooms, and 30 contain from three to six rooms. Seventy have shingle roofs; 50, dirt roofs; and 33, roofs of composition material. No tally was made of outbuildings and fences that will have to be moved or replaced. Some of the families do not own the houses which they occupy and thus will not be compensated for losses of property. A

number of homes in the Kenel community are located on land owned by the Catholic Mission.

The survey showed that 84 families procure their domestic water from rivers, creeks and springs, and 70 from wells. Regardless of the present sources of this necessity, all families who resettle on the reservation will have to be supplied with adequate sources of water.

The survey shows that 141 families intend to remain on the reservation. Only one definitely designated the site of his future home. The others are undecided or failed to answer the question. Similar studies show that families usually resettle near their former homes. Approximately 129 families will require little more than a new homesite, relocation or reconstruction of a home, and water development.

Forty-four livestock units present a much more complicated problem. These 44 families, including two of those not interviewed, owned 2,286 head of beef cattle, all classes, as of June 30, 1951. It is the re-establishment of these cattle enterprises which necessitates careful analysis of the potentials of the residual reservation.

3) Loss of Land, Timber, and Shelter

The Missouri River forms the eastern boundary of the Standing Rock Reservation for a distance of more than 80 miles. All of the bottom lands along the Missouri River will be inundated by the Oahe Reservoir. So also, the bottom lands of the Grand and Cannonball Rivers will be flooded for a distance of from 10 to 20 miles from their junctions with the Missouri. Preliminary estimates (based on the nearest sub-division lines above elevation 1620) indicate that approximately 50,000 acres of Indian land will be within the reservoir area. By ownership, the land to be taken may be classed as:

Allotted	43,027 acres
Tribal	<u>7,006</u> "
Total	50,033 acres

In the area that will be flooded is a belt of timber along the rivers that provides shelter for stock in winter and shade for them in summer. Stockwater is available in springs that have been developed and in the Missouri, Grand and Cannonball Rivers and their numerous minor tributaries. Native hay for winter feed of cattle is cut on the river bottoms and on the slopes and divides of the bordering uplands. Not only will the flooding of the bottomlands disrupt the livestock enterprises of the 44 operators living within the taking line but it will break up this balance between range, shelter, water and feed enjoyed by them as well as by several other Indian stockmen whose units extend into the reservoir area.



#7

Flooding along the rivers will break up this balance between range, shelter, water and feed.



#8

Native hay for winter feed of cattle is cut on the river bottoms.

Shelter for livestock is essential in an area where extremes of temperature from 115 degrees F. to -46 degrees F. have been recorded. The wooded area along the rivers furnishes protection from storms and wind which cattle need if they are to be wintered economically and safely. The costs of artificial shelter which would only partially take the place of this natural shelter will be expensive, and such shelter will not, in itself, compensate for the losses incurred.

Contract negotiations should seek to put a dollar value on the damages to the cattle enterprise which can be traced to the loss of these stabilizing influences. The loss of woodland shelter, browse shrubbery found along the river bottoms, and the most drought-resistant of their hay meadows by inundation will increase the risks of wintering the range cattle of the livestock operators now living along the river.

Flooding of the valley and destruction of the timber will also deprive many Indian families of a source of fuel, fence posts, corral poles and house logs, as well as protection for their homesteads. For the past 10 years, agency records show that an annual average of 161 M. bd. ft. of logs, 5,812 poles, 59,931 posts, and 5,944 cords of fuel wood were used by Indians. It is known that many Indians also help themselves to fuel, posts and poles without authorization by the agency. This unreported take of timber products would materially increase the figures given above. Many Indian families, whose fuel now costs them only a little labor, will have to buy that necessity once the reservoir is filled.

4) Isolation of Agency, and Loss of Highways

The agency buildings on the Standing Rock Reservation lie above the 1620 foot contour level but a causeway will be required to connect the agency with the residual reservation. New water and sewage disposal systems will be required.

About 50 miles of graded Indian Bureau roads will be rendered useless through flooding or flooding of their termini. Some new highways will have to be constructed to serve the relocated and reorganized population on the reservation.

5) Loss of Wildlife Resources

The Indians will lose valuable wildlife resources and recreational areas. On the Standing Rock Reservation more than 1,500 deer are estimated to live yearlong in the timbered area, most of which will be inundated. Pheasants winter along the river bottoms. Small fur-bearing animals, such as beaver, muskrat, mink, weasel and skunk are numerous. The agency Range Conservationist estimates the value of fish, game birds, pelts and big game taken in 1950 at \$86,160. The Fish and Wildlife Service in a report dated January 1951 estimates the net annual loss to wildlife on the

Standing Rock Reservation at \$60,300. ^{10/} These estimates include sport as well as food values. Nevertheless, wild game, fruits and berries, whether fresh, dried or canned, constitute a considerable part of the diet of many Indian families.

6) The Residual Reservation

All of the Oahe Reservoir site is within the Consolidation Area. Fifty thousand acres of the taking are Indian trust land, and 13,725 acres are owned by non-Indians. The residual Consolidation Area will therefore be reduced to 979,993 acres, of which 661,657 acres, or 65 percent, are Indian trust lands. Wholly or partially within this area are 114 grazing permits in favor of Indians and 107 permits issued to non-Indians. Under these permits Indians utilized 207,207 acres of trust grazing land and non-Indians used 272,801 acres of similar land in 1950. The residual 181,649 acres contain many Indian homesteads, some timbered areas, range for the Indians' 1,600 horses and for some Indian cattle not under permit.

Further consideration of land use, particularly of future use of lands within the Consolidation Area, will be facilitated by reference to Table 15.

Table 15

Acres by Tenure, Within and Without the Consolidation Area
as Modified by the Oahe Taking, Standing Rock Reservation,
North and South Dakota

Kind of Tenure	Consolidation Area acres	Oahe Taking acres	Net Consol- idation Area acres	Outside Consol- idation Area acres
1. Trust allotments, timber allotments, restricted deeds	595,781.76	43,027.46	552,691.30	237,429.65
2. Tribal, incl. reserves and purchases	115,971.71	7,006.44	108,965.27	77,534.59
Total Indian-owned	711,690.47	50,033.90	661,656.57	314,964.24
3. Fee patented	285,448.36	10,118.86	275,329.50	901,164.36
4. Govt. incl. sub- marginal	11,020.25	507.09	10,513.16	--
5. State & County	33,449.68	2,233.06	31,216.62	67,517.29
6. Churches	2,143.24	866.25	1,276.99	10.11
Total Non-Indian Owned	332,061.53	13,725.26	318,336.27	968,691.76
TOTAL	1,043,752.00	63,759.16	979,992.84	1,283,656.00

Source - MRBI Plat book, revised 2/7/51.

^{10/} Oahe Reservoir, North Dakota and South Dakota, a Report on Fish and Wildlife Resources, Billings, Montana, January 1951.

V. SUMMARY AND CONCLUSIONS

1) Income and Standard of Living

The Standing Rock Indians are a low income group, few of whom have attained a scale of living comparable to that of non-Indians of the area. Housing is sub-standard and homes are poorly furnished, lacking in utilities, and commonly overcrowded. Furthermore, attainment of the standard of living which most of them regard as adequate would improve the present status only slightly.

Replies to the question, "How much annual income would you have to receive in order to live reasonably well?", ranged from \$250 per year to more than \$20,000. The median of the estimates given was \$1,425, or only \$433 more than the median 1950 income of the same families. Seventeen percent gave estimates lower than their present income, and 24 percent were satisfied with what they received in 1950. This does not indicate that these families ended the year with a surplus. Rather, their estimates of the income required for adequate living include little more than the amount needed to purchase food.

Nearly one-half of the family heads express satisfaction with their present homes. Two hundred fifty-four families want a new house or improvements which they estimate would cost an average of \$1,312. However, 42 percent of this group would be satisfied with improvements costing \$500 or less.

The low standards held by the group may reflect a fatalistic attitude, "That is all I could possibly expect to attain." Nevertheless, basic to a program designed to improve the scale of living of the families now living on the Standing Rock Reservation, is guidance in the selection of attainable goals.

2) Dependency on Relief

Welfare and relief payments constituted 24 percent of the aggregate 1950 income of the 582 families interviewed. The average relief granted was \$398 per family. Eighty-two percent of the families received relief at one time or another during the year, and for 206 families, or 35 percent of those interviewed, welfare and relief payments constituted the principal source of income. There is no social stigma attached to the acceptance of relief even by those who are capable of earning a living.

The recently adopted policy of firmness in restricting relief to those in need because of physical disability must be continued. At the same time, serious thought should be given to ways and means of providing year-round income opportunities which will lessen the demand by able-bodied persons for a share in relief funds.

3) Family Plans for the Future

People wish to remain on the reservation. Seventy-one percent of the family heads interviewed not only wish to remain on the reservation, but have no plans for altering or supplementing their present source of income. There is little indication of any awareness of opportunities away from the reservation or of a willingness to migrate to jobs.

In Figure 2, present principal sources of income are contrasted with planned future principal sources of income. A few assumptions were made, i.e., that the Government workers will continue to work for the Government, and that all livestock operators want to continue in business. These assumptions brought the families covered in the diagram to 652, or 70 more than the number interviewed. Forty-seven families hope to get started in the cattle business, 13 plan to leave the reservation, and 32 have no particular plans for the future.

Several reasons for the reluctance of able-bodied males to leave the reservation are apparent. Some of these reasons are social and some are economic. Large families who would have difficulty in obtaining housing in most communities, lack of training and experience in skills required on many jobs, and unfamiliarity with urban living are all obstacles to leaving the reservation. A strong tie to the reservation exists also because of the practice of sharing which is a strong tradition among the Sioux. Income and housing, even though inadequate, are commonly shared with others. A considerable amount of the relief assistance granted to the aged or disabled goes indirectly to the able-bodied who, in return, often furnish the original recipient with wood, water or transportation.

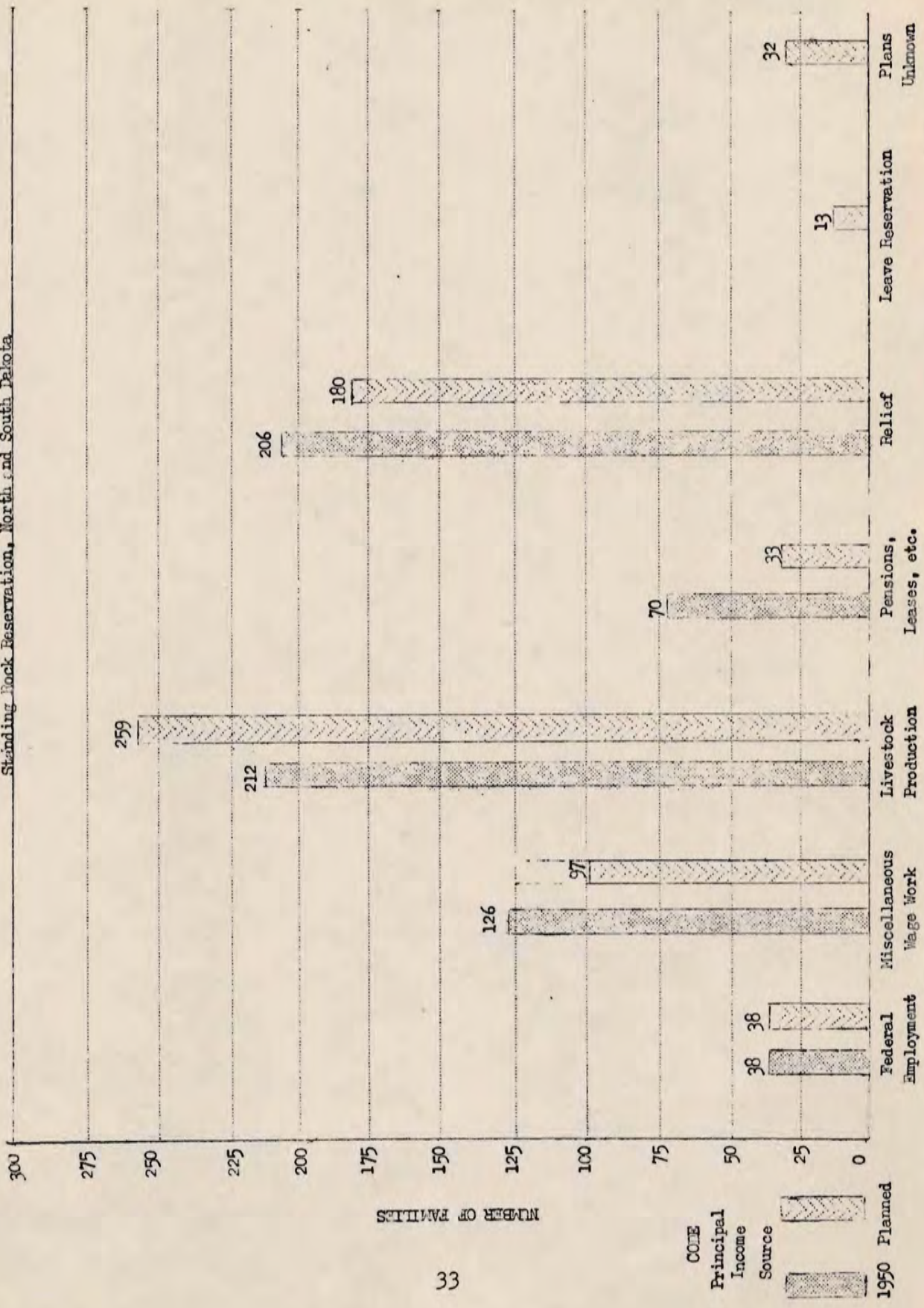
The psychological hazards which inhibit migration to areas of greater economic opportunity must be overcome before any large percentage of the families will establish permanent homes away from the reservation.

4) Land Base of the Residual Reservation

After the 50,000 acres of the Oahe taking are removed from the Consolidation Area of Indian use, there will remain almost one million acres, 65 percent of which is Indian-owned. This acreage is adequate for the number of Indian-owned cattle presently utilizing these grazing lands, for re-establishing units which lie within the taking area, and for such expansion as the survey indicates is likely to occur.

A range use capability study of the residual Consolidation Area is needed before full and complete use of the Indian range land can be accomplished, and such a study should be undertaken before the exodus from the reservoir site takes place. Certain portions of the range have not been fully utilized during recent years. The estimated carrying capacity is 12,962 head of cattle, whereas the Indians owned only 7,665 head on

Figure 2
 PRESENT AND PLANNED PRINCIPAL SOURCES OF INCOME
 Standing Rock Reservation, North and South Dakota



December 31, 1950, of which 1,068 are grazed outside the Consolidation Area. The cancellation of non-Indian permits in the Consolidation Area would provide grazing for an additional 9,000 Indian-owned cattle. Purchase of the fee patent land in the Consolidation Area would provide for an added increase of 10,600 head. These theoretical maximums may never be reached but the Standing Rock Indians have it within their power to double or even triple their present cattle holdings without going outside the boundaries of the residual Consolidation Area.

5) Reservation Programs

The livestock production program has not permitted and probably will not enable the large majority of the Standing Rock families to become self-sufficient. Important as is the livestock production program to the reservation economy, a program directed toward maximum use of the range by Indians does not imply that all Indians should raise beef cattle and thus become self-supporting. The survey indicates that fewer than one-half of the families, including the one-third who now own cattle, want to participate in the cattle program. In many families there is no able-bodied male who could perform the labor required by such an activity. Some Indians, like many non-Indians, simply are not inclined toward this type of work. The capacity of stockmen and prospective stockmen to succeed with full-time, family-size cattle ranches should be carefully determined before an attempt is made to finance them in the cattle business. For those who are suited to this type of work, maximum guidance and assistance should be made available if they are to fully succeed.

Funds must be provided to permit continuation and acceleration of the tribal land enterprise program in order to make larger units available to Indian stockmen and to make room for the re-establishment of those operators who will be displaced by the Oahe Project. It may be that additional credit funds will be needed to make the lending program fully effective.

6) Non-agricultural Population

A program of individual case work is recommended as basic to an economic program for the Standing Rock Reservation. This should be followed by placement and guidance in industrial employment for those who are physically and psychologically qualified for life away from the reservation. Some of the younger able-bodied adults might be induced to leave the reservation if their aged parents were encouraged to resettle where fuel, water, and food are more readily available.

There will remain on the reservation a substantial labor pool. These people, generally, are not trained in the skills required by industry. Some are partially disabled but could perform certain types of work. Local industries that promise to be successful should be financed and encouraged to provide employment for the large number of families who would otherwise be dependent upon relief.

7) Estimated Costs of Relocation and Re-establishment

Negotiators representing the Corps of Engineers, the Secretary of the Interior and the Standing Rock Sioux Tribe have not yet agreed on an agenda for their meetings to discuss contract provisions. Such questions as, "Should the construction of roads and schools and the development of water precede or follow relocation and resettlement" are still being discussed. An attempt has been made to keep this report on a factual basis. Nevertheless, the need for funds to carry on and expand the livestock, credit, and tribal land enterprises, and for case work, welfare, placement, and rehabilitation programs has been noted from time to time. In Appendix F certain material has been brought together which bears directly on the probable costs of relocating and re-establishing the displaced population. This report will best serve its purpose by remaining objective and factual, and by limiting its recommendations to those already made.

A P P E N D I X A

The Oahe Dam and Reservoir

The Oahe Dam site is located about 12 miles northwest of Pierre, South Dakota. The dam will be an earth fill structure rising approximately 230 feet above the flood plain, and with an over-all length of about 9,300 feet. At maximum operating pool level (elevation 1620 feet, m.s.l.) the dam will create a reservoir extending 250 miles in length and with a capacity of 23,600,000 acre-feet. The Oahe Project, now under construction by the Corps of Engineers, is a multiple-purpose one with flood control, irrigation, and the development of hydroelectric power its principal objects. The reservoir is one of a series of storage reservoirs on the main stem of the Missouri River to help control floods and regulate stream flow on the lower reaches of the river. Lands which may be irrigated with water from the reservoir include up to 750,000 acres in the James River valley of east-central South Dakota. The hydroelectric power plant will have an ultimate capacity of 350,000 k.w.

A P P E N D I X B

(Public Law 870 -- 81st Congress)
(Chapter 1120 - 2nd Session)
(H. R. 5372)

(Copy)

AN ACT

To authorize the negotiation and ratification of separate settlement contracts with the Sioux Indians of Cheyenne River Reservation in South Dakota and North Dakota for Indian lands and rights acquired by the United States for the Oahe Dam and Reservoir, Missouri River Development, and for other related purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Chief of Engineers, Department of the Army, jointly with the Secretary of the Interior, representing the United States of America, are hereby authorized and directed to negotiate contracts containing the provisions outlined herein separately with the Sioux Indians of the Cheyenne River Reservation in South Dakota and with the Sioux Indians of the Standing Rock Reservation in South Dakota and North Dakota, through representatives of the two tribes appointed for this purpose by their tribal councils.

Sec. 2. The contracts made pursuant to section 1 of this Act shall --

(a) convey to the United States the title to all tribal, allotted, assigned, and inherited lands or interests therein belonging to the Indians of each tribe required by the United States for the reservoir to be created by the construction of the dam across the Missouri River in South Dakota, to be known as Oahe Dam, including such lands along the margin of said reservoir as may be required by the Chief of Engineers, United States Army, for the protection, development, and use of said reservoir: Provided, That the date on which the contract is signed by Chief of Engineers, United States Army and the Secretary of the Interior shall be the date of taking by the United States for purposes of determining the ownership of the Indian tribal, allotted, and assigned lands conveyed thereby to the United States, subject to the determinations and the payments to be made as hereinafter provided for;

(b) provide for the payment of ---

(1) just compensation for lands and improvements and interests therein, conveyed pursuant to subsection(a);

(2) costs of relocating and re-establishing the tribe and the members of each tribe who reside upon such lands so that their economic, social, religious; and community life can be re-established and protected; Provided, That such costs of relocating and re-establishing the tribe and the members of each tribe who reside upon such lands shall not result in double compensation for lands and properties to the tribe and members of each tribe; and

(3) costs of relocating and re-establishing Indian cemeteries, tribal monuments, and shrines located upon such lands;

(c) provide that just compensation for the lands of individual members of such tribes, who reject the appraisal covering their individual property, shall be judicially determined in proceedings instituted for such purpose by the Department of the Army in the United States district court for the district in which the lands are situated;

(d) provide a schedule of dates for the orderly removal of the Indians and their personal property situated within the taking area of the Oahe Reservoir within the respective reservations: Provided, That the Chief of Engineers shall have primary and final responsibility in negotiating concerning the matters set out in the foregoing paragraphs (a) and (b) hereof;

(e) provide for the final and complete settlement of all claims by the Indians and tribes described in section 1 of this Act against the United States arising because of construction of the Oahe project.

Sec. 3. To assist the negotiators in arriving at the amount of just compensation as provided in Section 2 (b) (1), the Secretary of the Interior or his duly authorized representative and the Chief of Engineers, Department of the Army, or his duly authorized representative shall cause to be prepared an appraisal schedule on an individual tract basis of the tribal, allotted, and assigned lands, including

heirship interests therein, located within the taking areas of the respective reservations. In the preparation thereof, they shall determine the fair market value of the lands, giving full and proper weight to the following elements of appraisal; Improvements, severance damage, standing timber, mineral rights, and the uses to which the lands are reasonably adapted. They shall transmit the schedules to the representatives of the tribes appointed to negotiate a contract, which schedules shall be used as a basis for determining the amount of just compensation to be included in the contracts for the elements of damages set out in section 2 hereof.

Sec. 4. The specification in section 2 and 3 hereof of certain provisions to be included in each contract shall not operate to preclude the inclusion in such contracts of other provisions beneficial to the Indians who are parties to such contracts.

Sec. 5. (a) The contracts negotiated and approved pursuant to this Act shall be submitted to the Congress within eighteen months from and after the date of enactment of this Act.

(b) No such contract shall take effect until it shall have been ratified by Act of Congress and ratified in writing by three-quarters of the adult members of the two respective tribes designated in section 1 hereof, separately, within nine months from the date of the Act ratifying each said contract: Provided, That in the event the negotiating parties designated by section 1 of this Act are unable to agree on any item or provision in the proposed contracts, said items or provisions shall be reported separately to the Congress as an appendix to each contract, and shall set out the provisions in dispute as proposed by the advocates thereof for consideration and determination by the Congress.

Sec. 6. Nothing in this act shall be construed to restrict the orderly prosecution of the construction or delay the completion of the Oahe Dam to provide protection from floods on the Missouri River.

Approved September 30, 1950.

(Copy)

A P P E N D I X C

Standing Rock Family Questionnaire

STANDING ROCK FAMILY QUESTIONNAIRE

Community _____

Interviewer _____
Date _____

1) Family Head: (Allot. No. _____)

_____	_____	_____	_____	_____	_____	_____	_____	_____
Last	First	(Alias)	Deg. Ing.	Sex	Age	Marital Status	Highest Grade	Mar. Sing. Div. Wid.

2) Number family members living in household (include children in boarding school):

Males:	Over 70	_____	56-70	_____	36-55	_____	16-35	_____	Under 16	_____
Females:	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

3) Non-enrolled:

Children _____ Spouses _____

4) Number of children in each type of school:

_____	_____	_____	_____	_____
Ft. Yates Boarding	Federal Day	Mission (Name & Location)	Other (Name & Location)	

_____	_____	_____
Fed. Non-Res. (Name & Location)	Public (Name & location)	College (Name & Location)

5) Number children (age 6-18) not in school:

_____	_____	_____	_____	_____
Highest Grade completed	Age	Sex	Reason for leaving school	

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

6) Language spoken in the home: Only English: _____ Only Indian: _____
Mostly English _____ Mostly Indian _____ English-Indian equally _____

7) Non-Resident Family Members:

Rel.	_____	_____	_____	_____
Head	Army	Employed (occupation & location)	Highest Grade	No. years away from reservation
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

8) Present Home: (a) How many years have you lived in this house? _____

(b) Number of rooms _____

(c) No home _____ Living with _____

(d) Type of construction: Log _____ Frame _____ Other _____

(e) Floors: Dirt _____ Wood _____

(f) Roof: Dirt _____ Shingle _____ Composition _____

(g) Foundation: Wone _____ Cement _____ Stone _____

(h) Drinking water: Well _____ Spring _____ Reservoir _____ City _____ River or creek _____

(i) Distance from house to domestic water: In house _____ 100 yds. or less _____
1/2 mi. _____ 1 mi. _____ 2 mi. _____ 3 mi. _____ 4 mi. _____ 5 or more _____

16) Unemployed able-bodied males more than 16 years of age:

Rel. Head	Age	Skill, if any	Employed Last Date	Doing What?	Reason for Unemployment
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

17) Disabled family members:

Rel. Head	Age	Sex	Old Age	Type of Disability		T-Temporary
				Blind	Other (name)	
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

- 18) Hunting and Trapping (1950)
- | | |
|-------------------------|-------------------------|
| | Number used
or eaten |
| (a) Deer | _____ |
| (b) Rabbits | _____ |
| (c) Pheasants | _____ |
| (d) Grouse | _____ |
| (e) Ducks | _____ |

- 19) Timber & Coal (used 1950)
(Do not include purchases)
- | | |
|-----------------------------|----------|
| | Quantity |
| (a) Coal | _____ |
| (b) Firewood | _____ |
| (c) Fence posts | _____ |
| (d) Building logs | _____ |
| (e) Corral poles | _____ |

20) How much annual income would you have to receive in order to live reasonably well? \$ _____

21) Future plans for livelihood:

FOR FAMILIES NOT IN FLOOD AREA

- a) Place of residence: Same _____ Other _____
- b) Wage work _____ Where? _____
- c) Livestock production _____
- d) Relief _____
- e) Other _____

FOR FAMILIES IN FLOOD AREA ONLY

- f) Where do you plan to move? _____
- g) What do you plan to do? _____
- h) What help will you need to move? _____

(These data to be obtained from Agency records - 1950)

22) Relief Income:

OAA	\$ _____	Agency	\$ _____
ADC	_____	Tribal	_____
ANB	_____	Other	_____

23) Crop acres harvested _____

24) Tons hay put up: _____

25) Cattle owned:
1/1/51:

Cows	_____
Yearlings	_____
Calves	_____
Bulls	_____
Total	_____

Cattle repayments owed:
(1/1/51)

(Name of owner)

Cattle owned:
1/1/51

Cows	_____
Yearlings	_____
Calves	_____
Bulls	_____
Total	_____

Cattle repayments owed:
(1/1/51)

(Name of owner)

Cattle owned:
1/1/51

Cows	_____
Yearlings	_____
Calves	_____
Bulls	_____
Total	_____

Cattle repayments owed:
(1/1/51)

(Name of Owner)

26) Unaid balance, Tribal Loan \$ _____

27) Payments made, 1950 \$ _____

A P P E N D I X D.

Standing Rock Reservation
Elevation and Climate, Topography, Geology and Soils
(Excerpts from Program, Standing Rock Indian Reservation, June 1944)

1) Elevation and Climate

The elevation of the reservation varies from 1,700 feet to 2,500 feet above sea level.

The average annual precipitation is about 15 inches. An average of the records of five stations located on or adjacent to the reservation show an average of 15.48 inches distributed through the year as follows:

<u>Jan.</u>	<u>Feb.</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
.45	.46	.81	1.26	2.26	3.41
<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
1.90	1.62	1.41	.92	.53	.45

The heaviest precipitation comes during the growing season. Annual precipitation varies greatly. One station reported a low of 5.14 inches and a high of 21.28 inches.

The average growing season is 129 days with the average date of the last spring frost on May 14 and the first fall frost September 21. Temperatures have varied at individual stations from 119 degrees above zero to 50 degrees below. The average annual temperature is 41.3 degrees, the average maximum 55.3 and the average minimum is 30.05.

The average annual wind velocity is 9.6 miles per hour.

2) Topography

The general topography of the reservation is that of rolling uplands and level table lands which are typical of the Great Plains area. In the region along the Missouri River, Grand River, Cannonball River and most of the larger streams, the land is generally of a broken and rough character. Most of this rough land however is covered with grass. The southwestern part of the reservation from the Grand

River on the north and to Firesteel Creek on the east is characteristically rough land and badly eroded. There is some waste land in this area.

3) Geology and Soils

The soils on the Standing Rock Reservation are predominantly Morton Series. Beginning on the flat near Kenel, South Dakota, and extending southward along the Missouri River beyond the southern boundary of the reservation and westward along the southern boundary of the reservation to Mahop, South Dakota, on Oak Creek and Little Eagle, South Dakota, on the Grand River to a point a short distance east of Trail City, South Dakota, there are out-croppings of Pierre shale. In this roughly defined area it is possible to obtain water only from the river, streams and exceedingly deep wells except in areas of subsurface drainage. There are practically no springs in this area. In the soils of the Morton series sub-surface drainage water is more common and there are a limited number of springs.

Beginning at a point on the flats near Cannonball, North Dakota, and running roughly southward is a belt of land underlaid by Fox Hill sandstones which are a water bearing strata. In the vicinity of Cannonball, reliable sources of water can be obtained by wells approximately 127 feet deep. In the area around McLaughlin, which is in the eastern central portion of the belt, reliable water supply can be obtained from this strata at 169 feet. This is the source of water supply for the city of McLaughlin. The belt leaves the reservation at a point north of Firesteel, South Dakota, on the west and a point approximately half way between Glencross, South Dakota, and Trail City, South Dakota, on the east in what is known as the Timber Lake Basin. In the Standing Rock portion of the Timber Lake Basin water can be obtained from the Fox Hills Sandstones at a depth of between 30 to 60 feet. Where this belt is broken by rivers and streams or by erosion springs are numerous.

A P P E N D I X E

List of Families Living Below the "Taking line" of the Oahe Reservoir on the Standing Rock Reservation, as of July 1, 1951

Little Eagle Community

➤ Blackcloud, Peter	Did Not Butcher, Louise
Eagleman, Moses	Foster, Harry
Hayes, Dave	

Wakpala Community

Armstrong, Samuel	Ashes, Jake
➤ Bearsheart, Wilbur	➤ Birdhorse, Robert
Boneclub, Harry	➤ Cadotte, Alma & Henry Safe Cloud, Sr.
Catchbear, Alex & Ulysis	➤ Claymore, Joseph
Strongheart	➤ Gabe, Charles
Eagleman, Luke	Goodfur, Lela
➤ Good Elk, Philip	➤ Hanley, Wilmer and Joseph
Gunner, Louis	➤ Hawk, Enoch
Hawk, Edward	Howard, James
Hawk, William	Jones, Leonard
Howard, Wm. John	➤ LeFremboise, Regina & John
Lecompte, Benidict	➤ Mad Bear, Robert
Philips, John	➤ Strongheart, Walter
See Walker, Jerry	Tiona, Dave
Tiger, Walter	➤ Whitesell, Charles

Kenel Community

➤ Alkire, Leonard	➤ Alkire, Samuel
Amidst, Mrs.	➤ Crowfeather, Francis
Crowfeather, Wm. Frowin	➤ Crowfeather, Louis
Crowghost, Leo	Crowskin, Louis
Davies, George	➤ Defender, Ben. Sr.
➤ Defender, Ben. Jr.	Demery, Mrs. Mary
Demery, Rose Rabbithead	End of Horn, Abraham
Fire Cloud, Joseph	Left Hand, Ambrose
Left Hand, Henry George	Hand, Vermund
Holy Bear, Gertrude M.	Hona, George
Iron Horn, Rose Rabbithead	Jordan, Jacob
➤ Jordan, John	Little Bear, John
➤ Marshall, William	➤ Marshall, Robert
➤ Martin, Frank	➤ Martin, Gabe

Kenel Community (Cont'd)

→ Martin, Jerome
Pheasant, Mrs. Rose
Rough Surface, Sam. Sr.
Sac, John
→ Silk, Steven
White Bull, Cecil
→ Yellowfat, Raymond

→ Martin, Theodore
Rough Surface, Abraham
Rough Surface, Sam. Jr.
Sleeps, Dan.
Thief, Louis
Whitebull, Jacob

Agency Community

Antelope, Ignatius
Ashes, Henry ✓
→ BearKing, Lawrence
Brings or Double Rider, Julia ✓
Brought Plenty, August
Bull Head, James ✓
Chapman, Ernest
→ Cottonwood, Jerome
Crow Necklace, Charles
→ Dunn, Charles
→ Four, Eugene
→ Gray Bear, Harry ✓
Halsey, Jacob ✓
→ Keeps Eagle, Herbert
→ Keeps Eagle, Paul
→ Kills Spotted, Ben
Pretends Eagle, Joseph
→ Loans Him Arrows, Bede
Loneman, Louisa ✓
→ Lovejoy, James
Red Horse, Chase ✓
Silk, Thomas ✓
Vaulter, James ✓
Williamson, Geo. & Maggie ✓
Young, Gabe & Mary ✓

Big Horn Elk, Louis
Azure, George ✓
Belland, Mrs. Esther ✓
Blackhoop, Frank ✓
Brought Plenty, John ✓
→ Callousleg, Theodore
→ Claymore, Peter
→ Crazy Walker, Charles and Paul
Crow Necklace, David
→ Dunn, George Herbert
Good Left Hand, Luke ✓
Halsey, Mrs. Clementine or Percy ✓
Has Tricks, Jerome ✓
→ Keeps Eagle, Joseph
Kidder, Daniel ✓
Kuntz, Adam and Sophie ✓
Loans Him Arrows, Mrs. Fannie ✓
→ Loans Him Arrows, John
Long Chase, Francis ✓
Magpie Eagle, Lawrence ✓
→ Silk, Harry, Sr.
→ Tuske, Charles
Whiteshield, Clarence
Yellow Lodge, Francis ✓
Young Hawk, Francis

Cannonball Community

Blackbear, Chas. & Harding	Conica, Henry
Two Horses	Buckley, John
Blackcloud, Felix	Cottonwood, Asa
Buffalo Boy, Herbert	Eagleboy, Ambrose
Douglas, Louisa (Many Horses)	Fourth, Emma
Fast Horse, Henry	Guy, Frank & Cordelia
Fool Bear, Charles	Huff, Narvin
Huff, Nellie & Lucille	Hunt, Wm. & Carrie
(Killspotted)	Ironroads, Samuel (John S.)
Joshua, Francis & Victoria	Many Horses, Felix
Many Horses, Louis	Many Horses, Francis & Louis Dogskin
Melvin, John	Onehorn, Edward & Ruth
Ramsey, Charles	Red Beans, John & Emma
Reddog, Paul & Agnes	Red Tomahawk, Barney
Red Tomahawk, Henry	Shelltrack, Charles and Moses Brave
Spotted Elk, Henry (Hugh)	Swift Eagle, Eli
Track, George & Mary	Two Bears, Basil
Two Bear, Louis & Sidney	Two Bear, Mandan & Louise
Cottonwood	Two Horses, Francis E. (Edward)
Two Shields, Elsie & Clifford	Standing Bear, Clyde
Two Shields, Sampson & L.	White Eagle, Milan
White Lightning, John	White Lightning, Paul
Wise Spirit, Charles & Asa Lester	White Twin, Charles (Felix)
Yellowhammer, Edward & Richard	Yellowhammer, Wm. & Hermine

A P P E N D I X F

Reference Material on Costs of Relocation

1. Definitions and interpretations

In section 2(b)(2) of Public Law 870, quoted earlier in the report, are certain words and phrases that need to be defined.

"Tribe" and "each Tribe" refer to the Standing Rock Sioux Tribe.

"Such lands" refers to lands within the taking area of the Oahe Reservoir.

"Double compensation" is taken to mean paying for land or property twice, as in paying for a house and then replacing it.

"Costs of relocating and re-establishing" are considered to be in addition to costs included in Sec. 2 (b)(1), Sec. 2(b)(3), and Sec. 2(e) of Public Law 870. 1/

2. Estimated costs

Costs are those of relocating and re-establishing individual Indians and their families. These costs concern only Indians on the Standing Rock Reservation whose homes will be inundated by the Oahe Reservoir. As far as re-establishing the economic, social, religious, and community life of the people is concerned, that is something that only the people themselves can do. Aids in the form of money grants can be provided, and such aids are recommended in this report. Traditionally, Indians have been spared some of the shocks of the business world in that their property is administered for them and they are relieved of the burden of paying taxes. In the long run, the special privileges and immunities which any minority group of our citizens have been accustomed to enjoy will be wiped out and the general welfare clause of the Constitution will apply to all citizens. Just what the lawmakers had in mind in using the word "protected" in the Oahe Act is not known unless it was that the Indian lands should remain untaxed and that the Federal Government should continue to render to the people without cost certain services such as those of health, education, welfare, and law and order.

On the Fort Berthold Reservation, where funds to defray the costs of relocation and re-establishment were mingled with other funds, the

1/ See copy of Public Law 870 elsewhere in Appendix.

policy of the council is to hold these costs to a minimum. The assumption is that the per capita payment of \$1,000 will enable individuals to meet the miscellaneous costs incidental to moving. Actual costs of relocation on the Fort Berthold Reservation should soon be available. These actual figures will be of more value than any additional estimates that might be made at this time.

In Report No. 117 (revised) addressed to the Cheyenne River Sioux Tribe the following estimates were made of costs per family for relocation and re-establishment:

Moving houses and outbuildings to new locations	\$800
Developing domestic and stock water	700
Physical transfer of personal property	100
Interim subsistence and incidental costs	500
Windbreaks and sheds to replace native shelter	800
Total	<u>\$2,900</u>

Economists of the Bureau of Reclamation at Huron, South Dakota, have estimated the costs of relocating and re-establishing a dry-land farmer from the Dewey-Zieback-Perkins County area not far south of the Standing Rock Reservation at \$850. The Missouri Division of Resources and Development, Jefferson City, Missouri, cites the costs of removal of families from the Wappapello Reservoir at \$50 to \$400 at 1940 prices. A recent South Dakota report cites costs of removal from the Fort Randall and Shadehill Reservoirs. Excerpts from these three sources follow.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Region 6, Missouri-Oahe District, Huron, South Dakota

May 11, 1951

Mr. J. M. Cooper, Director
Missouri Basin Investigations
Office of Indian Affairs
804 North 29th St.
Billings, Montana

Dear Mr. Cooper:

In reply to your question in regard to the statement, "The average cost of moving is estimated at \$850 per family..." as found on page 37 of Definite Plan Report, Volume I, General Plan — Bixby Unit, Moreau Division, South Dakota, Missouri River Basin Project, the following points were considered in arriving at this figure.

These costs apply to farmers and ranchers who, because of drought are forced to move out of the country. The period involved is 100 years, and it was estimated that during the first of the three droughts the cost would be more than \$850 while the last, or third, drought would probably be somewhat less.

It must be recognized that the \$850 is an estimated figure based on some actual moving costs, also expenses and observations of the personnel of the Economics Section. The total cost is broken down into the following sub-divisions:

1. Moving expenses. This includes all costs of moving from present to future location by whatever means used, also loss of goods not moved but sold at a loss before moving. \$300.00
 2. Loss of Income while moving, and before obtaining job or becoming established in business in new location. This can be estimated over a period of three months at \$150 or five months at an average loss of \$90. \$450.00
 3. Unexpected costs of expenses in becoming established in new home. These items will vary but are certain to occur. \$100.00
- \$850.00

All figures have been rounded. This office is constantly searching for new and better data of this type, and if we secure the same we will be glad to forward it on to you. If your office obtains data of similar nature we would appreciate receiving copies of the same from you.

Sincerely yours,
Sgd. J. W. GRIMES, Dist. Mgr.

A report "Local Effects of the Wappapello Reservoir, Wayne County, Missouri, with Suggestions for Lessening Undesirable Effects of Reservoirs" by the Missouri Division of Resources and Development, Jefferson City, Missouri, February 1950, says in part:

"While several notable improvements in method have been made since the acquisition of land for the Wappapello Reservoir, more need to be made. Displaced persons at Wappapello had to bear several costs for which they received no compensation. Whatever it cost owner-operators or tenants to relocate or move to a new farm they bore without compensation from the government. This was also the case with city residents and businessmen. It took most farmers from 2 to 3 weeks of looking for another farm before they found one that was acceptable although some looked as long as 3 months. That was at a time when farms were easier to get than they now are. It cost individual farmers from \$50 to over \$400 to move, not considering time lost. In areas of larger farms, or moving at the present time when costs are high, the expense would be much greater. It cost the owner of one business over \$700 to move his equipment. It was reported that in one extreme case a farmer spent \$2,000.00 looking for a farm comparable to the one he had. Those who purchased other property had the usual expense of appraisals, financing charges and related costs. In most instances relocation also involved adjustment of inventories of livestock and machinery, sometimes at a sacrifice. In a few cases it involved a shift in type of farming and a loss from the point of view of experience. Whatever reputation a farmer had in his community was lost as an asset when he located in a new community. A business or professional man would experience somewhat related problems in getting re-established in a new area. In view of the fact that these costs arise out of forced moves, there is a need for federal legislation which would provide compensation for disturbance, the expenses of moving, the cost of getting re-established and for similar items. This should be done now. A large number of families already have had to move and several thousand more will have to move as a result of the current reservoir program."

Excerpts from "Some Local Impacts of Reservoirs in South Dakota" a report presented to South Dakota Coordinating Committee for Missouri Basin Development, October 29, 1951

1. As to Fort Randall Reservoir

"There are several costs incurred when people must move from reservoir areas. Some of these are: (1) cost of moving buildings, (2) cost of moving livestock, machinery and household goods, and (3) the loss of income as a result of disrupting the farm business as a going concern until the owner becomes re-established.

"The cost of moving buildings varies considerably depending on the number moved and the distance to the new location. It was estimated that a typical set of farm buildings could be moved for \$1,000 to \$1,500. These figures do not include costs of foundations, excavations or other costs. At the time this study was made there were not enough cases where buildings had been moved to provide an adequate basis for determining these costs. There is need for further study to provide criteria for estimating these costs. With present procedures a part of these costs are allowed for in the differences between the appraised value of buildings and the salvage value. The original owner is given an opportunity to buy the buildings at the salvage value which is generally lower than the appraised value.

"The livestock, equipment, and household goods must also be moved. No estimates were obtained for these costs.

"One man who planned to move about 100 miles away estimated his cost of relocation at \$5,000. This included the cost of feed purchased for livestock between the time of moving and a time when pastures would carry the livestock. These costs are affected by the length of time required to find suitable replacement property."

2. As to Shadehill Reservoir

"Several landowners who were forced to move retained all or some of their buildings and moved them to a new location. This moving was at their own expense. One landowner stated that it cost him \$1,200 to move the buildings. Foundations, excavation and other costs were additional."



