

APPENDIX Q

IMPACTS OF COAL DEVELOPMENT IN CASCADE COUNTY

The following analysis is based on many assumptions. This was necessary because no proposals have been made for development of the Great Falls Coal Field. The deposits in the area are high in sulfur, are found in small beds, and would require underground mining. The following discussion of the Economic-Demographic model indicates the type of impacts that could occur given the assumptions. The numbers shown are not absolute, but are predictions of population, employment, and fiscal trends caused by a project of the kind described.

To measure possible impacts of coal development in Cascade County, an Economic-Demographic Model developed by North Dakota State University for the BLM in Montana was used. An assumption was made that three underground mines would be developed in the Stockett area to supply enough coal for Montana Power's proposed Salem Project. A total development labor force of 230 people and a total production labor force of 690 people was projected. An assumption was also made that a substantial amount of the work force would commute from Great Falls. Under the above assumptions, the population and employment increases would all occur in Cascade County. Of the cities examined, 95% of the construction workers and 77% of the production workers would reside in Great Falls. A similar proportion of the indirect employment from the project would also occur in Great Falls. This does not mean, however, that Belt and Stockett would not be impacted. Belt would see an increase in population of over 10% due to the project, and Stockett would see an increase in population of almost 17% from the project. The magnitude of this increase would have major impacts on Belt and Stockett, which lack the infrastructure and school capacity to meet these population increases. The population projections for Cascade County, Great Falls, Belt, and Stockett through the year 2005 are shown in Figures Q-1 to Q-4. Employment projections for Cascade County are shown in Table Q-1.

The projections made by the E/D model are just that; projections. The model shows trends but does not predict the actual magnitudes of employment or fiscal impacts.

The fiscal impacts of these developments would begin in 1994. Aggregate increases in revenue to state and local governments are shown in Table Q-2. Aggregate increases in expenditures are shown in Table Q-3. A summary of income and expenditures for Cascade County are shown in Table Q-4.

The fiscal impacts shown in Tables Q-2, Q-3 and Q-4 do not show all of the sources of income or the costs faced by the county and the state. No Montana Coal Board payments to counties and municipalities are included in the E/D model, because these grants are handled on a case by case basis and therefore the distribution of funds cannot be predicted by the model.

With the present level of information, conclusions about the effects of leasing on the social well-being in the area cannot be drawn. If interest is expressed in leasing a specific tract, further assessment will be necessary using the methods outlined in the BLM's social assessment guide.

FIGURE Q-1
Population Forecasts for Cascade Co.

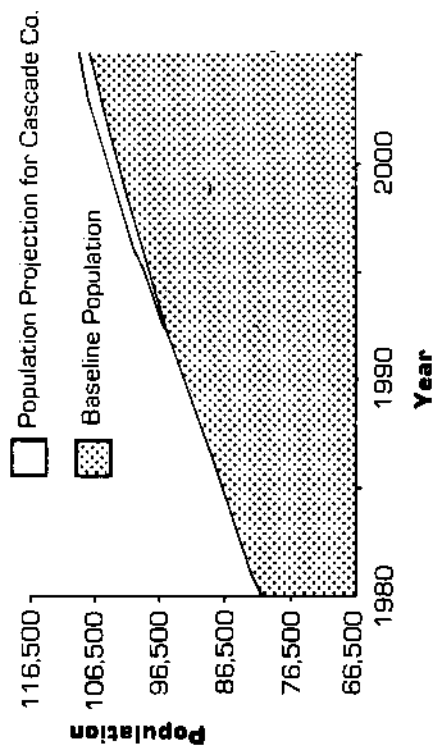


FIGURE Q-2
Population Forecasts for Great Falls

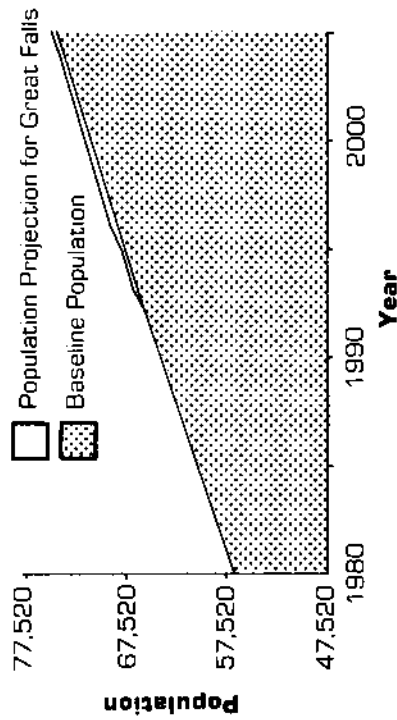


FIGURE Q-3
Population Forecasts for Belt

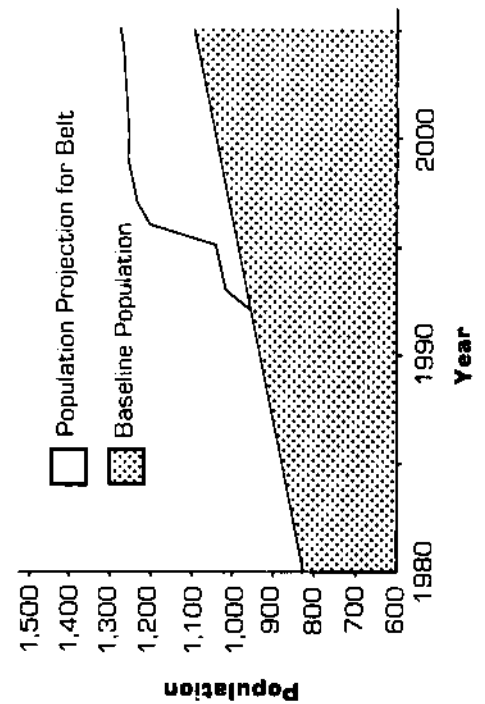
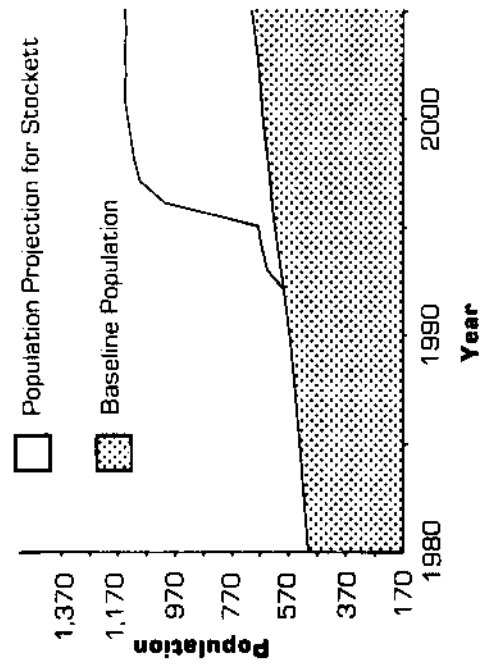


FIGURE Q-4
Population Forecasts for Stockett



APPENDIXES

**TABLE Q-1
EMPLOYMENT PROJECTIONS FOR CASCADE COUNTY**

Year	Employment							Employ. Change	% Change
	Projected		Baseline			Summary			
	Construc- tion	Energy Oper.	Indirect Employ.	Nonag. Employ	Ag. Employ.	Total Employ.			
1981	0	0	0	37,594	1,088	38,682	0	0	
1982	0	0	0	38,024	1,084	39,108	426	1	
1983	0	0	0	38,446	1,080	39,526	418	1	
1984	0	0	0	38,865	1,076	39,941	415	1	
1985	0	0	0	39,279	1,068	40,347	406	1	
1986	0	0	0	39,687	1,064	40,751	404	1	
1987	0	0	0	40,085	1,060	41,145	394	1	
1988	0	0	0	40,479	1,056	41,535	390	1	
1989	0	0	0	40,868	1,052	41,920	385	1	
1990	0	0	0	41,252	1,052	42,304	384	1	
1991	0	0	0	41,632	1,048	42,680	376	1	
1992	0	0	0	42,002	1,044	43,046	366	1	
1993	230	0	822	42,368	1,040	44,460	1,414	3	
1994	230	0	813	42,732	1,036	44,811	351	1	
1995	231	0	804	43,098	1,036	45,161	350	1	
1996	0	690	1,213	43,444	1,032	46,379	1,218	3	
1997	0	691	1,200	43,791	1,028	46,710	331	1	
1998	0	690	1,186	44,134	1,028	47,038	328	1	
1999	0	691	1,174	44,471	1,024	47,360	322	1	
2000	0	690	1,162	44,808	1,020	47,680	320	1	
2001	0	690	1,149	45,139	1,020	47,998	318	1	
2002	0	690	1,137	45,462	1,016	48,305	307	1	
2003	0	691	1,125	45,784	1,016	48,616	311	1	
2004	0	690	1,115	46,101	1,012	48,918	302	1	
2005	0	690	1,104	46,416	1,012	49,222	304	1	

**TABLE Q-2
AGGREGATE REVENUES (in thousands of dollars)**

Year	Severance Special Fund	Personal Income Tax	Corporate Income Tax	Federal Coal Royalty	Highway Tax	Cig.-Tab.- Liq.-Beer Tax	Equaliza- tion Tax	Coal Conv. Fund	Severance General Fund	Severance Trust Fund	Total Income	Net Balance
1981	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	1	0	0	0	1	1
1993	0	0	0	0	0	0	2	0	0	0	2	-599
1994	0	494	66	0	46	14	5	0	0	0	625	-27
1995	0	494	66	0	49	15	10	0	0	0	634	-34
1996	0	494	66	0	50	15	12	0	0	0	637	-1,024
1997	128	845	94	370	127	38	14	0	82	209	1,907	-780
1998	128	845	94	370	138	41	14	0	82	209	1,921	-822
1999	128	845	94	370	142	42	15	0	82	209	1,927	-844
2000	128	845	94	370	145	43	16	0	82	209	1,932	-856
2001	128	845	94	370	146	44	15	0	82	209	1,933	-869
2002	128	845	94	370	148	44	16	0	82	209	1,936	-844
2003	128	845	94	370	148	44	16	0	82	209	1,936	-818
2004	128	845	94	370	147	44	16	0	82	209	1,935	-776
2005	128	845	94	370	147	44	17	0	82	209	1,936	-750

TABLE Q-3
AGGREGATE EXPENDITURES (in thousands of dollars)

Year	Education Transfers	Highway Fund	Highway Operations	General Govt. Functions	Highway Construction	Total Expenditures	Net Balance
1981	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	1
1993	0	271	0	103	227	601	-599
1994	0	293	10	108	239	650	-27
1995	0	309	10	109	240	668	-34
1996	0	817	10	282	622	2,462	-1,824
1997	209	890	27	300	662	2,687	-780
1998	209	933	29	301	665	2,742	-822
1999	209	962	29	301	664	2,770	-844
2000	209	989	29	298	657	2,787	-856
2001	209	1,011	29	295	652	2,801	-869
2002	209	1,011	28	289	637	2,779	-844
2003	209	1,007	28	282	622	2,753	-818
2004	209	992	27	274	604	2,711	-776
2005	209	985	26	268	591	2,684	-750

TABLE Q-4
INCOME AND EXPENDITURES FOR CASCADE COUNTY
(in thousands of dollars)

Year	Income			Expenditures			Net Fiscal Balance
	Share of Local Property Tax	Federal Revenue Sharing	Highway Fund	Law Enforcement	Social Services	Other Govt.	
1981	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0
1991	3	0	0	0	0	0	3
1992	7	0	0	0	0	0	7
1993	10	0	0	4	8	41	-44
1994	29	0	5	5	9	44	-23
1995	62	0	6	5	9	44	-11
1996	76	0	6	13	23	116	-70
1997	87	0	15	13	25	123	-59
1998	85	0	16	13	25	124	-61
1999	94	0	16	13	25	124	-53
2000	98	0	16	13	25	123	-46
2001	96	0	16	13	25	122	-48
2002	99	14	16	13	24	119	-28
2003	101	14	16	13	24	116	-22
2004	102	14	15	12	23	113	-17
2005	103	14	15	12	22	111	-13