

**2024**

**Report to the**

**Farmland Advisory Committee**

**prepared for the**

**Utah Tax Commission**



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## Executive Summary

Summary of Study Recommendations: Changes in land values are recommended to the Utah State Tax Commission for the year 2024 because of the study for farmland production values. The data represents the 2023 production year values and the 2022 ag-census data.

**Irrigated Cropland-** Irrigated Cropland values should be increased in all counties in the State. Due to large amounts of alfalfa acreage in the State, any change in hay returns significantly impacts the average county land values. According to the USDA state information, Alfalfa sales accounted for approximately \$529 million of revenue within the State of Utah. Wheat, the second highest crop produced, was almost \$33 million. The average price received for all the major crops had a slight increase for the 2023 crop year, with barley having the greatest average increase of 20 percent. There was a small increase in average production yields for alfalfa, corn, and wheat, with barley, and safflower having a decrease in the average production. The cost of the inputs paid by producers decreased by 2.5 percent in 2023. Because of the decrease in costs and the increase in the price received, along with a stable average production yields we propose an increase in land values across the State. The greatest price increase in land values is \$56 dollars per acre in Weber, and Davis counties and the highest percentage change is 7.4 percent in Wayne County.

**Orchard Cropland-** Proposed 2024 orchard land values should be decreased again across the State, based on the production of tart cherries, apples, and peaches. The greatest orchard land value change is a \$76 dollar decrease in Washington County. There was a decrease in the average yield for tart cherries and peaches. There was also a decrease in the average price received for tart cherries of 20 percent. Tart cherries are the leading fruit product grown in the State, affecting the average price and average production the greatest.

**Meadow Cropland-** The 2024 meadow land values for all counties in the State should have an increase in land values.

**Dry Cropland-** There should be an increase in most values recommended for the dryland acreage within the State. Beaver, and San Juan counties class 4 dryland values, and Daggett, Emery, Piute, Sevier, and Wayne counties class 3 and 4 dryland values should not change.

**Grazing Land-** Most of the grazing land values in the State should show an increase for 2024

**Nonproductive Land-** No change in value for nonproductive land is recommended for 2024.

**Table 1.**

**Summary of all 2024 proposed Utah land values.**

County	Irrigated Land Values				Grazing Land Values				Dry Land Values		Meadow	Non	Orchard
	I	II	III	IV	I	II	III	IV	III	IV	Land	Prod.	Land
Beaver	0	542	446	369	68	21	16	5	50	14	229	5	227
Box Elder	757	666	522	433	70	22	16	5	88	56	243	5	247
Cache	686	585	443	344	70	22	14	5	117	81	263	5	227
Carbon	533	423	284	181	52	15	13	5	49	15	134	5	227
Daggett	0	0	0	192	52	14	12	5	0	0	157	5	0
Davis	849	747	601	501	61	19	13	5	51	15	269	5	248
Duchesne	0	492	346	242	69	19	14	6	56	19	170	5	227
Emery	505	406	254	159	71	21	14	6	0	0	140	5	227
Garfield	0	0	213	114	78	22	15	5	48	15	106	5	227
Grand	0	391	248	151	79	22	15	5	49	15	136	5	227
Iron	807	709	562	460	76	22	15	5	49	15	266	5	227
Juab	0	443	300	198	65	18	14	5	52	15	153	5	227
Kane	421	325	180	80	76	25	15	5	48	15	109	5	227
Millard	800	701	555	451	77	25	15	6	47	14	196	5	227
Morgan	0	0	395	293	70	22	13	6	67	27	202	5	227
Piute	0	0	337	234	91	26	17	5	0	0	193	5	227
Rich	0	0	180	82	64	20	13	5	48	15	107	5	0
Salt Lake	691	593	453	350	68	19	15	5	54	17	221	5	227
San Juan	0	0	152	68	65	21	13	5	47	17	0	5	227
Sanpete	0	548	404	302	63	18	14	6	56	19	198	5	227
Sevier	0	580	431	330	66	18	14	6	0	0	206	5	227
Summit	0	463	318	217	73	20	14	5	48	15	203	5	227
Tooele	0	448	301	205	73	20	14	5	52	15	186	5	227
Uintah	0	0	372	276	81	28	19	6	55	19	209	5	227
Utah	749	647	498	399	65	23	14	5	51	15	249	5	250
Wasatch	0	492	342	242	52	16	13	5	48	15	212	5	227
Washington	656	559	411	310	65	21	13	6	48	14	230	5	270
Wayne	0	0	333	235	89	28	17	5	0	0	175	5	227
Weber	841	737	586	479	73	20	14	6	84	45	314	5	248

## **Introduction**

This report represents the fifteenth annual report to the Farmland Advisory Committee recommending “productive values” for lands that qualify for the Farmland Assessment Act (FAA). The methodology used to derive the suggested values is summarized below. The relevant statutes for this work are provided in Appendix A. Instructions relative to the make-up of the various land classes can be found at <http://propertytax.utah.gov/standards/standard07.pdf> (Land classification guidelines for each classification of agricultural land, Property Tax Division's Standards of Practice, Tax Commission Website).

## **Summary of General Approach Adopted**

Agricultural land values are not easily derived because land market *values* reflected in farm sales typically include the potential value for alternative development, existing land ownership patterns, location, and environmental amenities. Even when sold for continued agricultural use, these lands may have intrinsic values associated with farm expansion, location considerations, and unique characteristics that limit the usefulness of such data in assessing actual farm production values. Finally, the actual market involving agricultural land sales is very thin (i.e., few sales occur), and sale values for one area would not necessarily reflect the values of similar farmland in another area due to differences in climate, productive capacity, crop mix, etc.

Lease data might be an alternative method of calculating agricultural land values. However, even in areas where leases occur, the market is thin and comparable leases are challenging to come by, and even some lease conditions are made because of local considerations. Finally, the application of a lease rate in one area of the State would not likely be appropriate for other regions in the State. There is too much variation in conditions to allow an overall comparison.

Unfortunately, this means that it is generally not possible to get an accurate idea of agricultural land values directly from market signals. Thus, an alternative approach that is theoretically consistent with market values is needed.

## Partial Budgeting

The theoretically consistent approach selected for this analysis is identifying the present value of agricultural-producing lands based strictly on the use of that land in agricultural production. The best estimate of the value of alfalfa-producing land should be based on land whose sole function is producing alfalfa hay. The present value of the *future flow of returns less costs* should represent the per acre value of land in agricultural production for a particular county for a specific land type. Returns and costs are brought to the present point using a discounting process, reflecting the “time value of money.”<sup>1</sup> Discounting is widely accepted as the correct approach to evaluate costs and returns at different times. This method eliminates the vagaries of location, proximity to other properties, unique location characteristics, etc.

Partial budgeting is used to determine the net returns for each crop or land use. Given the information available, this involves determining localized costs and localized prices, at least as much as possible. Crop mixes vary by county. Some counties have a very limited agricultural complex (Daggett County). In contrast, other counties have more different crops (Box Elder County), so it is crucial that these county-by-county differences be considered. Due to existing data limitations, the smallest sized unit that can be specified is the county level. Unfortunately, gathering data, even on a county basis, is becoming more difficult due to the USDA’s disclosure rules, prohibiting data release wherein individual producers could be identified. This county-wide value approach admittedly precludes consideration of many within-county variations or changes. For example, suppose a significant portion of the county’s farmland still relies on flood irrigation. In that case, the land value will be partly based on flood irrigation, even if some producers utilize more costly wheel lines or irrigation circles.

Though desirable, it is a complicated and costly process to develop county-level crop budgets annually for the most critical crops on a county-by-county basis, so budgets are being developed on an ongoing basis—a few counties yearly. We currently have over 100 different crop budgets that must be updated. The budgets not developed for the current year using producer panels need to be updated using available information on both the price and cost sides. Using the current updating process, it is possible that the budgets being used for any one county will be five to six years old, depending on how many county budgets can be developed each year. However, all land values are updated to the 2022 production year.

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<sup>1</sup> The *time value of money* is based on our actions wherein we prefer payment today rather than the same payment at a later point in time.

A somewhat unique situation exists for fruit budgets as there is an extended time frame for startup and production—up to 25 years. This requires a different budgeting process using a discounting process. These budgets are more difficult to develop for each county, yet they must be updated regularly. Again, some crop budgets could be five to six years old and will require updating through the process described below for those crop budgets that are not current.

**Outline of Process Used in Determining Agricultural Land Values:**

A general overview of the steps taken in making these recommendations follows. The approach requires finding the present value of acreage-weighted net returns for various crops. This allows us to develop county-specific land value estimates when used only for crop production. This removes the value of development potential, unique land characteristics, location in a county, and many other factors that influence land values.

1. The analysis begins with developing or updating individual crop budgets. With the budget allocated for this work, it is impossible to update the individual, county-specific budgets for each of the major crops for each county every year. Well over 100 budgets must be developed, and we are updating the budgets on a 5-6-year cycle. For the revised budgets, we use the cost information directly for the year in question. Still, for those budgets that have not been updated that year, we use the National Agricultural Statistical Service's (NASS) "producer prices paid" indices to update the costs in the older crop budgets to the current year. To access the updated budgets, please visit the following website:  
<https://apexextension.usu.edu/htm/agribusiness>.
2. We use a five-year average of commodity prices and a five-year average of yields (obtained from NASS, USDA, or state sources) to determine the gross return from each crop.
3. Most current cost data are used because time series data on actual costs do not exist. These costs are adjusted for county-to-county differences where possible.
4. These costs (excluding any return to land) are subtracted from the total revenue. This represents the net returns per acre for any crop.
5. The crop mix for any county is determined from the most recent U.S. Census of Agriculture, which is taken every five years. This is where the proportional acreage devoted to each crop can be determined.

6. The county-level value is developed by taking each crop's net return times the proportion of acreage in each crop. For instance, if the net return from an acre of alfalfa was \$200 and 75% of the county's acreage was devoted to alfalfa. The net return per acre of grain (the only other crop grown in this fictitious county) was \$75. It comprised the remaining 25% of the county's agricultural land; the weighted average value of agriculture in this county would be:  $(.75) \times (\$200) + (.25) \times (\$75) \cong \$169/\text{acre}$ .

7. The annual value of \$169/acre net of land costs would then be determined by assuming that acre provided the same value over time and discounting this sum of values using an interest rate (longer-term investments) determined by gathering data on long-term borrowing as obtained from public and proprietary records. Using this discount (or interest) rate, the net returns are entered into an Excel spreadsheet, and the value is discounted or brought to a present value. This then becomes the average value of the land base in that county.

Of course, no county is this simple. In some counties, more than a dozen crops are grown, and county-specific budgets must be made for each. But these are the general steps in determining per-acre land values used solely for agricultural production.

### **Valuing Land in Agricultural Production**

Five areas warrant special attention to accurately reflect land value in agricultural production—prices, costs, yields, crop mix, and data limitations.

***Changing Prices.*** The first area that needs to be considered for changes in crop budgets is commodity prices or returns. As prices rise, the net value of the crop in question also rises (assuming costs remain fixed). The net value declines when prices fall, and other factors are fixed. Agricultural commodity prices have been quite variable historically, and such variability is difficult to deal with, both as producers and assessors. To temper annual price declines and increases, we have determined that a five-year average of prices results in sufficient stability in assessment values and associated taxes.

It is essential to remember that while this approach adds some stability to the value of agricultural land when prices are *increasing*, a five-year average of past prices will mean that the most current five-year average will be *below* that of the most recent price. When prices decline, the current five-year average will lie above the recent price.

For example, if hay prices have averaged \$75, \$85, \$95, \$105, and \$115 per ton over the past five years, the price that would be used in the crop budget would be  $(\$75 + \$85 + \$95 + \$105 + \$115)/5 = \$95/\text{ton}$  (which is considerably *lower* than the two most recent years). On the other hand, if the prices over the past five years had averaged \$115, \$105, \$95, \$85, and \$75, then the average price would still be \$95/ton; however, please note that it is considerably *higher* than the last two years. This is simply the result of the averaging process utilized.

Furthermore, even if prices have *declined* in the most recent year, the overall price average will depend on the price dropped from the calculation six years earlier and the price added in the most current year.

For example, if the previous five years of prices (*excluding* the most recent price) were \$3/bu., \$6/bu., \$5/bu., \$5/bu., and \$5/bu., respectively, the average price would be  $(3 + 6 + 5 + 5 + 5)/5 = \$4.80/\text{bu.}$  If the most recent price is \$4/bu., the latter five-year average price will still be *higher* than in the earlier period due to the deletion of the \$3/bu. and the addition of the \$4/bu., i.e.,  $(6 + 5 + 5 + 5 + 4)/5 = \$5.00/\text{bu.}$  Hence, although the price declined in the most recent year, the average did not drop since the \$4/bu. the price that was added was still higher than the \$3/bu. price that was dropped. This potentially can happen with any crop.

The important point is that using a five-year average minimizes year-to-year changes in land values. This helps to stabilize land values for tax purposes. **Table 2** shows a five-year average and the annual change for the state-wide price data for Utah's major crops for 2022 to 2023.

Table 2	Producer prices received for Utah's major crops				
	2022-2023 Annual and average percentage change				
	Ave. Price	Annual Price			
	Change	Change		2022	2023
<b>Alfalfa</b>	7.4%	-25.5%		\$ 298.00	\$ 222.00
<b>Barley</b>	21.0%	25.0%		\$ 6.80	\$ 8.50
<b>Corn(grain)</b>	6.3%	-13.2%		\$ 6.80	\$ 5.90
<b>Corn(silage)</b>	7.4%	-25.5%		\$ 83.56	\$ 62.25
<b>Safflower</b>	17.4%	15.1%		\$ 30.40	\$ 35.00
<b>Wheat(all)</b>	3.7%	-13.4%		\$ 8.20	\$ 7.10
<b>Onions</b>	14.3%	-21.4%		\$ 26.60	\$ 20.90



**Table 3** includes the prices received by producers, the annual price change percentage change, and a five-year average percentage change for tart cherries, apples, and peaches using 2022 to 2023 prices. The average price is greater because the higher price from 2018 was dropped from the average calculation.

<b>Table 3</b>	<b>Producer prices received for Utah's fruit crop</b>				
	<b>2022-2023 Annual and average percentage change</b>				
	<b>Ave. Price</b>	<b>Annual Price</b>			
	<b>change</b>	<b>change</b>		<b>2022</b>	<b>2023</b>
<b>Tart Cherries</b>	-20.8%	-5.4%		\$ 0.26	\$ 0.24
<b>Apples</b>	-19.2%	-14.9%		\$ 0.32	\$ 0.27
<b>Peaches</b>	-19.9%	7.5%		\$ 1,060.00	\$ 1,140.00

**Changing Costs.** The second area that needs updating in the crop budgets is that of costs. When input costs increase, the net returns of a particular land use decline (assuming prices remain constant). While costs usually do not change as rapidly as prices, they still change and are almost always upward (at least over the past few decades). Therefore, costs associated with various production elements also need to be adjusted to get an accurate estimate of land's "current" value in agricultural production.

Data for updating costs are available in the "*producer's prices paid*" indices published by ERS, USDA, and NASS, USDA.<sup>2</sup> We only consider the most recent year's cost changes because of the rapid changes in input prices (i.e., fertilizer, fuel, pesticides, etc.). This means there is a conservative bias in the approach used to determine prices versus the approach used to determine costs, i.e., we average past prices but use only the most current costs.

The primary justifications for adopting this approach are that: (a) there are no *time series* data sources readily available that show the type of county-level data needed for such averaging and (b) since production costs are almost always increasing, taking a five-year average of production costs would consistently understate the actual costs of doing business. There is more justification to consider a rolling five-year average for prices, which move up and down than costs.

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<sup>2</sup> Economic Research Service (ERS) and National Agricultural Statistical Service (NASS), U.S. Department of Agriculture, Washington, D.C.

A summary of the percentage change in nationwide costs for inputs used in the major crop categories is shown below in **Table 4**.

<b>Table 4</b>	<b>National Cost of Inputs</b>	
<b>Fertilizer</b>		<b>Down 33 percent</b>
<b>Chemicals</b>		<b>Down 17 percent</b>
<b>Fuel</b>		<b>Down 11 percent</b>
<b>Machinery</b>		<b>Up 1 percent</b>
<b>Feed</b>		<b>Down 12 percent</b>
<b>Seed</b>		<b>same</b>
<b>Consumer Price Index</b>		<b>up 3.4 percent</b>

Based on USDA information, the national average cost for all production inputs for Utah's typical crops showed a decrease of (6.1%) from the previous year.

Consumer Price Index (CPI) changes are also shown for comparative purposes. The CPI index (3.4%) rose along with production costs.

**Crop Yields.** The third area of consideration is the yield of each crop, as this also helps determine the actual value of land kept in agricultural production. Yield changes directly impact the net returns of various crops, whether grains, forages, or fruit. By necessity, we have had to rely on those crops for which annual yields are reported. Because of the small number of acres planted, some crops are not included in the annual crop yields. Yields are quite variable and a five-year average on per acre yields has also been used. This also helps to stabilize farm values over time. Some crops are particularly susceptible to yield fluctuations, e.g., dryland wheat. Still, the vagaries of weather and precipitation almost always bring about a change in all crop yields from year to year. The yields for Utah's crops and the average yield changes are shown in **Table 5**.

<b>Table 5</b>	<b>Ave Yield</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
	<b>Change</b>					
<b>Alfalfa</b>	2.1%	4	3.9	3.7	3.8	3.85
<b>Barley</b>	-3.0%	73	82	81	85	93
<b>Corn(grain)</b>	.4%	185	165	179	149	143
<b>Corn(silage)</b>	1.7%	25	24	24	23	24
<b>Wheat</b>	.4%	53	36	46	53	54
<b>Safflower</b>	-5%	660	530	460	820	1050
<b>Onions</b>	1.5%	546	519	506	579	551

**Crop Mix.** The fourth item that needs to be considered is the change in crop mix on a county-by-county level. Shifts in crop mix are difficult to capture on a year-to-year basis because data on crop mixes are determined through the five-year agricultural census. The 2022 Ag-census numbers were used for the calculation of the land values. The number of farms has increased in the State over the past five years. Additionally, the size of those farms has continued to decrease. With the 65 percent of those farms being 50 or less acres. Moving forward we will continue to monitor the changes in the crop mix. And the make of those farms.

To illustrate how the crop mix impacts the suggested values, consider a county where only three crops are produced, all under irrigation: alfalfa hay, wheat, and barley. If the net change in crop values were +3%, +5%, and -1%, respectively, and the crop mix consisted of 75% of the land being planted in alfalfa, 10% in wheat, and 15% in barley, then the suggested land value for that county would change by taking a weighted average of the three net changes:  $(.75 \times 3) + (.10 \times 5) + (.15 \times -1) = 2.60$  (or a net increase in assessed value of 2.6% for that county and acreage configuration). Alfalfa acreage is dominant in virtually all counties and its price continues to dominate that for wheat, barley, and other crops. The only exception is for a small number of counties with a relatively large percentages of fruit acreage.

**Dated Prices and Costs – 2023 Crop Year.** Finally, it needs to be remembered that price and cost data remain *dated* in the sense that the only complete data we have available now (in 2024) are for the 2023 crop year. Hence, the net return in 2024 may differ from that found in this report. Further complicating matters is the fact that this year's reported values will not become effective until 2025, leaving us two years behind what the actual crop picture might be. There does not appear to be any acceptable way around this problem and the only thing that can be said is that *net* returns typically do not change by large amounts following the approach adopted.

## General Trends Affecting Productive Land Values

As implied above, several factors have influenced the suggested FAA land values for the 2024 reporting year: prices, costs, crop mix, and productivity or yields.

**Crop prices.** Prices received by producers for the field crops for the 2024 report were up using the average price. Barley had the highest percent increase in the average price received. The average price for wheat had the smallest increase. The price received by farmers for the major Utah crops for 2019 through and 2023 with the average percentage changes contained in **Table 6**. Again, using the average price takes out the larger much of the swings in price that may occur year to year.

Table 6	Prices received by producers for Utah's major crops (with average annual percentage change)					
	Ave. Price Change	2023	2022	2021	2020	2019
Alfalfa	7.4%	\$ 222.00	\$ 289.00	\$ 231.00	\$ 185.00	\$ 182.00
Barley	20.0%	\$ 8.50	\$ 6.80	\$ 5.00	\$ 3.95	\$ 3.80
Corn(grain)	6.3%	\$ 5.90	\$ 6.80	\$ 6.00	\$ 4.95	\$ 4.40
Corn(silage)	7.4%	\$ 62.25	\$ 83.56	\$ 64.77	\$ 51.80	\$ 50.96
Safflower	17.4%	\$ 35.00	\$ 30.40	\$ 21.00	\$ 19.00	\$ 17.10
Wheat(all)	3.6%	\$ 7.10	\$ 8.20	\$ 7.10	\$ 5.75	\$ 4.95
Onions	14.3%	\$ 20.90	\$ 32.20	\$ 35.10	\$ 19.50	\$ 11.20

Tart cherries are the primary fruit crop in the State of Utah, so the change in tart cherries has the greatest effect on the orchard land value. Average prices received by producers were down for tart cherries, apples, and peaches. The average percentage change and prices received by producers are shown in **Table 7**. With the discontinuing of state data for apples, and peaches. National data was used for price and production for those commodities. The 2022 state census information was used for all orchard crop production lands. This is an example of averaging going a negative way a higher price in 2018 was dropped out of the formula.

Table 7	Prices received for Utah's fruit crop (average percentage change)					
	Ave. Price change	2023	2022	2021	2020	2019
Tart Cherries (per LB)	-20.0%	\$ 0.24	\$ 0.26	\$ 0.25	\$ 0.17	\$ 0.16
Apples (per LB)	-19.0%	\$ 0.27	\$ 0.32	\$ 0.31	\$ 0.30	\$ 0.34
Peaches (per Ton)	-19.0%	\$ 1,140.00	\$ 1,060.00	\$ 943.00	\$ 1,430.00	\$ 788.00

**Cost Changes.** Input costs were all down in 2023. The cost of fuel, fertilizer, feed, and chemicals all decreased. Machinery had a slight increase and seed prices were constant. The total change in the price of the inputs had a net effect of a (-3.4) three-point 4 percent decrease in the cost of production. (**Table 4**).

**Crop Yields.** Average crop yield changes from 2022 to 2023 were mixed, with the average yields of alfalfa, corn silage, corn for grain, wheat, and onions increasing. Average yields for barley, and safflower decreased. (**Table 8**). The greatest average decrease was safflower with a (4.86%) four-point eight six percent decrease. The largest average yield increase was alfalfa at (2.1%) two-point one percent. Again, using the average took out much of the drastic swings.

Table 8	Yield per acre for Major Utah Crops				
	2022-2023 Average and Annual change				
	Ave. yield	Annual Yield			
Crop	change	change		2022	2023
Alfalfa	2.10%	2.6%		3.9 ton	4 ton
Barley	-3.40%	-11.0%		82 bu.	73 bu.
Corn(grain)	0.37%	12.1%		165 bu.	185 bu.
Corn(silage)	1.69%	4.2%		24 ton	25 ton
Wheat	0.41%	47.2%		36 bu.	53 bu.
Safflower	-4.86%	24.5%		530 bu.	660 bu.
Onions	1.55%	5.4%		519 bu.	547 bu.

The five-year average production yields decreased for tart cherry, and peach production. Apple had a slight increase in production. The total 2022 and 2023 fruit production, the annual percentage change, and five-year average are shown in (**Table 9**).

Table 9	Utah Fruit Production				
	2022-2023 (average percentage change)				
	Ave. Yield	Annual Yield			
	Change	Change		2022	2023
Tart Cherries (lbs.)	-6.7%	43.81%		22,600,000	32,500,000
Apples bu.	1.7%	13.02%		33,800	38,200
Peaches (tons)	-1.6%	-7.30%		8.63	8.00

***Crop Mix.*** The mix of crops on a county-by-county basis is based on the 2022 census data (2022, NASS). The 2022 census information showed changes in the crop mix in many of the counties in the State. There was not a significant shift to a single crop, just subtle movements of one crop or another. Alfalfa is still the major crop produced in the State.

***Summary.*** As an illustration of the process used in calculating changes in net returns, if the average price of a particular crop mix *increased* 8%, yields *increased* by 1%, the crop mix was *unchanged* from year to year, and costs *were up* by 7%, land values would *increase* by approximately 2%.

## **Suggested Land Values**

### ***Irrigated Land***

Alfalfa remains the crop with the largest acreage devoted to it throughout Utah. Because of the relatively large proportion of acreage producing alfalfa, changes in alfalfa hay production tend to dominate the overall land values county-by-county. Average yield increased for alfalfa, wheat, onions, grain corn, silage corn. Yields decreased on average for barley and safflower. The average price received by producers in the State increased in 2023 for all crops, with barley having the greatest increase. However, barley production within the State is only a small portion of all crop production. The cost of production decreased nationally by three-point four percent. These factors resulted in a proposed increase in most land values across the State.

### ***Orchard Land***

The average yields for tart cherry production in the State were down in 2023, with peaches decreasing nationally and apples increasing. The costs of production decreased nationally, and average prices received by producers decreased for tart cherries, apples, and peaches. Thereby causing a proposed decrease in orchard land values across the State of Utah.

### ***Meadow Land***

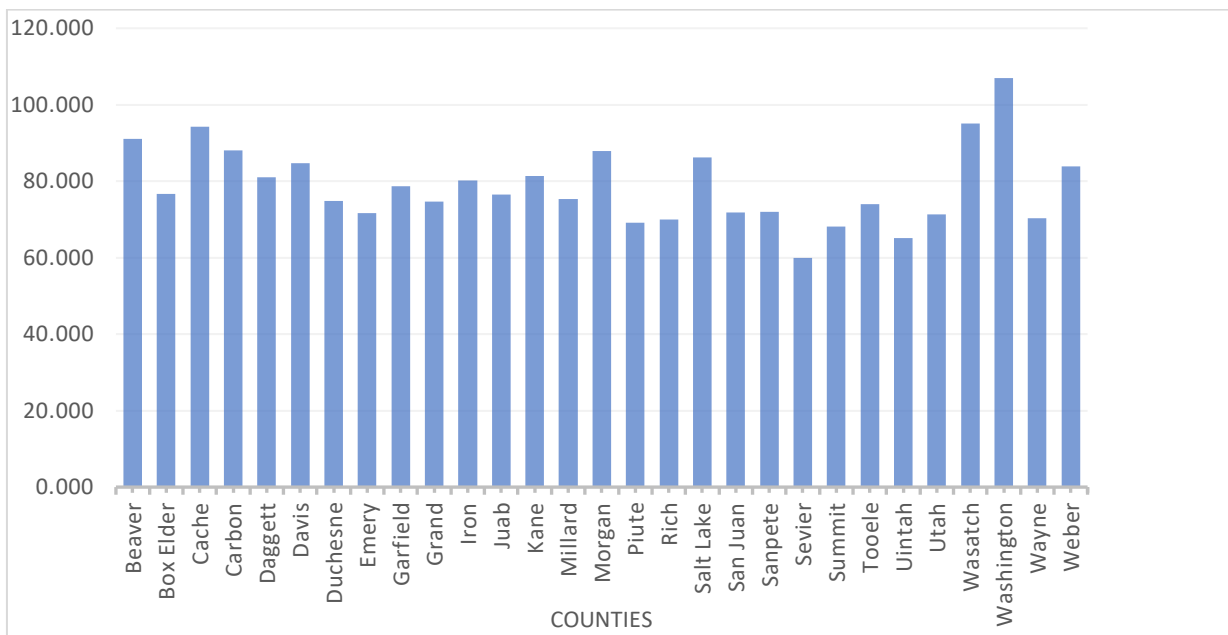
An increase in the land values for meadow land is recommended in the State.

### ***Dry Land***

An increase in land values for most counties with dry lands is recommended.

### ***Grazing Lands***

The two most significant factors impacting the value of grazing land are the level of precipitation received and the price or value of cattle. The chart below **(Figure 2.)** summarizes five year's county-by-county precipitation levels as a percent (%) of "normal." Note that these data do not provide details on when the precipitation was received, which can also impact productivity. Furthermore, the level of rainfall even changes within individual counties, and these data apply only to certain county rain gauge areas.



**Figure 2. County Five-year Precipitation Average, 2019-2023<sup>3</sup>.**

Most of the counties in the State received greater than average precipitation when considering a five-year running average. However, over the last few years, the numbers have been getting closer to an average normal. Washington county is over 100 percent with using a five-year average. Sevier county received the lowest average precipitation during the previous five years. In addition to precipitation, the price of cattle has been increasing over the last several years. Therefore, a slight increase in grazing land is proposed for most of the grazing land in the state.

***Nonproductive Land***

No change is recommended for land that is in the nonproduction category.

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<sup>3</sup> Data collected from USU Climate Center.



## **Suggestions for Additional Work**

We will continue working with the USU Extension agricultural agents to develop accurate crop budgets for each of the counties in the State. The process adopted at the county level is to bring together a group of representative landholders to work out localized budgets under the direction of the USU Extension County agriculture agents, who, in turn, work under the supervision of the Applied Economics Department at Utah State University. In addition, we adjust the budgets for any known factors that influence the returns and/or costs of production. This should enhance producer acceptance of the budgeted values.

We will continue to monitor the crop mix's changes with each new agricultural census and watch for new crops being produced and the changes in the mix that they may cause.

A consolidation of the 2024 proposed land values is included in **Table 1**. More detailed information in terms of the actual proposed land values and changes for all land classes and types for 2024 recommendations and 2023 land values are provided in **Appendix A**.

## **Appendix A: Values of Land in Alternative Uses**

**Irrigated Farmland:** Irrigated farmland values were increased in all counties throughout the State for 2024. Weber and Davis Counties had the greatest increase of \$56 dollars per acre. 2024 values along with the 2023 value as shown in **Table A1**. For those counties without any land in a class, a value of zero is given consistent with previous reports.

**Table A1. Irrigated Farmland, Classes I through IV.**

<b>2023-2024 Irrigated Lands</b>								
	2023	2024	2023	2024	2023	2024	2023	2024
County	I	I	II	II	III	III	IV	IV
Beaver	0	0	533	542	439	446	363	369
Box Elder	722	757	635	666	498	522	413	433
Cache	642	686	548	585	415	443	322	344
Carbon	498	533	395	423	265	284	169	181
Daggett	0	0	0	0	0	0	179	192
Davis	793	849	698	747	562	601	468	501
Duchesne	0	0	461	492	324	346	227	242
Emery	472	505	380	406	238	254	149	159
Garfield	0	0	0	0	199	213	107	114
Grand	0	0	365	391	232	248	141	151
Iron	756	807	664	709	526	562	431	460
Juab	0	0	418	443	283	300	187	198
Kane	393	421	304	325	168	180	75	80
Millard	750	800	658	701	521	555	423	451
Morgan	0	0	0	0	369	395	274	293
Piute	0	0	0	0	315	337	219	234
Rich	0	0	0	0	168	180	77	82
Salt Lake	656	691	563	593	430	453	332	350
San Juan	0	0	0	0	149	152	67	68
Sanpete	0	0	512	548	377	404	282	302
Sevier	0	0	543	580	403	431	309	330
Summit	0	0	433	463	297	318	203	217
Tooele	0	0	419	448	281	301	192	205
Uintah	0	0	0	0	349	372	259	276
Utah	707	749	610	647	470	498	376	399
Wasatch	0	0	459	492	319	342	226	242
Washington	615	656	524	559	385	411	291	310
Wayne	0	0	0	0	310	333	219	235
Weber	785	841	688	737	547	586	447	479

All irrigated land value changes are shown in table A2 below.

**Table A2. Specific Changes in Irrigated Farmland Values.**

<b>2024 Irrigated Land Change</b>				
<b>County</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
<b>Beaver</b>	0	9	7	6
<b>Box Elder</b>	35	31	24	20
<b>Cache</b>	44	37	28	22
<b>Carbon</b>	35	28	19	12
<b>Daggett</b>	0	0	0	13
<b>Davis</b>	56	49	39	33
<b>Duchesne</b>	0	31	22	15
<b>Emery</b>	33	26	16	10
<b>Garfield</b>	0	0	14	7
<b>Grand</b>	0	26	16	10
<b>Iron</b>	51	45	36	29
<b>Juab</b>	0	25	17	11
<b>Kane</b>	28	21	12	5
<b>Millard</b>	50	43	34	28
<b>Morgan</b>	0	0	26	19
<b>Piute</b>	0	0	22	15
<b>Rich</b>	0	0	12	5
<b>Salt Lake</b>	35	30	23	18
<b>San Juan</b>	0	0	3	1
<b>Sanpete</b>	0	36	27	20
<b>Sevier</b>	0	37	28	21
<b>Summit</b>	0	30	21	14
<b>Tooele</b>	0	29	20	13
<b>Uintah</b>	0	0	23	17
<b>Utah</b>	42	37	28	23
<b>Wasatch</b>	0	33	23	16
<b>Washington</b>	41	35	26	19
<b>Wayne</b>	0	0	23	16
<b>Weber</b>	56	49	39	32

### ***Orchard Land***

Land values for orchard lands decreased in all counties for the 2024 report. The largest decreases recommended are \$76 in Washington County, as shown in **Table A3**.

**Table A3. Suggested Changes in 2024 Orchard Land Values.**

<b>Orchard Land Values</b>			<b>Orchard Value Change</b>	
	<b>2023</b>	<b>2024</b>		<b>Value</b>
<b>County</b>	<b>Value</b>	<b>Value</b>	<b>County</b>	<b>Change</b>
Beaver	291	227	Beaver	-64
Box Elder	317	247	Box Elder	-70
Cache	291	227	Cache	-64
Carbon	291	227	Carbon	-64
Daggett	0	0	Daggett	0
Davis	318	248	Davis	-70
Duchesne	291	227	Duchesne	-64
Emery	291	227	Emery	-64
Garfield	291	227	Garfield	-64
Grand	291	227	Grand	-64
Iron	291	227	Iron	-64
Juab	291	227	Juab	-64
Kane	291	227	Kane	-64
Millard	291	227	Millard	-64
Morgan	291	227	Morgan	-64
Piute	291	227	Piute	-64
Rich	0	0	Rich	0
Salt Lake	291	227	Salt Lake	-64
San Juan	291	227	San Juan	-64
Sanpete	291	227	Sanpete	-64
Sevier	291	227	Sevier	-64
Summit	291	227	Summit	-64
Tooele	291	227	Tooele	-64
Uintah	291	227	Uintah	-64
Utah	321	250	Utah	-71
Wasatch	291	227	Wasatch	-64
Washington	346	270	Washington	-76
Wayne	291	227	Wayne	-64
Weber	318	248	Weber	-70

\*When a county has no acres of a given class of land, a \$0 taxable value is listed.

## ***Meadow Land***

Proposed meadow land values increased across the State, the largest increase being \$18.00 per acre in Davis County are shown in **Table A4**.

**Table A4. Suggested Values and changes in Meadow Land, 2023-2024.**

<b>2024 Meadow Land Values</b>			<b>Meadow Land Change</b>	
	<b>2023</b>	<b>2024</b>		
<b>County</b>			<b>County</b>	
<b>Beaver</b>	225	229	<b>Beaver</b>	4
<b>Box Elder</b>	232	243	<b>Box Elder</b>	11
<b>Cache</b>	246	263	<b>Cache</b>	17
<b>Carbon</b>	125	134	<b>Carbon</b>	9
<b>Daggett</b>	147	157	<b>Daggett</b>	10
<b>Davis</b>	251	269	<b>Davis</b>	18
<b>Duchesne</b>	159	170	<b>Duchesne</b>	11
<b>Emery</b>	131	140	<b>Emery</b>	9
<b>Garfield</b>	99	106	<b>Garfield</b>	7
<b>Grand</b>	127	136	<b>Grand</b>	9
<b>Iron</b>	249	266	<b>Iron</b>	17
<b>Juab</b>	144	153	<b>Juab</b>	9
<b>Kane</b>	102	109	<b>Kane</b>	7
<b>Millard</b>	184	196	<b>Millard</b>	12
<b>Morgan</b>	189	202	<b>Morgan</b>	13
<b>Piute</b>	180	193	<b>Piute</b>	13
<b>Rich</b>	100	107	<b>Rich</b>	7
<b>Salt Lake</b>	210	221	<b>Salt Lake</b>	11
<b>San Juan</b>	0	0	<b>San Juan</b>	0
<b>Sanpete</b>	185	198	<b>Sanpete</b>	13
<b>Sevier</b>	193	206	<b>Sevier</b>	13
<b>Summit</b>	190	203	<b>Summit</b>	13
<b>Tooele</b>	174	186	<b>Tooele</b>	12
<b>Uintah</b>	196	209	<b>Uintah</b>	13
<b>Utah</b>	235	249	<b>Utah</b>	14
<b>Wasatch</b>	198	212	<b>Wasatch</b>	14
<b>Washington</b>	216	230	<b>Washington</b>	14
<b>Wayne</b>	163	175	<b>Wayne</b>	12
<b>Weber</b>	293	314	<b>Weber</b>	21

\*When a county has no acres of a given class of land, a \$0 taxable value is listed.

## ***Dry Farmland***

An increase in dry farmland values is proposed in some counties for 2024 as shown in **Table A5**.

**Table A5. Suggested Values for Dry Farmland, 2023-2024.**

<b>2024 Dry Farmland Values</b>				
	<b>2023</b>	<b>2024</b>	<b>2023</b>	<b>2024</b>
<b>County</b>	III	III	IV	IV
<b>Beaver</b>	49	50	14	14
<b>Box Elder</b>	84	88	53	56
<b>Cache</b>	110	117	76	81
<b>Carbon</b>	46	49	14	15
<b>Daggett</b>	0	0	0	0
<b>Davis</b>	48	51	14	15
<b>Duchesne</b>	52	56	18	19
<b>Emery</b>	0	0	0	0
<b>Garfield</b>	45	48	14	15
<b>Grand</b>	46	49	14	15
<b>Iron</b>	46	49	14	15
<b>Juab</b>	49	52	14	15
<b>Kane</b>	45	48	14	15
<b>Millard</b>	44	47	13	14
<b>Morgan</b>	63	67	25	27
<b>Piute</b>	0	0	0	0
<b>Rich</b>	45	48	14	15
<b>Salt Lake</b>	51	54	16	17
<b>San Juan</b>	46	47	17	17
<b>Sanpete</b>	52	56	18	19
<b>Sevier</b>	0	0	0	0
<b>Summit</b>	45	48	14	15
<b>Tooele</b>	49	52	14	15
<b>Uintah</b>	52	55	18	19
<b>Utah</b>	48	51	14	15
<b>Wasatch</b>	45	48	14	15
<b>Washington</b>	45	48	13	14
<b>Wayne</b>	0	0	0	0
<b>Weber</b>	78	84	42	45

\*When a county has no acres of a given class of land, a \$0 taxable value is listed.

The largest proposed increase in dry land values is \$7 per acre in Cache County as can be seen in **Table A6**.

**Table A6. 2024 Proposed Changes in Dry Land Values.**

<b>Dry Farmland Change</b>		
	III	IV
<b>County</b>		
<b>Beaver</b>	1	0
<b>Box Elder</b>	4	3
<b>Cache</b>	7	5
<b>Carbon</b>	3	1
<b>Daggett</b>	0	0
<b>Davis</b>	3	1
<b>Duchesne</b>	4	1
<b>Emery</b>	0	0
<b>Garfield</b>	3	1
<b>Grand</b>	3	1
<b>Iron</b>	3	1
<b>Juab</b>	3	1
<b>Kane</b>	3	1
<b>Millard</b>	3	1
<b>Morgan</b>	4	2
<b>Piute</b>	0	0
<b>Rich</b>	3	1
<b>Salt Lake</b>	3	1
<b>San Juan</b>	1	0
<b>Sanpete</b>	4	1
<b>Sevier</b>	0	0
<b>Summit</b>	3	1
<b>Tooele</b>	3	1
<b>Uintah</b>	3	1
<b>Utah</b>	3	1
<b>Wasatch</b>	3	1
<b>Washington</b>	3	1
<b>Wayne</b>	0	0
<b>Weber</b>	6	3

## ***Grazing Land***

There is a proposed increase in grazing land values in most classes and counties in the State as shown in **Table A7**.

**Table A7. Suggested 2023-2024 Grazing Land values**

<b>2024 Grazing Land Values</b>								
	<b>2023</b>	<b>2024</b>	<b>2023</b>	<b>2024</b>	<b>2023</b>	<b>2024</b>	<b>2023</b>	<b>2024</b>
<b>County</b>	I	I	II	II	III	III	IV	IV
<b>Beaver</b>	67	68	21	21	16	16	5	5
<b>Box Elder</b>	67	70	21	22	15	16	5	5
<b>Cache</b>	66	70	21	22	13	14	5	5
<b>Carbon</b>	49	52	14	15	12	13	5	5
<b>Daggett</b>	49	52	13	14	11	12	5	5
<b>Davis</b>	57	61	18	19	12	13	5	5
<b>Duchesne</b>	65	69	18	19	13	14	6	6
<b>Emery</b>	66	71	20	21	13	14	6	6
<b>Garfield</b>	73	78	21	22	14	15	5	5
<b>Grand</b>	74	79	21	22	14	15	5	5
<b>Iron</b>	71	76	21	22	14	15	5	5
<b>Juab</b>	61	65	17	18	13	14	5	5
<b>Kane</b>	71	76	23	25	14	15	5	5
<b>Millard</b>	72	77	23	25	14	15	6	6
<b>Morgan</b>	65	70	21	22	12	13	6	6
<b>Piute</b>	85	91	24	26	16	17	5	5
<b>Rich</b>	60	64	19	20	12	13	5	5
<b>Salt Lake</b>	65	68	18	19	14	15	5	5
<b>San Juan</b>	64	65	21	21	13	13	5	5
<b>Sanpete</b>	59	63	17	18	13	14	6	6
<b>Sevier</b>	62	66	17	18	13	14	6	6
<b>Summit</b>	68	73	19	20	13	14	5	5
<b>Tooele</b>	68	73	19	20	13	14	5	5
<b>Uintah</b>	76	81	26	28	18	19	6	6
<b>Utah</b>	61	65	22	23	13	14	5	5
<b>Wasatch</b>	49	52	15	16	12	13	5	5
<b>Washington</b>	61	65	20	21	12	13	6	6
<b>Wayne</b>	83	89	26	28	16	17	5	5
<b>Weber</b>	68	73	19	20	13	14	6	6



An increase of \$6.00 in class one land value in Piute, and Wayne counties is the largest proposed increase as can be seen in **Table A8**.

**Table A8. Specific Proposed 2024 Changes in Grazing Land Value.**

<b>Grazing Land Change</b>				
<b>County</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
Beaver	1	0	0	0
Box Elder	3	1	1	0
Cache	4	1	1	0
Carbon	3	1	1	0
Daggett	3	1	1	0
Davis	4	1	1	0
Duchesne	4	1	1	0
Emery	5	1	1	0
Garfield	5	1	1	0
Grand	5	1	1	0
Iron	5	1	1	0
Juab	4	1	1	0
Kane	5	2	1	0
Millard	5	2	1	0
Morgan	5	1	1	0
Piute	6	2	1	0
Rich	4	1	1	0
Salt Lake	3	1	1	0
San Juan	1	0	0	0
Sanpete	4	1	1	0
Sevier	4	1	1	0
Summit	5	1	1	0
Tooele	5	1	1	0
Uintah	5	2	1	0
Utah	4	1	1	0
Wasatch	3	1	1	0
Washington	4	1	1	0
Wayne	6	2	1	0
Weber	5	1	1	0

## ***Nonproductive Land***

No changes are proposed again for nonproductive land for the 2024 report year as shown in **Table A9**.

**Table A9. Suggested Value and Changes in Nonproductive Land, 2023-2024.**

<b>Non-productive Land Values and Change</b>			
	<b>2023</b>	<b>2024</b>	<b>Value</b>
<b>County</b>			<b>Change</b>
<b>Beaver</b>	5	5	0
<b>Box Elder</b>	5	5	0
<b>Cache</b>	5	5	0
<b>Carbon</b>	5	5	0
<b>Daggett</b>	5	5	0
<b>Davis</b>	5	5	0
<b>Duchesne</b>	5	5	0
<b>Emery</b>	5	5	0
<b>Garfield</b>	5	5	0
<b>Grand</b>	5	5	0
<b>Iron</b>	5	5	0
<b>Juab</b>	5	5	0
<b>Kane</b>	5	5	0
<b>Millard</b>	5	5	0
<b>Morgan</b>	5	5	0
<b>Piute</b>	5	5	0
<b>Rich</b>	5	5	0
<b>Salt Lake</b>	5	5	0
<b>San Juan</b>	5	5	0
<b>Sanpete</b>	5	5	0
<b>Sevier</b>	5	5	0
<b>Summit</b>	5	5	0
<b>Tooele</b>	5	5	0
<b>Uintah</b>	5	5	0
<b>Utah</b>	5	5	0
<b>Wasatch</b>	5	5	0
<b>Washington</b>	5	5	0
<b>Wayne</b>	5	5	0
<b>Weber</b>	5	5	0