DETERMINATION OF CROP MIX REVISION ONE

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Eastern Snake Plain Aquifer Model Enhancement Project
Scenario Document Number DDW-001

DESIGN DOCUMENT OVERVIEW

Design documents are a series of technical papers addressing specific design topics on the eastern Snake River Plain Aquifer Model upgrade. Each design document will contain the following information: topic of the design document, how that topic fits into the whole project, which design alternatives were considered and which design alternative is proposed. In draft form, design documents are used to present proposed designs to reviewers. Reviewers are encouraged to submit suggested alternatives and comments to the design document. Reviewers include all members of the Eastern Snake Hydrologic Modeling (ESHM) Committee as well as selected experts outside of the committee. The design document author will consider all suggestions from reviewers, update the draft design document, and submit the design document to the SRPAM Model Upgrade Program Manager. The Program Manager will make a final decision regarding the technical design of the described component. The author will modify the design document and publish the document in its final form in .pdf format on the SRPAM Model Upgrade web site. This revision reports the final methods and results for determination of crop mix.

The goal of a draft design document is to allow all of the technical groups which are interested in the design of the SRPAM Model Upgrade to voice opinions on the upgrade design. The final design document serves the purpose of documenting the final design decision. Once the final design document has been published for a specific topic, that topic will no longer be open for reviewer comment. Many of the topics addressed in design documents are subjective in nature. It is acknowledged that some design decisions will be controversial. The goal of the Program Manager and the modeling team is to deliver a well-documented, defensible model which is as technically representative of the physical system as possible, given the practical constraints of time, funding and manpower. Through the mechanism of design documents, complicated design decisions will be finalized and documented. Final model documentation will include all of the design documents, edited to ensure that the “as-built” condition is appropriately represented.

INTRODUCTION

The calculation of net recharge from surface water irrigation, or the net withdrawal from ground water irrigation, requires a calculation of evapotranspiration (ET). Calculation of ET requires knowledge of the crop mix. Differences in crop mix can change average ET by as much as ten percent,

which translates into 1.7×10^{10} ft^3 (400,000 acre feet), or approximately seven percent of the aquifer water budget.[1]

This design document examines various sources of crop-mix data, the challenges posed by limitations of each, and explains the selected method to determine crop mix for use in the study.

USE OF DATA

Crop-type data will be applied to irrigated acreage data to determine the crop mix in each model cell. A weighted-average of estimated ET for the crop mix will be calculated, based on the reference ET and crop coefficients published for the nearest weather station (Allen and Brockway 1983). This document describes only the crop-mix aspect of this process. Design Document DDW-015 describes the determination of irrigated lands, and Design Document DDW-010 describes the calculation of ET.

SOURCES OF DATA

Because some counties lie partly outside the study area, and because the crop mix outside may differ from that inside, a method is needed to calculate an inside-study-area-only crop mix. This section describes data sources available to calculate the crop mix (available for the full calibration period), and data sources available to compare or test these sources (available for shorter time periods).

The primary data source is the National Agricultural Statistics Service (NASS) crop report data, which are based on county-wide surveys of farm operators. These data are available in three formats for the study area. These are the “Published Estimates Data Base On Line” (USDA 2000), the “US Agricultural Census” (USDA 1992, 1997) and the “Idaho Agricultural Statistics” (Idaho Department of Agriculture 1981 - 2002) report. Laney (2000) found that the Published Estimates Data Base On Line (PEDB) version gave county-wide acres planted and harvested, by crop. These reports did not include alfalfa hay for the earlier years of the study, so Laney used 1982 and 1987 values from the ”US Agricultural Census” (Ag Census) version of the NASS data for alfalfa. Laney also used the Idaho Agricultural Statistics (IAS) report to fill in gaps in the PEDB potato data. The Ag Census reports give more detailed results, including details of irrigated and non-irrigated acreage by county, for the years 1982, 1987,

[1] Assuming two feet of ET on 2,000,000 irrigated acres and a 6,000,000 acre-foot aquifer budget.

1992, and 1997. The IAS report is compiled from NASS data and includes yearly values for irrigated and non-irrigated acreage, by county, for major crops. The IAS data are currently available for years 1980 through 2001. Many of the county agents interviewed recommended the NASS/IAS data.

Three alternate sets of data are available for comparison purposes. The first is a synthesized crop mix based on reasonable assumptions for the areas of Bonneville and Cassia counties that are inside the study area. Another data set comes from interviews with the county agents of the counties that are partially within the study area. The final set of comparison data is a classification of 1980 LANDSAT images which provides a map of irrigated crop groups within the study area. GIS analysis allows calculation of mix ratios by geographic area (in-study-area portions of individual counties, in this case).

OPTIONS AND POTENTIAL LIMITATIONS

Limitations of data available for use. One option is to synthesize a representative crop mix from all the available data sources, by county, and apply that crop mix to the entire calibration period. This ignores any year-to-year variation in crop mix, as well as any long-term change over the period.

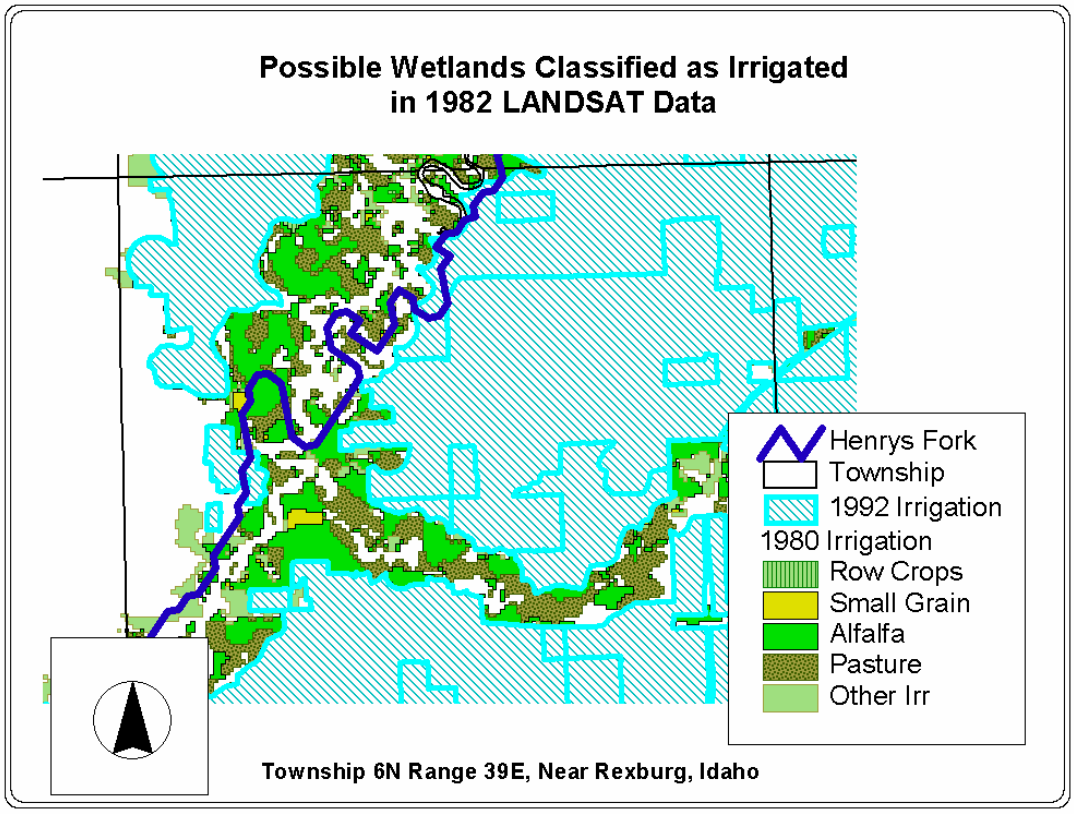
The other options represent the three versions of NASS data available. Option two is to use the PEDB county-wide version of NASS data. Its limitation is that it cannot represent differences between in-study-area and out-of-study-area crop mix. The Ag Census irrigated-only crop mix is a third option, which may more appropriately represent the in-study area crop mix. This is because dry farm areas tend to be outside the study area, and farmlands inside the study area tend to be irrigated. The limitation of these data is that they are only available for selected years (1982, 1987, 1992, 1997). A fourth option is to use the IAS annual summary reports of NASS data. None of these data include a classification for “pasture.”

Limitations of comparison data. Each of the comparison data sources has both positive and negative attributes. The synthesized crop mixes generated for Bonneville and Cassia counties are based upon reasonable assumptions, but the assumptions are untested. County-agent data are based largely upon the professional judgement of the county agents, rather than upon hard data. Agents cautioned the interviewers about this limitation. Since the interviews were conducted before the LANDSAT data set was identified, agents were only asked about the crops in the yearly NASS data, which did not include irrigated pasture.[2] The 1980 LANDSAT classification only included five categories - hay, row crops,

[2] One county agent did voluntarily report a very small percentage of irrigated pasture.

small grains, pasture, and other irrigated. Some natural wetlands may have been included as “irrigated,” and it appears that many of these possible wetlands are classified as “alfalfa” or “pasture,” as illustrated in Figure 1. Because alfalfa and pasture are high-ET crops, this may affect the comparability of the LANDSAT data set.

Figure 1



Differences in crop mix by water source or application method. Because of economic considerations, it is possible that ground-water irrigated lands have a different crop mix than surface-water irrigated lands. Because of agronomic factors, it is possible that sprinkler-irrigated lands have a different crop mix than gravity-irrigated lands. Design Documents DDW-017 and DDW-022 outline analyses of these possibilities, indicating that the effect may be a few percentage points of the overall ET rate. These represent distortions of spatial distribution of ET, but not of total volume of ET in a county. Because of the small potential effect of these factors, and the lack of data to adequately address possible differences, these effects are not treated.

ADJUSTMENT OF DATA SETS

To allow for comparisons, some adjustments were made to the data. These adjustments were made only for comparison purposes; it is not proposed to use adjustments in actual calculations of the water budget. For instance, all three versions of the NASS data report barley and wheat separately, but the LANDSAT classification only reports “small grains.” To directly compare these data sets, the NASS data were adjusted by combining all small grains. This adjustment would not be needed to actually use NASS data in a water-budget calculation. The adjustments made are explained below.

Only the IAS reports differentiate between spring and winter wheat. For other reporting formats, wheat acreage was apportioned to winter and spring wheat in the same ratio as winter and spring wheat in the 1981 - 2002 IAS data, by county. Winter wheat has a higher ET rate than spring wheat.

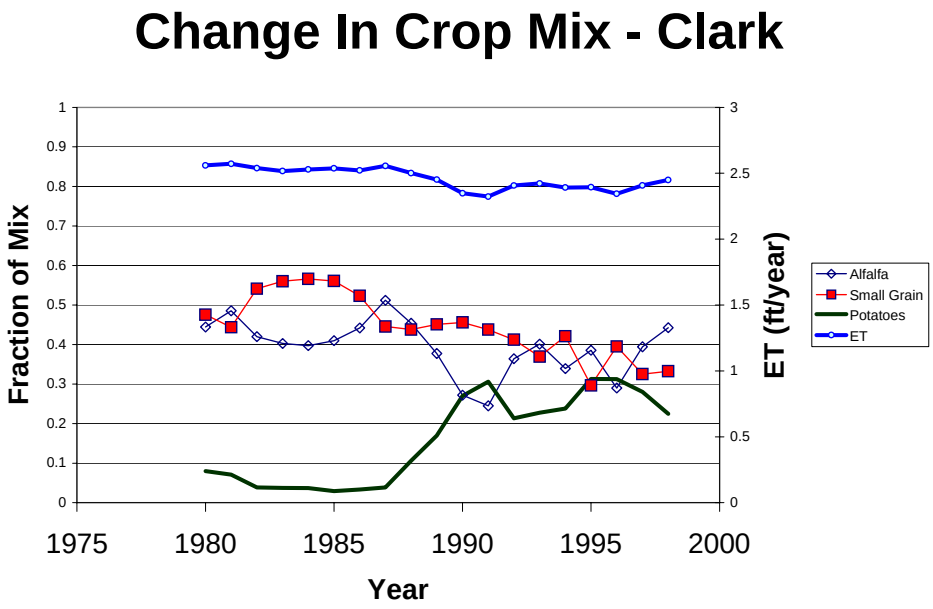
As mentioned, the 1980 LANDSAT data included a “pasture” classification that is not represented in other data sets. The “planning” or “pristine” ET for pasture is high relative to other crops, but informal observation and economic considerations indicate that pasture is much more likely than other crops to be managed at less-than-optimum levels of production, so the “actual” pasture ET may be lower. This difference, the possibility of wetlands being classified as pasture, and the fact that other data sets omit pasture, resulted in a decision to omit pasture from the LANDSAT data. Other percentages were normalized to sum to 100%. Because these data will be used to determine crop mix, but not to identify irrigated lands or quantify acres, no adjustments were made for non-cropped Conservation Reserve Program (CRP) lands.

No ET rate was available for the category “other irrigated.” Spring grain ET rates were assigned to the “other” lands in the LANDSAT classification (spring grain ET rates are less than alfalfa, pasture, and sugar beets, higher than corn and potatoes). For graphic display, 1980 NASS crops were combined into the same categories as the LANDSAT data. The graphic displays of 2001 crop mix combine grain corn and silage corn. Slight rounding errors were found in some county agent data and agents reported some minor crops (oats and pasture) not appearing in some other data sets. The crops used were normalized to sum to 100%.

TESTS AND COMPARISONS

Effect of using a single crop mix for the entire calibration period. Using the yearly county-wide PEDB crop mix data, a weighted-average ET depth (feet) was calculated for each year. Yearly values varied by as much as plus or minus six percent from the previous year's rate. The overall difference (high to low) was more than five percent in Bannock, Blaine, and Gooding Counties, and ten percent in Clark County. Figure 2 illustrates the Clark County results. The upper blue line is feet of ET and corresponds to the right vertical axis. The other lines represent the fraction of crop mix for alfalfa, small grains, and potatoes, and correspond to the left vertical axis.

Figure 2

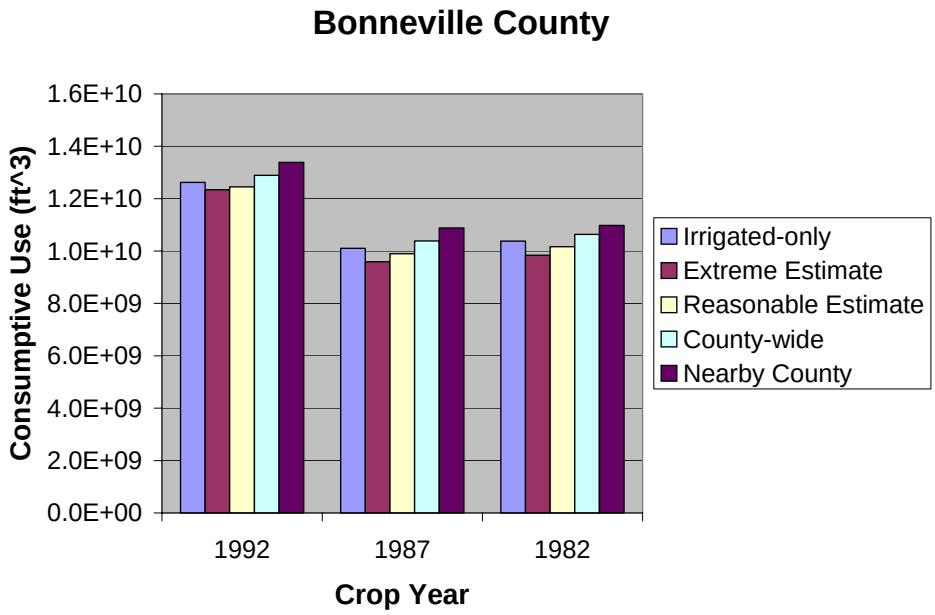


Effect of "out of study area" lands. About half the counties in the study area have farmed land inside and outside the study area. It is possible that the crop mix outside the study area is different than the mix inside. The potential errors associated with these crop differences were first assessed by estimating a "reasonable" and "extreme" crop mix for lands inside the study area, and calculating volume of ET for each. The "reasonable" crop mix was calculated based on a subjective effort to actually represent cropping patterns within and without the study area. For instance, Bonneville County has two irrigated areas outside the study area, Swan Valley and the Ririe Bench. Based on informal

observations, Swan Valley irrigation was assigned to alfalfa, and the Ririe Bench was assigned to potatoes and grain. All remaining crop acreage was assigned within the study area, and a mix calculated based on in-study acres. The "extreme" estimate was calculated in an effort to represent the greatest possible differences that might exist, still honoring the known county-wide data. This meant forcing as much grain and hay as possible outside the study area, and as many row crops as possible inside the study area, without changing total reported acres of any crop, within the county.

The analysis was performed for Bonneville County and Cassia County. The synthetic crop mixes were used as the standards by which three other methods were tested. The tested methods were ET volumes calculated by using: 1) PEDB county-wide data for all crops, 2) Ag Census or IAS irrigated-only data, and 3) the PEDB crop mix from a nearby county that was entirely within the plain. Figure 3 illustrates the results for Bonneville County. Cassia County was similar.

Figure 3



Based on these results, a preliminary decision was made to vary the crop mix over time. It was also decided to use irrigated-only reports (Ag Census or IAS), instead of county-wide PEDB reports. Because of concerns that there may have been biases not addressed by this first analysis, data were obtained to further test the preliminary decision. County agent interviews were conducted,

and a 1980 LANDSAT land-use classification was obtained which included crop-mix data.

A comparison was made between the 1980 LANDSAT data and the 1982 NASS[3] irrigated-only data for the crop categories included in the IAS reporting format. Figure 4 shows sample comparisons of crop percentages for Bannock County. Other counties are similar. Figure 5 shows the total ET volumes calculated using the LANDSAT and NASS crop mixes. A statistical test failed to find a significant difference between the methods (see appendix 1).

Figure 4

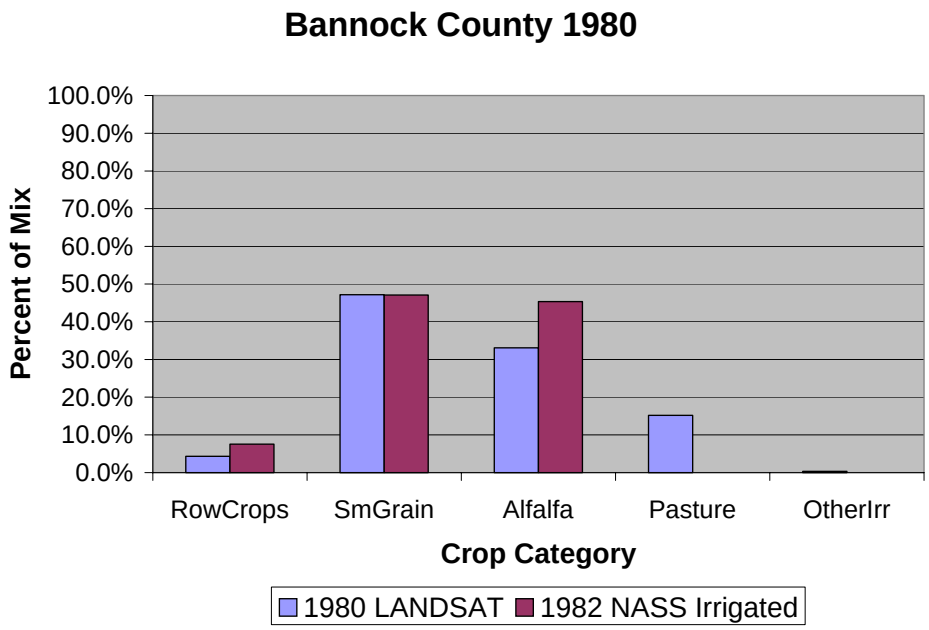
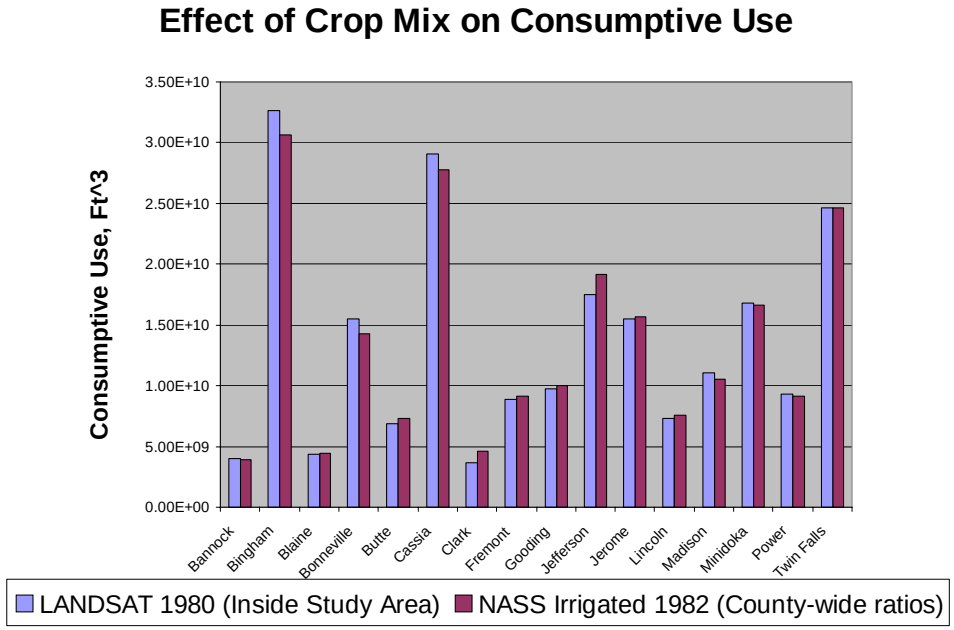


Figure 5

[3] At the time of the analysis, 1980 NASS data had not been obtained.



A second comparison was made between the 1981 - 2002 irrigated-only NASS major crop report (IAS format), and the county agent report for lands inside the study area. Figure 6 illustrates Cassia County. Other counties are similar. This comparison only includes counties lying partly within the study area, as only these county agents were interviewed.

Figure 6

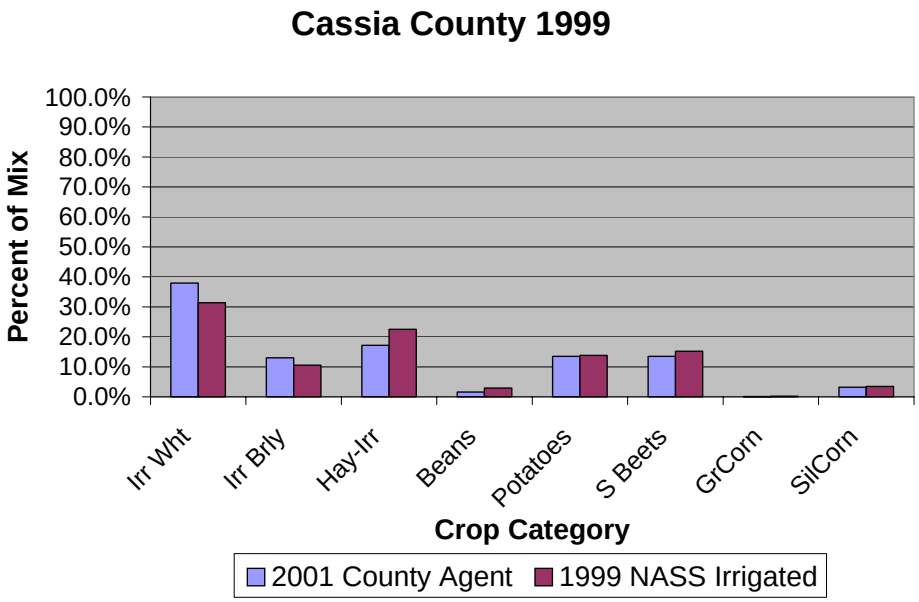
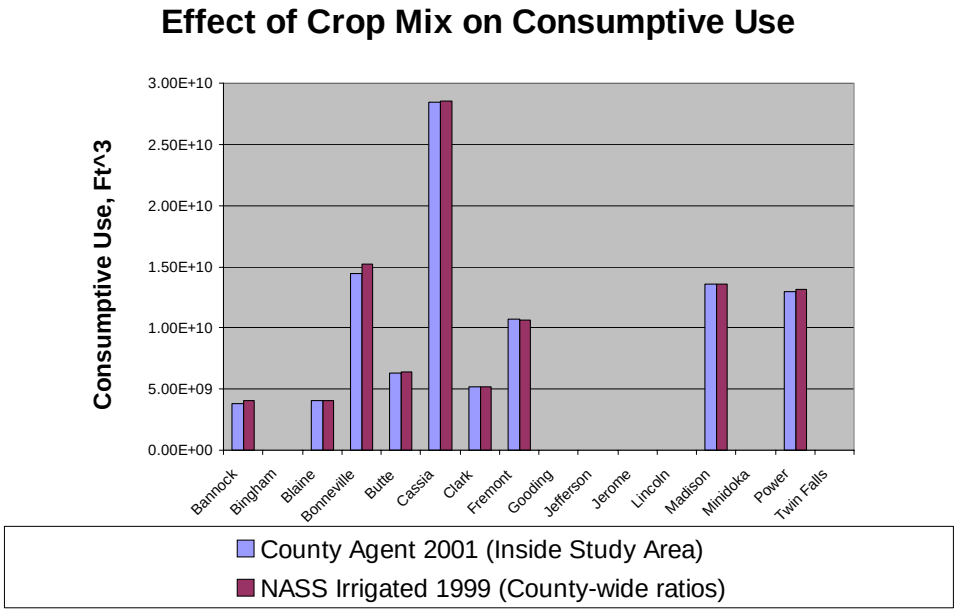


Figure 7 shows the total ET volume effect. The difference (about 1% of ET or 0.5% of the total aquifer budget) was small but statistically significant.[4] The possibility of scaling NASS data to match the county agent data was rejected because the county agent data were based on professional judgement rather than hard data.

Figure 7



SUMMARY

Key findings include:

1. Year-to-year changes in crop mix have up to six percent effect on ET.
2. Over twenty years, high-ET and low-ET crop mixes differ by as much as ten percent.
3. “Irrigated only” data better represent the study area than do “county-wide” data.

[4] Significant at alpha = 0.1 but not at alpha = 0.05. The actual differences were very small, but statistically significant because in all but one case, the county agent data indicated less ET than NASS data.

4. Comparison of NASS/IAS data with the 1980 LANDSAT classification failed to find a statistically significant difference.
5. Comparison with county agent data found only a small difference.

FINAL DATA COMPILATION

The final data compilation uses the published Idaho Agricultural Statistics (Idaho Department of Agriculture 1981 - 2002) data with the following refinements:

1. Alfalfa hay 1980 - 1984 is based on “all hay” from the 1982 ag census, scaled to reflect alfalfa/all hay and irrigated alfalfa/all alfalfa ratios by county from later data that include these categories.
2. Grain corn, silage corn, and oats 1980 - 1982 are based on ag census (USDA 1992 and 1997) and PEDB (USDA 2000) data.
3. In the data, no distinction was made between irrigated and dryland alfalfa for 1985 and 1986. The values reported here are adjusted for the ratio between all alfalfa and irrigated alfalfa for later years, by county.
4. Values reported here for beans 1980 through 1992 use the average value from later years, by county.
5. Adjustments 1 through 4 and other minor adjustments are documented in a spreadsheet included in the data CD accompanying this report.

Final crop mix fractions by year and county are listed in Table 1 in appendix 2.

DESIGN DECISION

Crop mix is calculated on an annual basis, from the State of Idaho report of National Agricultural Statistics Service irrigated crop acreage for major crops (IAS reporting format). The calculation for each county uses the irrigated-only crop mix for the county. Determination of irrigated acres will be discussed in Design Document DDW-015. Calculation of ET will be based on the crop mix and the nearest weather station, as discussed in Design Document DDW-010.

REFERENCES

Allen, R.A. and C.E. Brockway. 1983. Estimating Consumptive Irrigation Requirements for Crops In Idaho. Idaho Water and Energy Resources Research Institute.[5]

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Laney, S. 2000. Comparison of ET Estimating Methods for Selected Counties in the Eastern Snake Plain. Draft manuscript. Idaho Water Resources Research Institute.

Ott, R.L. 1993. An Introduction to Statistical Methods and Data Analysis. Duxbury Press.

US Department of Agriculture, National Agricultural Statistics Service (NASS), 1992 and 1997. US Census of Agriculture. Electronic data on compact disk.

US Department of Agriculture, National Agricultural Statistics Service (NASS), 2000. Published Estimates Data Base On Line. (http://www.nass.usda.gov:81/ipedb/front/html)

[5] It is anticipated that the soon-to-be-released update of this report will be utilized.

APPENDIX 1

Statistical Analysis (Ott 1993)

Method. Because the total magnitude of ET in each county varies widely, a paired-data test was selected. This test is more sensitive to possible differences than a standard test of means would be in this situation.

In a typical statistical test, there is danger of committing a "Type I" error, declaring a difference to exist when one does not. A small alpha (0.05 or 0.025) would be used to guard against this possibility.

In this case, we are testing the claim that a proposed method is not different from the standard. A larger alpha (0.1) guards against the possibility of committing a "Type II" error, failing to find a difference when one does exist.

Comparison with LANDSAT Data

Statistical Test: Paired *t* Test (Ott p. 293)

H_o: $Mean_d = D_o$
H_a: $Mean_d < D_o$

Test Statistic: $t =$ (d-bar - D_0)/ (s_d/(square root n))

Where d-bar and s_d are the mean and standard deviation of differences.

Rejection Region: reject H_o if $t < -t_{(alpha, n-1)}$

Data:

d-bar = -8.5 E7 ft^3 (NASS - LANDSAT)
$D_o = 0$
s_d = 8.5 E8 ft^3
n = 16
t = -0.40
$t_{(0.1,15)}$ = 1.34

Conclusion:

Because t is not less than $-t_{(0.1,15)}$, fail to reject H_o and conclude that the NASS/State of Idaho data are not shown to be different from the LANDSAT data at the alpha = 0.1 level.

Comparison with County Agent Data

Statistical Test: Paired *t* Test (Ott p. 293)

H_o: $Mean_d = D_o$
H_a: $Mean_d > D_o$

Test Statistic: $t =$ (d-bar - D_0)/ (s_d/(square root n))

Where d-bar and s_d are the mean and standard deviation of differences.

Rejection Region: reject H_o if $t > t_{(alpha, n-1)}$

Data:

d-bar = 1.3 E8 ft^3 (NASS - county agent)
$D_o = 0$
s_d = 2.4 E8 ft^3
n = 9
t = 1.69
$t_{(0.1,8)}$ = 1.40

Conclusion:

Because t is greater than $t_{(0.1,8)}$, reject H_o and conclude that the NASS/State of Idaho data are shown to give larger ET than the county agent data at the alpha = 0.1 level.

APPENDIX 2

Table 1

Final Crop Mix Fractions for Irrigated Crops
in the Eastern Snake Plain Aquifer Model Enhancement Project
Study Area

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Bannock	1980	0.12	0.23	0.000	0.000	0.000	0.006	0.036	0.000	0.21	0.40
Bingham	1980	0.15	0.11	0.000	0.001	0.013	0.007	0.185	0.024	0.34	0.17
Blaine	1980	0.51	0.34	0.000	0.000	0.000	0.026	0.000	0.000	0.09	0.03
Bonneville	1980	0.12	0.26	0.000	0.001	0.005	0.005	0.167	0.000	0.19	0.25
Butte	1980	0.52	0.29	0.000	0.000	0.000	0.023	0.053	0.000	0.09	0.02
Cassia	1980	0.17	0.15	0.024	0.002	0.032	0.005	0.097	0.087	0.12	0.31
Clark	1980	0.42	0.18	0.000	0.000	0.000	0.000	0.093	0.000	0.10	0.20
Fremont	1980	0.08	0.55	0.000	0.000	0.000	0.008	0.185	0.000	0.14	0.04
Gooding	1980	0.36	0.07	0.033	0.093	0.083	0.009	0.104	0.015	0.10	0.12
Jefferson	1980	0.40	0.24	0.000	0.000	0.015	0.008	0.109	0.000	0.22	0.00
Jerome	1980	0.30	0.08	0.091	0.024	0.027	0.004	0.088	0.044	0.25	0.09
Lincoln	1980	0.39	0.16	0.004	0.016	0.054	0.009	0.061	0.075	0.18	0.06
Madison	1980	0.09	0.36	0.000	0.000	0.014	0.006	0.201	0.000	0.22	0.11
Minidoka	1980	0.12	0.19	0.043	0.004	0.035	0.004	0.088	0.209	0.25	0.05
Power	1980	0.04	0.04	0.000	0.000	0.000	0.002	0.084	0.040	0.32	0.47
Twin Falls	1980	0.28	0.10	0.205	0.039	0.036	0.005	0.061	0.044	0.10	0.13
Bannock	1981	0.13	0.27	0.000	0.000	0.000	0.010	0.040	0.000	0.15	0.40
Bingham	1981	0.14	0.14	0.000	0.001	0.010	0.006	0.199	0.027	0.31	0.16
Blaine	1981	0.50	0.38	0.000	0.000	0.000	0.018	0.000	0.000	0.08	0.03
Bonneville	1981	0.12	0.28	0.000	0.000	0.001	0.006	0.183	0.000	0.11	0.30
Butte	1981	0.52	0.32	0.000	0.000	0.000	0.023	0.054	0.000	0.06	0.02
Cassia	1981	0.17	0.15	0.025	0.002	0.028	0.005	0.109	0.084	0.10	0.31
Clark	1981	0.41	0.22	0.000	0.000	0.000	0.000	0.109	0.000	0.10	0.16

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Fremont	1981	0.08	0.58	0.000	0.000	0.000	0.007	0.185	0.000	0.13	0.03
Gooding	1981	0.40	0.06	0.036	0.096	0.081	0.012	0.122	0.018	0.09	0.09
Jefferson	1981	0.39	0.28	0.000	0.001	0.016	0.008	0.120	0.000	0.18	0.00
Jerome	1981	0.30	0.12	0.090	0.028	0.022	0.004	0.099	0.041	0.21	0.09
Lincoln	1981	0.38	0.21	0.004	0.012	0.051	0.008	0.064	0.056	0.17	0.05
Madison	1981	0.08	0.43	0.000	0.000	0.009	0.005	0.200	0.000	0.16	0.12
Minidoka	1981	0.13	0.21	0.044	0.002	0.029	0.002	0.097	0.208	0.23	0.06
Power	1981	0.04	0.05	0.000	0.000	0.000	0.002	0.095	0.030	0.31	0.47
Twin Falls	1981	0.28	0.12	0.200	0.050	0.031	0.004	0.065	0.053	0.08	0.12
Bannock	1982	0.12	0.30	0.000	0.000	0.000	0.010	0.041	0.000	0.17	0.36
Bingham	1982	0.15	0.14	0.000	0.000	0.010	0.006	0.214	0.022	0.30	0.16
Blaine	1982	0.50	0.40	0.000	0.000	0.000	0.014	0.000	0.000	0.07	0.03
Bonneville	1982	0.11	0.32	0.000	0.000	0.002	0.007	0.181	0.000	0.11	0.27
Butte	1982	0.52	0.31	0.000	0.000	0.000	0.020	0.057	0.000	0.07	0.02
Cassia	1982	0.16	0.15	0.022	0.001	0.023	0.004	0.101	0.071	0.16	0.31
Clark	1982	0.34	0.23	0.000	0.000	0.000	0.000	0.091	0.000	0.24	0.10
Fremont	1982	0.08	0.60	0.000	0.000	0.000	0.006	0.196	0.000	0.09	0.02
Gooding	1982	0.39	0.10	0.035	0.085	0.066	0.014	0.121	0.021	0.06	0.11
Jefferson	1982	0.38	0.28	0.000	0.001	0.019	0.009	0.121	0.000	0.18	0.00
Jerome	1982	0.29	0.12	0.089	0.032	0.019	0.004	0.099	0.037	0.20	0.10
Lincoln	1982	0.36	0.20	0.004	0.013	0.043	0.008	0.062	0.068	0.17	0.07
Madison	1982	0.07	0.46	0.000	0.000	0.005	0.003	0.181	0.000	0.19	0.09
Minidoka	1982	0.12	0.22	0.043	0.002	0.025	0.001	0.096	0.191	0.23	0.07
Power	1982	0.04	0.09	0.000	0.000	0.000	0.002	0.095	0.034	0.30	0.44
Twin Falls	1982	0.27	0.12	0.195	0.061	0.025	0.004	0.066	0.054	0.09	0.12
Bannock	1983	0.14	0.35	0.000	0.000	0.000	0.010	0.026	0.000	0.11	0.36
Bingham	1983	0.17	0.14	0.000	0.001	0.014	0.013	0.223	0.025	0.24	0.17
Blaine	1983	0.51	0.35	0.000	0.000	0.000	0.014	0.000	0.000	0.10	0.03
Bonneville	1983	0.12	0.30	0.000	0.000	0.004	0.004	0.174	0.000	0.11	0.29
Butte	1983	0.54	0.29	0.000	0.000	0.000	0.027	0.048	0.000	0.07	0.02
Cassia	1983	0.17	0.13	0.024	0.001	0.036	0.004	0.116	0.073	0.17	0.28

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Clark	1983	0.34	0.25	0.000	0.000	0.000	0.000	0.034	0.000	0.27	0.11
Fremont	1983	0.08	0.58	0.000	0.000	0.000	0.005	0.213	0.000	0.09	0.03
Gooding	1983	0.43	0.08	0.038	0.094	0.062	0.006	0.098	0.024	0.08	0.09
Jefferson	1983	0.40	0.27	0.000	0.000	0.023	0.008	0.106	0.000	0.19	0.01
Jerome	1983	0.31	0.12	0.094	0.035	0.024	0.004	0.093	0.040	0.18	0.10
Lincoln	1983	0.40	0.18	0.005	0.014	0.049	0.009	0.069	0.065	0.15	0.06
Madison	1983	0.07	0.48	0.000	0.000	0.011	0.012	0.219	0.000	0.11	0.10
Minidoka	1983	0.14	0.19	0.048	0.003	0.023	0.006	0.070	0.221	0.23	0.07
Power	1983	0.05	0.15	0.001	0.000	0.000	0.004	0.096	0.039	0.23	0.43
Twin Falls	1983	0.29	0.10	0.208	0.053	0.020	0.002	0.046	0.073	0.09	0.12
Bannock	1984	0.21	0.55	0.000	0.000	0.000	0.023	0.033	0.000	0.12	0.06
Bingham	1984	0.15	0.19	0.000	0.000	0.006	0.006	0.208	0.022	0.23	0.18
Blaine	1984	0.44	0.49	0.000	0.000	0.000	0.020	0.000	0.000	0.04	0.01
Bonneville	1984	0.13	0.54	0.000	0.001	0.004	0.007	0.189	0.000	0.08	0.05
Butte	1984	0.47	0.41	0.000	0.000	0.000	0.019	0.045	0.000	0.06	0.00
Cassia	1984	0.18	0.25	0.025	0.002	0.023	0.005	0.129	0.083	0.11	0.20
Clark	1984	0.43	0.23	0.000	0.000	0.000	0.000	0.043	0.000	0.19	0.10
Fremont	1984	0.08	0.61	0.000	0.000	0.000	0.007	0.224	0.000	0.06	0.01
Gooding	1984	0.42	0.11	0.038	0.109	0.066	0.018	0.096	0.026	0.03	0.08
Jefferson	1984	0.39	0.32	0.000	0.001	0.028	0.010	0.112	0.000	0.13	0.01
Jerome	1984	0.31	0.16	0.093	0.026	0.027	0.004	0.092	0.042	0.13	0.11
Lincoln	1984	0.38	0.26	0.004	0.014	0.041	0.010	0.059	0.081	0.08	0.07
Madison	1984	0.08	0.51	0.000	0.000	0.006	0.004	0.249	0.000	0.11	0.04
Minidoka	1984	0.13	0.26	0.045	0.002	0.027	0.002	0.070	0.197	0.14	0.12
Power	1984	0.06	0.34	0.001	0.000	0.000	0.000	0.130	0.051	0.23	0.19
Twin Falls	1984	0.26	0.18	0.192	0.067	0.028	0.005	0.045	0.060	0.05	0.11
Bannock	1985	0.26	0.49	0.000	0.000	0.000	0.022	0.039	0.000	0.15	0.04
Bingham	1985	0.17	0.15	0.000	0.001	0.007	0.006	0.242	0.023	0.25	0.15
Blaine	1985	0.39	0.49	0.000	0.000	0.000	0.022	0.000	0.000	0.08	0.01
Bonneville	1985	0.14	0.47	0.000	0.001	0.002	0.008	0.214	0.000	0.10	0.07
Butte	1985	0.48	0.35	0.000	0.000	0.000	0.022	0.047	0.000	0.11	0.00

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Cassia	1985	0.17	0.25	0.026	0.002	0.026	0.004	0.139	0.099	0.11	0.18
Clark	1985	0.44	0.26	0.000	0.000	0.000	0.000	0.034	0.000	0.18	0.09
Fremont	1985	0.08	0.62	0.000	0.000	0.000	0.006	0.227	0.000	0.06	0.00
Gooding	1985	0.38	0.07	0.042	0.121	0.071	0.017	0.145	0.030	0.06	0.06
Jefferson	1985	0.36	0.31	0.000	0.002	0.027	0.010	0.112	0.000	0.18	0.00
Jerome	1985	0.24	0.17	0.096	0.031	0.036	0.003	0.100	0.052	0.19	0.08
Lincoln	1985	0.31	0.26	0.005	0.022	0.051	0.009	0.069	0.078	0.14	0.05
Madison	1985	0.08	0.45	0.000	0.000	0.003	0.003	0.246	0.000	0.19	0.03
Minidoka	1985	0.10	0.27	0.044	0.002	0.021	0.001	0.076	0.214	0.17	0.10
Power	1985	0.05	0.34	0.001	0.000	0.000	0.000	0.161	0.054	0.24	0.15
Twin Falls	1985	0.27	0.14	0.201	0.073	0.031	0.004	0.048	0.062	0.08	0.09
Bannock	1986	0.27	0.49	0.000	0.000	0.000	0.016	0.040	0.000	0.14	0.04
Bingham	1986	0.17	0.16	0.000	0.000	0.004	0.005	0.228	0.026	0.23	0.18
Blaine	1986	0.41	0.46	0.000	0.000	0.000	0.013	0.000	0.000	0.09	0.02
Bonneville	1986	0.13	0.51	0.000	0.001	0.003	0.011	0.182	0.000	0.09	0.07
Butte	1986	0.50	0.33	0.000	0.000	0.000	0.014	0.066	0.000	0.09	0.01
Cassia	1986	0.19	0.24	0.030	0.004	0.020	0.004	0.098	0.112	0.12	0.19
Clark	1986	0.48	0.22	0.000	0.000	0.000	0.002	0.039	0.000	0.21	0.05
Fremont	1986	0.09	0.62	0.000	0.000	0.000	0.002	0.217	0.000	0.07	0.00
Gooding	1986	0.40	0.07	0.044	0.080	0.060	0.010	0.143	0.033	0.08	0.08
Jefferson	1986	0.39	0.29	0.000	0.000	0.021	0.006	0.109	0.000	0.18	0.01
Jerome	1986	0.24	0.13	0.094	0.027	0.023	0.005	0.130	0.062	0.18	0.11
Lincoln	1986	0.34	0.25	0.005	0.016	0.043	0.016	0.039	0.071	0.16	0.06
Madison	1986	0.10	0.40	0.000	0.000	0.000	0.002	0.273	0.000	0.20	0.04
Minidoka	1986	0.10	0.25	0.045	0.001	0.016	0.001	0.077	0.232	0.17	0.11
Power	1986	0.06	0.30	0.001	0.005	0.005	0.002	0.187	0.058	0.24	0.14
Twin Falls	1986	0.27	0.14	0.203	0.059	0.021	0.004	0.048	0.068	0.08	0.10
Bannock	1987	0.31	0.43	0.000	0.000	0.000	0.020	0.053	0.000	0.14	0.05
Bingham	1987	0.18	0.13	0.000	0.000	0.003	0.008	0.247	0.027	0.21	0.19
Blaine	1987	0.50	0.40	0.000	0.000	0.000	0.016	0.000	0.000	0.06	0.02
Bonneville	1987	0.15	0.46	0.000	0.000	0.000	0.016	0.209	0.000	0.08	0.08

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Butte	1987	0.55	0.27	0.000	0.000	0.000	0.039	0.076	0.000	0.05	0.01
Cassia	1987	0.21	0.17	0.033	0.003	0.014	0.006	0.148	0.124	0.09	0.20
Clark	1987	0.53	0.20	0.000	0.000	0.000	0.004	0.044	0.000	0.15	0.07
Fremont	1987	0.10	0.57	0.000	0.000	0.000	0.004	0.268	0.000	0.06	0.00
Gooding	1987	0.44	0.07	0.048	0.063	0.063	0.005	0.162	0.035	0.05	0.07
Jefferson	1987	0.43	0.23	0.000	0.000	0.012	0.013	0.139	0.000	0.17	0.01
Jerome	1987	0.26	0.11	0.103	0.022	0.025	0.007	0.168	0.068	0.14	0.10
Lincoln	1987	0.36	0.21	0.005	0.004	0.037	0.021	0.083	0.079	0.13	0.06
Madison	1987	0.11	0.33	0.000	0.000	0.000	0.011	0.341	0.000	0.16	0.04
Minidoka	1987	0.11	0.22	0.050	0.001	0.012	0.001	0.094	0.259	0.13	0.12
Power	1987	0.07	0.20	0.001	0.000	0.000	0.007	0.240	0.068	0.26	0.16
Twin Falls	1987	0.30	0.11	0.223	0.050	0.022	0.004	0.054	0.085	0.07	0.08
Bannock	1988	0.45	0.14	0.000	0.000	0.000	0.020	0.086	0.000	0.22	0.09
Bingham	1988	0.16	0.12	0.000	0.000	0.004	0.008	0.247	0.026	0.21	0.22
Blaine	1988	0.51	0.39	0.000	0.000	0.000	0.007	0.000	0.000	0.07	0.02
Bonneville	1988	0.19	0.34	0.000	0.000	0.004	0.029	0.255	0.000	0.11	0.08
Butte	1988	0.55	0.24	0.000	0.000	0.000	0.045	0.066	0.000	0.09	0.00
Cassia	1988	0.19	0.16	0.034	0.006	0.013	0.005	0.169	0.128	0.07	0.23
Clark	1988	0.45	0.14	0.000	0.000	0.000	0.002	0.128	0.000	0.21	0.07
Fremont	1988	0.14	0.41	0.000	0.000	0.000	0.019	0.311	0.000	0.11	0.00
Gooding	1988	0.38	0.07	0.044	0.078	0.072	0.006	0.159	0.041	0.08	0.06
Jefferson	1988	0.40	0.23	0.000	0.000	0.014	0.013	0.138	0.000	0.20	0.01
Jerome	1988	0.22	0.13	0.094	0.013	0.042	0.002	0.170	0.069	0.16	0.09
Lincoln	1988	0.38	0.21	0.006	0.009	0.028	0.019	0.097	0.071	0.15	0.03
Madison	1988	0.12	0.31	0.000	0.000	0.000	0.012	0.332	0.000	0.18	0.05
Minidoka	1988	0.11	0.21	0.048	0.001	0.018	0.003	0.091	0.254	0.13	0.13
Power	1988	0.11	0.04	0.001	0.000	0.000	0.003	0.251	0.079	0.32	0.19
Twin Falls	1988	0.26	0.13	0.220	0.053	0.031	0.008	0.063	0.081	0.07	0.08
Bannock	1989	0.45	0.14	0.000	0.000	0.000	0.013	0.078	0.000	0.25	0.06
Bingham	1989	0.15	0.11	0.000	0.000	0.005	0.012	0.217	0.025	0.23	0.26
Blaine	1989	0.47	0.37	0.000	0.000	0.000	0.037	0.000	0.000	0.09	0.03

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Bonneville	1989	0.19	0.31	0.000	0.000	0.004	0.027	0.255	0.000	0.15	0.06
Butte	1989	0.49	0.22	0.000	0.000	0.000	0.033	0.073	0.000	0.18	0.00
Cassia	1989	0.19	0.14	0.030	0.002	0.013	0.008	0.165	0.124	0.07	0.25
Clark	1989	0.39	0.14	0.000	0.000	0.000	0.002	0.183	0.000	0.22	0.07
Fremont	1989	0.13	0.38	0.000	0.000	0.000	0.031	0.261	0.000	0.19	0.00
Gooding	1989	0.39	0.06	0.040	0.060	0.103	0.013	0.143	0.047	0.07	0.07
Jefferson	1989	0.37	0.24	0.000	0.001	0.018	0.018	0.132	0.000	0.21	0.01
Jerome	1989	0.21	0.12	0.088	0.009	0.055	0.006	0.173	0.064	0.17	0.10
Lincoln	1989	0.34	0.21	0.005	0.008	0.051	0.022	0.082	0.092	0.15	0.04
Madison	1989	0.12	0.36	0.000	0.000	0.000	0.005	0.316	0.000	0.16	0.04
Minidoka	1989	0.11	0.18	0.043	0.000	0.017	0.004	0.104	0.235	0.19	0.12
Power	1989	0.10	0.03	0.001	0.000	0.000	0.006	0.251	0.076	0.40	0.13
Twin Falls	1989	0.27	0.12	0.220	0.050	0.039	0.006	0.043	0.086	0.07	0.11
Bannock	1990	0.46	0.15	0.000	0.000	0.000	0.012	0.094	0.000	0.23	0.06
Bingham	1990	0.13	0.08	0.000	0.000	0.003	0.002	0.259	0.036	0.21	0.27
Blaine	1990	0.52	0.43	0.000	0.000	0.000	0.010	0.000	0.000	0.03	0.01
Bonneville	1990	0.19	0.31	0.000	0.000	0.004	0.018	0.301	0.000	0.12	0.06
Butte	1990	0.54	0.25	0.000	0.000	0.000	0.017	0.062	0.000	0.13	0.00
Cassia	1990	0.19	0.11	0.028	0.001	0.010	0.002	0.154	0.118	0.15	0.24
Clark	1990	0.27	0.14	0.000	0.000	0.000	0.002	0.293	0.000	0.28	0.01
Fremont	1990	0.12	0.42	0.000	0.000	0.000	0.009	0.312	0.000	0.14	0.00
Gooding	1990	0.41	0.05	0.036	0.043	0.094	0.005	0.155	0.052	0.08	0.07
Jefferson	1990	0.39	0.24	0.000	0.000	0.017	0.004	0.137	0.000	0.18	0.03
Jerome	1990	0.21	0.12	0.089	0.017	0.062	0.003	0.196	0.074	0.13	0.11
Lincoln	1990	0.37	0.20	0.005	0.002	0.034	0.004	0.093	0.099	0.14	0.05
Madison	1990	0.13	0.30	0.000	0.000	0.004	0.001	0.349	0.000	0.17	0.05
Minidoka	1990	0.11	0.18	0.043	0.000	0.010	0.002	0.100	0.257	0.17	0.13
Power	1990	0.05	0.03	0.001	0.000	0.000	0.003	0.290	0.070	0.22	0.33
Twin Falls	1990	0.30	0.11	0.212	0.026	0.024	0.001	0.062	0.076	0.04	0.15
Bannock	1991	0.51	0.14	0.000	0.000	0.000	0.017	0.093	0.000	0.10	0.14
Bingham	1991	0.13	0.09	0.000	0.000	0.003	0.004	0.239	0.031	0.30	0.21

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Blaine	1991	0.53	0.44	0.000	0.000	0.000	0.011	0.000	0.000	0.02	0.00
Bonneville	1991	0.21	0.32	0.000	0.000	0.005	0.014	0.249	0.000	0.16	0.04
Butte	1991	0.62	0.23	0.000	0.000	0.000	0.023	0.051	0.000	0.08	0.00
Cassia	1991	0.22	0.12	0.029	0.000	0.015	0.004	0.155	0.136	0.11	0.21
Clark	1991	0.24	0.11	0.000	0.000	0.000	0.012	0.333	0.000	0.29	0.01
Fremont	1991	0.14	0.41	0.000	0.000	0.000	0.010	0.312	0.000	0.13	0.00
Gooding	1991	0.43	0.05	0.034	0.086	0.089	0.011	0.135	0.046	0.06	0.05
Jefferson	1991	0.38	0.25	0.000	0.000	0.021	0.010	0.152	0.000	0.16	0.02
Jerome	1991	0.29	0.10	0.107	0.056	0.055	0.006	0.132	0.104	0.06	0.09
Lincoln	1991	0.44	0.12	0.005	0.034	0.061	0.013	0.084	0.109	0.09	0.05
Madison	1991	0.11	0.30	0.000	0.000	0.005	0.002	0.277	0.000	0.13	0.18
Minidoka	1991	0.12	0.21	0.039	0.000	0.010	0.007	0.143	0.239	0.14	0.10
Power	1991	0.08	0.03	0.001	0.000	0.000	0.007	0.293	0.076	0.26	0.24
Twin Falls	1991	0.31	0.14	0.218	0.039	0.019	0.004	0.057	0.081	0.05	0.09
Bannock	1992	0.41	0.14	0.000	0.000	0.000	0.006	0.089	0.000	0.19	0.17
Bingham	1992	0.13	0.09	0.000	0.000	0.002	0.002	0.232	0.036	0.24	0.26
Blaine	1992	0.48	0.48	0.000	0.000	0.000	0.008	0.000	0.000	0.03	0.01
Bonneville	1992	0.16	0.23	0.000	0.000	0.000	0.003	0.266	0.000	0.30	0.05
Butte	1992	0.52	0.21	0.000	0.000	0.000	0.008	0.064	0.000	0.20	0.00
Cassia	1992	0.17	0.11	0.026	0.000	0.012	0.002	0.134	0.135	0.22	0.19
Clark	1992	0.37	0.08	0.000	0.000	0.000	0.011	0.229	0.000	0.29	0.02
Fremont	1992	0.12	0.33	0.000	0.000	0.000	0.005	0.272	0.000	0.23	0.04
Gooding	1992	0.41	0.05	0.033	0.033	0.097	0.011	0.141	0.051	0.10	0.06
Jefferson	1992	0.35	0.19	0.000	0.000	0.012	0.004	0.117	0.000	0.25	0.08
Jerome	1992	0.19	0.13	0.082	0.032	0.048	0.001	0.127	0.087	0.21	0.09
Lincoln	1992	0.30	0.14	0.004	0.000	0.066	0.005	0.086	0.125	0.17	0.11
Madison	1992	0.10	0.27	0.000	0.000	0.003	0.003	0.298	0.000	0.17	0.15
Minidoka	1992	0.09	0.20	0.039	0.000	0.007	0.002	0.122	0.230	0.21	0.10
Power	1992	0.06	0.02	0.001	0.000	0.000	0.001	0.246	0.072	0.35	0.24
Twin Falls	1992	0.22	0.13	0.221	0.027	0.021	0.002	0.051	0.087	0.08	0.16
Bannock	1993	0.43	0.14	0.000	0.000	0.000	0.011	0.094	0.000	0.14	0.20

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Bingham	1993	0.15	0.08	0.000	0.000	0.002	0.001	0.227	0.044	0.24	0.26
Blaine	1993	0.49	0.41	0.000	0.000	0.000	0.007	0.000	0.059	0.02	0.01
Bonneville	1993	0.18	0.25	0.000	0.000	0.000	0.004	0.266	0.000	0.25	0.05
Butte	1993	0.55	0.22	0.000	0.000	0.000	0.008	0.058	0.000	0.17	0.00
Cassia	1993	0.21	0.11	0.034	0.001	0.017	0.003	0.133	0.131	0.15	0.21
Clark	1993	0.39	0.10	0.000	0.000	0.000	0.002	0.255	0.000	0.24	0.02
Fremont	1993	0.17	0.32	0.000	0.000	0.000	0.008	0.309	0.000	0.20	0.01
Gooding	1993	0.47	0.05	0.042	0.048	0.111	0.004	0.099	0.039	0.06	0.08
Jefferson	1993	0.46	0.20	0.000	0.000	0.020	0.002	0.122	0.000	0.19	0.01
Jerome	1993	0.20	0.14	0.121	0.018	0.058	0.001	0.102	0.097	0.16	0.10
Lincoln	1993	0.29	0.14	0.025	0.014	0.087	0.011	0.078	0.131	0.15	0.08
Madison	1993	0.11	0.31	0.000	0.000	0.003	0.003	0.320	0.000	0.10	0.14
Minidoka	1993	0.09	0.20	0.056	0.002	0.007	0.002	0.137	0.228	0.19	0.09
Power	1993	0.07	0.02	0.000	0.000	0.000	0.002	0.281	0.080	0.23	0.31
Twin Falls	1993	0.23	0.12	0.253	0.024	0.029	0.001	0.062	0.082	0.07	0.13
Bannock	1994	0.41	0.13	0.000	0.000	0.000	0.014	0.096	0.000	0.15	0.20
Bingham	1994	0.16	0.08	0.000	0.000	0.001	0.001	0.238	0.041	0.28	0.19
Blaine	1994	0.45	0.40	0.000	0.000	0.000	0.016	0.040	0.059	0.03	0.01
Bonneville	1994	0.17	0.29	0.000	0.000	0.000	0.005	0.247	0.000	0.24	0.04
Butte	1994	0.54	0.23	0.000	0.000	0.000	0.008	0.065	0.000	0.15	0.01
Cassia	1994	0.20	0.12	0.039	0.002	0.017	0.002	0.135	0.127	0.19	0.17
Clark	1994	0.35	0.10	0.000	0.000	0.000	0.002	0.259	0.000	0.27	0.02
Fremont	1994	0.14	0.31	0.000	0.000	0.000	0.011	0.314	0.000	0.23	0.00
Gooding	1994	0.45	0.04	0.079	0.032	0.091	0.001	0.130	0.042	0.07	0.06
Jefferson	1994	0.43	0.23	0.000	0.000	0.013	0.004	0.122	0.000	0.19	0.01
Jerome	1994	0.23	0.10	0.134	0.019	0.047	0.001	0.132	0.091	0.15	0.09
Lincoln	1994	0.36	0.14	0.017	0.006	0.043	0.011	0.092	0.142	0.16	0.02
Madison	1994	0.13	0.32	0.000	0.000	0.000	0.002	0.320	0.000	0.21	0.02
Minidoka	1994	0.10	0.20	0.057	0.001	0.006	0.001	0.135	0.217	0.19	0.09
Power	1994	0.06	0.03	0.000	0.000	0.000	0.000	0.280	0.079	0.34	0.21
Twin Falls	1994	0.22	0.13	0.257	0.019	0.028	0.001	0.068	0.079	0.06	0.13

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Bannock	1995	0.41	0.13	0.000	0.000	0.000	0.013	0.107	0.000	0.13	0.21
Bingham	1995	0.18	0.09	0.000	0.000	0.000	0.002	0.226	0.041	0.23	0.23
Blaine	1995	0.44	0.40	0.000	0.000	0.000	0.011	0.045	0.061	0.02	0.03
Bonneville	1995	0.20	0.31	0.000	0.000	0.000	0.003	0.241	0.000	0.21	0.04
Butte	1995	0.53	0.26	0.000	0.000	0.000	0.008	0.065	0.000	0.13	0.01
Cassia	1995	0.22	0.10	0.026	0.000	0.019	0.002	0.137	0.133	0.15	0.21
Clark	1995	0.38	0.02	0.000	0.000	0.000	0.005	0.343	0.000	0.22	0.02
Fremont	1995	0.15	0.34	0.000	0.000	0.000	0.005	0.299	0.000	0.20	0.01
Gooding	1995	0.46	0.04	0.034	0.045	0.082	0.005	0.134	0.038	0.07	0.09
Jefferson	1995	0.43	0.23	0.000	0.000	0.007	0.004	0.125	0.000	0.20	0.01
Jerome	1995	0.28	0.12	0.110	0.017	0.038	0.001	0.130	0.093	0.11	0.10
Lincoln	1995	0.35	0.16	0.000	0.010	0.051	0.010	0.087	0.119	0.18	0.03
Madison	1995	0.14	0.38	0.000	0.000	0.000	0.000	0.281	0.000	0.18	0.02
Minidoka	1995	0.11	0.22	0.040	0.000	0.008	0.001	0.129	0.220	0.16	0.11
Power	1995	0.07	0.02	0.000	0.000	0.000	0.003	0.273	0.086	0.28	0.27
Twin Falls	1995	0.24	0.15	0.206	0.021	0.030	0.002	0.069	0.077	0.05	0.15
Bannock	1996	0.31	0.12	0.000	0.000	0.000	0.026	0.143	0.000	0.18	0.22
Bingham	1996	0.14	0.08	0.000	0.000	0.000	0.002	0.226	0.048	0.22	0.28
Blaine	1996	0.41	0.41	0.000	0.000	0.000	0.010	0.051	0.068	0.04	0.01
Bonneville	1996	0.16	0.30	0.000	0.000	0.000	0.004	0.254	0.000	0.23	0.04
Butte	1996	0.44	0.25	0.000	0.000	0.000	0.023	0.049	0.000	0.21	0.02
Cassia	1996	0.20	0.10	0.017	0.002	0.012	0.003	0.151	0.130	0.21	0.18
Clark	1996	0.29	0.04	0.000	0.000	0.000	0.002	0.343	0.000	0.31	0.01
Fremont	1996	0.12	0.25	0.000	0.000	0.000	0.004	0.277	0.000	0.34	0.01
Gooding	1996	0.38	0.06	0.034	0.054	0.084	0.005	0.148	0.044	0.10	0.09
Jefferson	1996	0.43	0.20	0.000	0.000	0.000	0.003	0.131	0.000	0.24	0.01
Jerome	1996	0.26	0.10	0.074	0.013	0.060	0.001	0.135	0.087	0.18	0.09
Lincoln	1996	0.27	0.13	0.000	0.008	0.051	0.008	0.057	0.135	0.31	0.03
Madison	1996	0.13	0.26	0.000	0.000	0.000	0.000	0.301	0.000	0.29	0.03
Minidoka	1996	0.10	0.21	0.030	0.000	0.007	0.002	0.138	0.221	0.18	0.11
Power	1996	0.05	0.03	0.000	0.000	0.000	0.000	0.269	0.075	0.32	0.25

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Twin Falls	1996	0.23	0.13	0.190	0.021	0.032	0.001	0.070	0.071	0.10	0.15
Bannock	1997	0.40	0.13	0.000	0.000	0.000	0.026	0.103	0.000	0.14	0.21
Bingham	1997	0.19	0.07	0.000	0.000	0.000	0.001	0.218	0.073	0.20	0.24
Blaine	1997	0.39	0.50	0.000	0.000	0.000	0.009	0.043	0.026	0.03	0.00
Bonneville	1997	0.16	0.33	0.000	0.000	0.000	0.004	0.226	0.000	0.23	0.05
Butte	1997	0.49	0.26	0.000	0.000	0.000	0.008	0.038	0.000	0.19	0.01
Cassia	1997	0.20	0.12	0.020	0.003	0.019	0.002	0.131	0.151	0.14	0.22
Clark	1997	0.36	0.06	0.000	0.000	0.000	0.000	0.242	0.000	0.27	0.07
Fremont	1997	0.12	0.32	0.000	0.000	0.000	0.003	0.300	0.000	0.25	0.01
Gooding	1997	0.42	0.05	0.037	0.028	0.104	0.000	0.156	0.057	0.06	0.09
Jefferson	1997	0.39	0.21	0.000	0.000	0.011	0.004	0.142	0.000	0.24	0.01
Jerome	1997	0.31	0.12	0.000	0.010	0.083	0.002	0.140	0.115	0.12	0.10
Lincoln	1997	0.30	0.14	0.000	0.009	0.063	0.005	0.076	0.168	0.17	0.08
Madison	1997	0.11	0.28	0.000	0.000	0.000	0.000	0.319	0.000	0.26	0.03
Minidoka	1997	0.11	0.21	0.034	0.000	0.007	0.000	0.129	0.222	0.17	0.11
Power	1997	0.06	0.02	0.000	0.000	0.000	0.000	0.266	0.116	0.29	0.24
Twin Falls	1997	0.24	0.16	0.199	0.028	0.038	0.000	0.081	0.071	0.04	0.15
Bannock	1998	0.41	0.14	0.000	0.000	0.000	0.041	0.131	0.000	0.09	0.19
Bingham	1998	0.19	0.07	0.000	0.000	0.000	0.002	0.222	0.072	0.21	0.23
Blaine	1998	0.38	0.47	0.000	0.000	0.000	0.020	0.050	0.040	0.04	0.00
Bonneville	1998	0.16	0.34	0.000	0.000	0.000	0.006	0.223	0.000	0.23	0.04
Butte	1998	0.51	0.34	0.000	0.000	0.000	0.017	0.035	0.000	0.11	0.00
Cassia	1998	0.23	0.11	0.020	0.001	0.033	0.002	0.141	0.152	0.11	0.20
Clark	1998	0.41	0.05	0.000	0.000	0.000	0.000	0.276	0.000	0.24	0.02
Fremont	1998	0.14	0.33	0.000	0.000	0.000	0.004	0.290	0.000	0.23	0.00
Gooding	1998	0.39	0.04	0.018	0.076	0.170	0.000	0.145	0.054	0.06	0.05
Jefferson	1998	0.41	0.21	0.000	0.000	0.013	0.004	0.132	0.000	0.22	0.01
Jerome	1998	0.31	0.09	0.095	0.021	0.092	0.001	0.116	0.110	0.08	0.08
Lincoln	1998	0.30	0.18	0.000	0.009	0.063	0.009	0.087	0.144	0.17	0.04
Madison	1998	0.12	0.33	0.000	0.000	0.000	0.003	0.300	0.000	0.22	0.03
Minidoka	1998	0.15	0.18	0.042	0.000	0.009	0.001	0.135	0.235	0.15	0.10

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Power	1998	0.07	0.03	0.000	0.000	0.000	0.000	0.301	0.136	0.24	0.23
Twin Falls	1998	0.29	0.13	0.172	0.033	0.058	0.002	0.080	0.073	0.03	0.13
Bannock	1999	0.39	0.13	0.000	0.000	0.000	0.033	0.125	0.000	0.12	0.20
Bingham	1999	0.20	0.07	0.000	0.000	0.000	0.003	0.217	0.078	0.20	0.23
Blaine	1999	0.43	0.46	0.000	0.000	0.000	0.010	0.049	0.000	0.05	0.00
Bonneville	1999	0.19	0.30	0.000	0.000	0.000	0.007	0.214	0.000	0.25	0.05
Butte	1999	0.50	0.28	0.000	0.000	0.000	0.005	0.043	0.000	0.15	0.02
Cassia	1999	0.22	0.11	0.029	0.002	0.035	0.002	0.138	0.152	0.15	0.16
Clark	1999	0.37	0.03	0.000	0.000	0.000	0.000	0.127	0.000	0.45	0.02
Fremont	1999	0.14	0.29	0.000	0.000	0.000	0.006	0.303	0.000	0.26	0.00
Gooding	1999	0.47	0.03	0.024	0.064	0.191	0.003	0.093	0.048	0.05	0.03
Jefferson	1999	0.41	0.18	0.000	0.000	0.012	0.003	0.130	0.000	0.25	0.01
Jerome	1999	0.33	0.09	0.093	0.013	0.121	0.001	0.106	0.110	0.08	0.06
Lincoln	1999	0.31	0.16	0.000	0.005	0.075	0.005	0.098	0.150	0.17	0.03
Madison	1999	0.12	0.30	0.000	0.000	0.000	0.003	0.281	0.000	0.26	0.03
Minidoka	1999	0.14	0.16	0.041	0.000	0.012	0.001	0.141	0.226	0.22	0.06
Power	1999	0.07	0.02	0.000	0.000	0.000	0.000	0.275	0.115	0.35	0.17
Twin Falls	1999	0.29	0.14	0.162	0.037	0.070	0.001	0.072	0.083	0.04	0.11
Bannock	2000	0.35	0.13	0.000	0.000	0.000	0.027	0.142	0.000	0.14	0.20
Bingham	2000	0.17	0.08	0.000	0.001	0.006	0.002	0.227	0.074	0.22	0.23
Blaine	2000	0.43	0.46	0.000	0.000	0.000	0.010	0.051	0.000	0.05	0.01
Bonneville	2000	0.17	0.33	0.000	0.000	0.000	0.005	0.211	0.000	0.23	0.05
Butte	2000	0.53	0.30	0.000	0.000	0.000	0.004	0.049	0.000	0.12	0.01
Cassia	2000	0.19	0.10	0.018	0.001	0.052	0.001	0.148	0.145	0.15	0.19
Clark	2000	0.39	0.05	0.000	0.000	0.000	0.002	0.154	0.000	0.40	0.00
Fremont	2000	0.15	0.33	0.000	0.000	0.000	0.003	0.313	0.000	0.20	0.00
Gooding	2000	0.45	0.04	0.011	0.038	0.193	0.002	0.103	0.053	0.05	0.05
Jefferson	2000	0.45	0.22	0.000	0.000	0.016	0.002	0.141	0.000	0.16	0.01
Jerome	2000	0.33	0.12	0.057	0.019	0.155	0.001	0.107	0.085	0.05	0.07
Lincoln	2000	0.30	0.18	0.000	0.010	0.088	0.008	0.100	0.115	0.16	0.04
Madison	2000	0.13	0.32	0.000	0.000	0.000	0.003	0.273	0.000	0.25	0.02

County	Year	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	WinWht
Minidoka	2000	0.13	0.21	0.027	0.000	0.018	0.001	0.159	0.218	0.17	0.07
Power	2000	0.06	0.02	0.008	0.000	0.000	0.000	0.306	0.106	0.32	0.18
Twin Falls	2000	0.29	0.16	0.127	0.037	0.082	0.001	0.082	0.066	0.04	0.12
Bannock	2001	0.38	0.08	0.000	0.000	0.000	0.024	0.110	0.000	0.13	0.27
Bingham	2001	0.19	0.07	0.000	0.000	0.008	0.002	0.207	0.080	0.18	0.26
Blaine	2001	0.56	0.36	0.000	0.000	0.000	0.013	0.041	0.000	0.02	0.01
Bonneville	2001	0.18	0.36	0.000	0.001	0.013	0.007	0.211	0.000	0.20	0.03
Butte	2001	0.61	0.23	0.000	0.000	0.000	0.022	0.033	0.000	0.11	0.00
Cassia	2001	0.22	0.11	0.018	0.006	0.047	0.001	0.129	0.145	0.12	0.20
Clark	2001	0.44	0.05	0.000	0.000	0.000	0.022	0.131	0.000	0.35	0.00
Fremont	2001	0.16	0.33	0.000	0.000	0.000	0.005	0.277	0.000	0.23	0.00
Gooding	2001	0.44	0.02	0.006	0.058	0.264	0.004	0.064	0.064	0.04	0.04
Jefferson	2001	0.45	0.21	0.000	0.000	0.017	0.013	0.149	0.000	0.15	0.01
Jerome	2001	0.35	0.13	0.052	0.023	0.169	0.000	0.082	0.104	0.04	0.04
Lincoln	2001	0.38	0.12	0.000	0.011	0.077	0.007	0.034	0.152	0.12	0.10
Madison	2001	0.15	0.30	0.000	0.000	0.000	0.003	0.261	0.000	0.26	0.03
Minidoka	2001	0.15	0.23	0.025	0.000	0.017	0.002	0.176	0.237	0.11	0.05
Power	2001	0.08	0.03	0.000	0.024	0.001	0.002	0.282	0.120	0.23	0.23
Twin Falls	2001	0.33	0.18	0.090	0.032	0.088	0.003	0.071	0.074	0.02	0.12