DATE: August 5, 2016
TO: Directors & Members
FROM: Rob Vandenheuvel, General Manager

MPC FRIDAY MARKET UPDATE

<table>
<thead>
<tr>
<th>CHICAGO CHEDDAR CHEESE</th>
<th>CHICAGO AA BUTTER</th>
<th>NON-FAT DRY MILK</th>
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</thead>
<tbody>
<tr>
<td>Blocks +$0.825 $1.8150</td>
<td>Weekly Change +$1.350 $2.2700</td>
<td>Week Ending 7/29 &amp; 7/30</td>
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<tr>
<td>Barrels +$1.050 $1.8800</td>
<td>Weekly Average +$0.0110 $2.2180</td>
<td>Calif. Plants $0.7920 9,091,435</td>
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<td>Weekly Average, Cheddar Cheese</td>
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<td>Nat’l Plants $0.8407 18,424,046</td>
</tr>
<tr>
<td>Blocks +$0.0460 $1.7655</td>
<td>Dairy Market News w/e 08/05/16 $2.863</td>
<td>Prior Week Ending 7/22 &amp; 7/23</td>
</tr>
<tr>
<td>Barrels +$0.0470 $1.8220</td>
<td>National Plants w/e 07/30/16 $2.694</td>
<td>Calif. Plants $0.7859 9,569,453</td>
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<td></td>
<td></td>
<td>Nat’l Plants $0.8472 20,858,271</td>
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FRED DOUMA’S PRICE PROJECTIONS…
Aug 5 Est: Quota cwt. $16.64 Overbase cwt. $14.94 Cls. 4a cwt. $13.88 Cls. 4b cwt. $16.37
July ’16 Final: Quota cwt. $15.61 Overbase cwt. $13.91 Cls. 4a cwt. $14.23 Cls. 4b cwt. $14.67

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MARKET COMMENTARY: (By Sarina Sharp, Daily Dairy Report, sarina@dailymarketer.com)

Milk & Dairy Markets
The fiery cheese markets remain ablaze. CME spot Cheddar barrels jumped 10.5ȼ this week to $1.88/lb., a price not seen since late 2014. The well-supplied block market is struggling mightily to keep pace as barrels sprint ever higher. Blocks climbed 8.25ȼ this week to $1.815. Buoyed by spot cheese, August through October Class III futures added 20ȼ to 37ȼ this week. Deferred contracts were steady to a little lower. The inverted structure of the futures market implies that as the summer heat gives way to brisk fall days, fresh cheese will crop up. Milk prices are forecast to fall from the late summer highs.

Milk continues to flood into cheese vats. U.S. cheese output reached 987.4 million pounds in June, up 1.1% from a year ago. However, Cheddar production fell 3.5% from June 2015 volumes, and year-to-date output stands 1.4% lower than last year after adjusting for Leap Day. Americans are hungry for pizza and cheese makers have shifted production from Cheddar to Mozzarella and other Italian-style cheeses. The Cheddar deficit has helped to limit supplies of fresh cheese for sale at the exchange, propping up the spot market while warehouses are bursting with aged inventories.

Domestic cheese demand remains strong, but exports have failed to
impress. In June, cheese and curd exports fell 12.6% short of year-ago volumes. Given the persistent and quickly widening gap between domestic and global markets, U.S. cheese exports are likely to continue to underperform.

In contrast, whey is leaving our shores at an increasingly rapid pace. In June, dry whey exports climbed to 37.3 million pounds, an eleven-month high. Exports of whey protein concentrate (WPC) with less than 80% protein soared to 34.5 million pounds, the largest volume ever. In fact, WPC exports accounted for 96% of domestic production in June. As manufacturers directed more whey to WPC, output of dry whey dropped, and stocks fell to a new low for the year. Inventories of dry whey for human consumption on June 30 were down 14.9% from May and 2.3% lower than the prior year. The whey market suffered a steep decline last summer, but it is slowly, steadily recovering. Whey futures gained ground every day this week.

U.S. butter output totaled 152.9 million pounds in June, the highest output for the month since 1954. Stocks are large and exports are hardly significant. U.S. butter imports in June were up 70.8% from a year ago. Cream is much more readily available than is typical at this time of year, even after a stretch of very high temperatures. Nonetheless, the spot butter market bounced right back from last week’s slide. It vaulted 13.5ȼ higher to $2.27. Class IV futures settled mostly higher; the September contract gained 24ȼ for the week.

Only the milk powder market retreated. Spot nonfat dry (NDM) milk slipped 1.75ȼ to 83.25ȼ. U.S. production of NDM and skim milk powder (SMP) in June fell 0.6% short of year-ago volumes, at 199 million pounds. Despite lower production, NDM stocks climbed to 237.66 million pounds, up 2.3% from inventories on May 31. However, stocks remain 9.4% lower than they were a year ago. Exports of NDM were slightly larger on a daily average basis in June than in May, but they were 8.7% lower than prior year levels and they pale in comparison to shipments in June 2014. Milk powder exports to Mexico dropped 5.5% from a year ago. Europe and New Zealand are crowding in on U.S. market share south of the border.

Prices moved higher across the board at the Global Dairy Trade (GDT) auction. The GDT index rose 6.6%, its largest increase so far this year. Whole milk powder (WMP) prices leapt 9.9%, and SMP prices rallied 2.2%. Butter finished 6.6% higher and the average winning price for Cheddar was slightly higher than at the previous event.
Strength in the milk powder market is likely based on the assumption that New Zealand will have less product to offer. Fonterra expects New Zealand milk output in the nascent 2016-17 season to fall 3% short of the previous season. Ultimately, Oceania milk production will depend on the weather. Winter rain and snow failed to recharge soil moisture in Canterbury, along the eastern coast of the South Island. Dairy producers who are short on cash won’t be inclined to pay for supplemental feed if they run short of water as well. If pasture conditions deteriorate, cow numbers and milk output will likely decline.

For the week ending July 23, dairy cow slaughter totaled 53,294 head, up 3.6% from the same week a year ago. So far this year, dairy cow culling is running 1.5% behind last year’s pace.

**Grain Markets**
September corn futures settled at $3.245 per bushel, a dime lower than last Friday. Ahead of USDA’s Crop Production report next week, the trade is trying to measure this year’s crop down to the bushel. A drive through the Corn Belt reveals fields that are almost uniformly lush, but there are concerns that brief dry spells and prolonged heat have limited the potential for a record-breaking yield. However, there is no doubt that the crop is large, and America’s grain bins are still well-supplied with last year’s harvest.

September soybean futures finished at $9.88, down 32¢. With August underway, the weather risk premium is eroding. The crop is in excellent shape, and the forecast looks relatively favorable. Yield estimates are creeping higher. Early this week the bulls were herded out of the soybean pits, but they have since been nosing around the edges. If rainfall disappoints or another heat wave hits, they would come running back. There is a good chance that the U.S. soybean crop will be huge. Based on projected demand, it had better be.

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“CELEBRATION OF LIFE” FOR FORMER MPC PRESIDENT GENE KOOPMAN: (By Rob Vandenheuvel) As we reported a couple months ago, Gene Koopman (73) – a longtime leader in the California dairyman who served 18 years on the MPC Board, with 10 as President – passed away at the end of May after a lengthy battle with health issues. We reported it earlier, but as a reminder for those interested in attending, the family’s Celebration of Life in memory of Gene is set for tomorrow (Saturday, August 6th) at 11 am at the Pechanga Resort (45000 Pechanga Pkwy, Temecula, CA 92592).