

# PRICE RECOMMENDATIONS - 2017

PREPARED BY VINEYARD FINANCIAL ASSOCIATES FOR

## El Dorado Wine Grape Growers Association

Wine Grape Price Recommendations

PUBLIC

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## IMPORTANT NOTES ON METHODS & CALCULATIONS

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### RECOMMENDED PRICES

Recommended prices for 2017 were calculated as  $P_{2017} = P_{2016} * (1 + g)$ , where  $P_x$  indicates price for a given year and  $g$  indicates the growth rate. The assumed growth rate was calculated as  $g = i + \alpha + l$ , where  $i$  indicates inflation, as represented by the national Consumer Prices Index,  $\alpha$  indicates the long-term real<sup>1</sup> growth in prices for El Dorado, and  $l$  indicates an adjustment for the increase in labor costs.

In this case, based on the most recent Philadelphia Federal Reserve Livingston survey, I assumed that CPI for 2016-2017 would be 2.4%. Based on previous work, I calculated the long-term, real growth in El Dorado prices as 1%. Based on my own proprietary calculations and drawing on dynamics in established wine regions, I assumed that in the 2016-2017 period, additional labor costs would need to be offset by an additional, marginal price increase of 1.4% for growers to maintain the long-term trend in gross margins. The calculated growth rate, therefore, is 4.8%.

Recommended prices for 2017 were calculated as 1.048 times the 2016 average price, as reported in the Crop Report and were rounded to the nearest \$5 increment. Attached to this report, I have made my original work available for easy inspection, if desired. Additionally, I can also provide estimates of the accuracy of estimates of the variables used to develop the assumed growth rate.

### RECOMMENDED PRICE DISTRIBUTIONS

Except for Lagrein, all price distributions were calculated using a simple methodology. Percentile prices were calculated for District 10 prices for each variety. For each variety, the ratio of the 2017 recommended El Dorado price to the 2016 District 10 price was calculated. This ratio was then multiplied by the percentile prices calculated in the first step, in order to conclude a price distribution estimate for each variety. This report contains such price recommendations for the 1<sup>st</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 99<sup>th</sup> percentile.

The **50<sup>th</sup> percentile** price is the median price<sup>2</sup>. Typically, in our industry, the median price is higher than the average price. El Dorado is not an exception. This provides another negotiating point for growers, who can argue that the median is more representative of typical grapes for the region: it is not as heavily influenced by large sales and/or by sales of grapes that exhibit atypical prices/quality. In fact, a grower could go even further. If a median price is much higher than the average price, he may instead want to argue that a “trimmed mean” should be used. This involves removing a small percentage of either tonnage or sales at the high- and low-end of the price distribution to more accurately reflect the “normal” part of the market.

The **1<sup>st</sup> percentile** was given to indicate a minimum price that growers should accept. Every grower has a different strategy in terms of crop care, yields and other factors that determine price. In some cases, a grower may elect to compete on cost. However, even those growers should strive to avoid accepting prices below the recommended 1<sup>st</sup> percentile price.

The **25<sup>th</sup> percentile** price indicates my recommendation for the price level that 75% of all grape tonnage should sell above. The **75<sup>th</sup> percentile** price indicates my recommendation for the price level that 25% of all grape

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<sup>1</sup> Real, in this instance, indicates a growth rate measured in constant dollars.

<sup>2</sup> For instance, in the series {1, 2, 6}, the average is 3:  $(6+2+1)/3 = 3$ . The median is 2, as this is the middle number.

tonnage should sell above. The **99<sup>th</sup> Percentile** indicates the minimum price a grower should ask for, if he believes his grapes warrant the highest or one of the highest prices in the county.

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### *Why Aren't Recommended Prices Based Upon Costs/Profitability?*

In my recent presentation to the El Dorado Wine Grape Growers, I spent a great deal of time talking about profitability issues. Depending on yields and costs, and varying greatly between operations, the price level necessary to ensure financial sustainability could be roughly estimated as \$2,400 per ton for a mid-sized vineyard producing yields of 3.5 tons to the acre. While this could constitute a good price target, and though this report is not an attempt to forecast prices, I must consider market dynamics. Market prices are not determined by “fairness”, but by buyers’ willingness to pay a certain price and sellers’ willingness to sell at a certain price. Besides this, the authors of the 2015 cost study for the Sierra Foothills region have done a laudable job of providing a great resource for those seeking to incorporate cost-driven considerations into price research.

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PRICE RECOMMENDATIONS – BASIC

This table includes only the average price and the median price. It is more readable than the larger chart that follows.

EL DORADO - 2017	RECOMMENDED PRICES	
	AVERAGE	MEDIAN
Barbera	\$1,625.00	\$1,662.01
Cabernet Franc	\$1,655.00	\$1,709.23
Cabernet Sauvignon	\$1,585.00	\$1,961.90
Chardonnay	\$1,520.00	\$1,615.70
Grenache	\$1,875.00	\$1,763.40
Grenache Blanc	\$2,145.00	N/A
Lagrein <sup>3</sup>	\$1,835.00	N/A
Malbec	\$1,780.00	\$1,875.80
Marsanne	\$2,010.00	\$2,045.80
Merlot	\$1,670.00	\$1,725.50
Mourvedre/Mataro	\$2,015.00	\$1,973.71
Muscat Canelli & Blanc	\$1,415.00	N/A
Petit Verdot	\$1,785.00	\$1,791.15
Petite Sirah	\$1,705.00	\$1,673.61
Pinot Gris	\$1,300.00	\$1,278.71
Pinot Noir	\$1,800.00	\$1,816.58
Primitivo	\$1,720.00	N/A
Rousanne	\$1,915.00	\$1,850.96
Sangiovese	\$1,655.00	\$1,648.22
Sauvignon Blanc	\$1,310.00	\$790.25
Syrah	\$1,765.00	\$1,775.93
Tempranillo	\$1,770.00	\$1,660.28
Touriga Nacional	\$1,960.00	\$1,974.33
Viognier	\$1,655.00	\$1,644.26
Zinfandel	\$1,545.00	\$1,622.90
Other Red	\$2,035.00	N/A
Other White	\$1,700.00	N/A

<sup>3</sup> Lagrein was created as a test case prior to bidding on the project. The Lagrein worksheet in the appendix contains the breakdown for the growth rate and, due to a lack of data, an idiosyncratic, recommended price distribution that does not conform to this chart.

PRICE RECOMMENDATIONS - EXPANDED

This chart contains more detail, providing additional percentile levels.

<b>EL DORADO - 2017</b>	<b>RECOMMENDED PRICES</b>					
<b>VARIETY</b>	<b>AVERAGE</b>	<b>1ST %ILE</b>	<b>25TH %ILE</b>	<b>MEDIAN</b>	<b>75TH %ILE</b>	<b>99TH %ILE</b>
<b>Barbera</b>	\$1,625.00	\$1,001.30	\$1,440.90	\$1,662.01	\$1,773.41	\$2,881.79
<b>Cabernet Franc</b>	\$1,655.00	\$1,025.54	\$1,417.52	\$1,709.23	\$1,823.18	\$2,165.02
<b>Cabernet Sauvignon</b>	\$1,585.00	\$523.17	\$817.46	\$1,961.90	\$2,223.49	\$2,713.96
<b>Chardonnay</b>	\$1,520.00	\$1,077.13	\$1,400.27	\$1,615.70	\$1,615.70	\$2,154.27
<b>Grenache</b>	\$1,875.00	\$1,058.04	\$1,645.84	\$1,763.40	\$2,174.86	\$3,879.48
<b>Grenache Blanc</b>	\$2,145.00	N/A	N/A	N/A	N/A	N/A
<b>Lagrein<sup>4</sup></b>	\$1,835.00	N/A	N/A	N/A	N/A	N/A
<b>Malbec</b>	\$1,780.00	\$884.81	\$1,659.03	\$1,875.80	\$1,880.23	\$2,212.03
<b>Marsanne</b>	\$2,010.00	\$1,136.56	\$1,818.49	\$2,045.80	\$2,386.77	\$2,614.08
<b>Merlot</b>	\$1,670.00	\$970.59	\$1,725.50	\$1,725.50	\$1,833.34	\$1,833.34
<b>Mourvedre/Mataro</b>	\$2,015.00	\$1,134.39	\$1,512.52	\$1,973.71	\$2,268.77	\$4,411.50
<b>Muscat Canelli &amp; Blanc</b>	\$1,415.00	N/A	N/A	N/A	N/A	N/A
<b>Petit Verdot</b>	\$1,785.00	\$1,475.07	\$1,791.15	\$1,791.15	\$1,791.15	\$2,107.24
<b>Petite Sirah</b>	\$1,705.00	\$1,115.74	\$1,562.04	\$1,673.61	\$1,896.76	\$2,789.35
<b>Pinot Gris</b>	\$1,300.00	\$1,065.59	\$1,065.59	\$1,278.71	\$1,385.27	\$1,918.07
<b>Pinot Noir</b>	\$1,800.00	\$1,211.05	\$1,693.45	\$1,816.58	\$2,018.42	\$2,018.42
<b>Primitivo</b>	\$1,720.00	N/A	N/A	N/A	N/A	N/A
<b>Rousanne</b>	\$1,915.00	\$1,433.00	\$1,731.54	\$1,850.96	\$2,030.08	\$2,507.75
<b>Sangiovese</b>	\$1,655.00	\$1,098.81	\$1,538.34	\$1,648.22	\$1,758.10	\$2,197.63
<b>Sauvignon Blanc</b>	\$1,310.00	\$790.25	\$790.25	\$790.25	\$2,031.50	\$2,500.30
<b>Syrah</b>	\$1,765.00	\$959.00	\$1,479.94	\$1,775.93	\$2,012.72	\$2,604.69
<b>Tempranillo</b>	\$1,770.00	\$1,217.54	\$1,438.91	\$1,660.28	\$1,881.65	\$3,320.56
<b>Touriga Nacional</b>	\$1,960.00	\$1,579.46	\$1,842.71	\$1,974.33	\$1,974.33	\$2,764.06
<b>Viognier</b>	\$1,655.00	\$998.30	\$1,174.47	\$1,644.26	\$1,937.87	\$2,614.37
<b>Zinfandel</b>	\$1,545.00	\$378.68	\$1,308.79	\$1,622.90	\$1,731.10	\$2,813.03
<b>Other Red</b>	\$2,035.00	N/A	N/A	N/A	N/A	N/A
<b>Other White</b>	\$1,700.00	N/A	N/A	N/A	N/A	N/A

<sup>4</sup> Lagrein was created as a test case prior to bidding on the project. The Lagrein worksheet in the appendix contains the breakdown for the growth rate and, due to a lack of data, an idiosyncratic, recommended price distribution that does not conform to this chart.

## APPENDIX

Appended to this document are two Excel files. One includes calculations upon which this document is based. The other includes tables that show District 10 prices for every percentile level 1-99, plus average prices, in both same-year and constant dollars. These can also be obtained by [e-mailing me](#) or finding them on my website: [www.VineyardFinancialAssociates.com](http://www.VineyardFinancialAssociates.com).