"Strength doesn't come from what you can do. It comes from overcoming the things you couldn't" **- Rikki Rogers**

TUESDAY, MAY 02, 2017

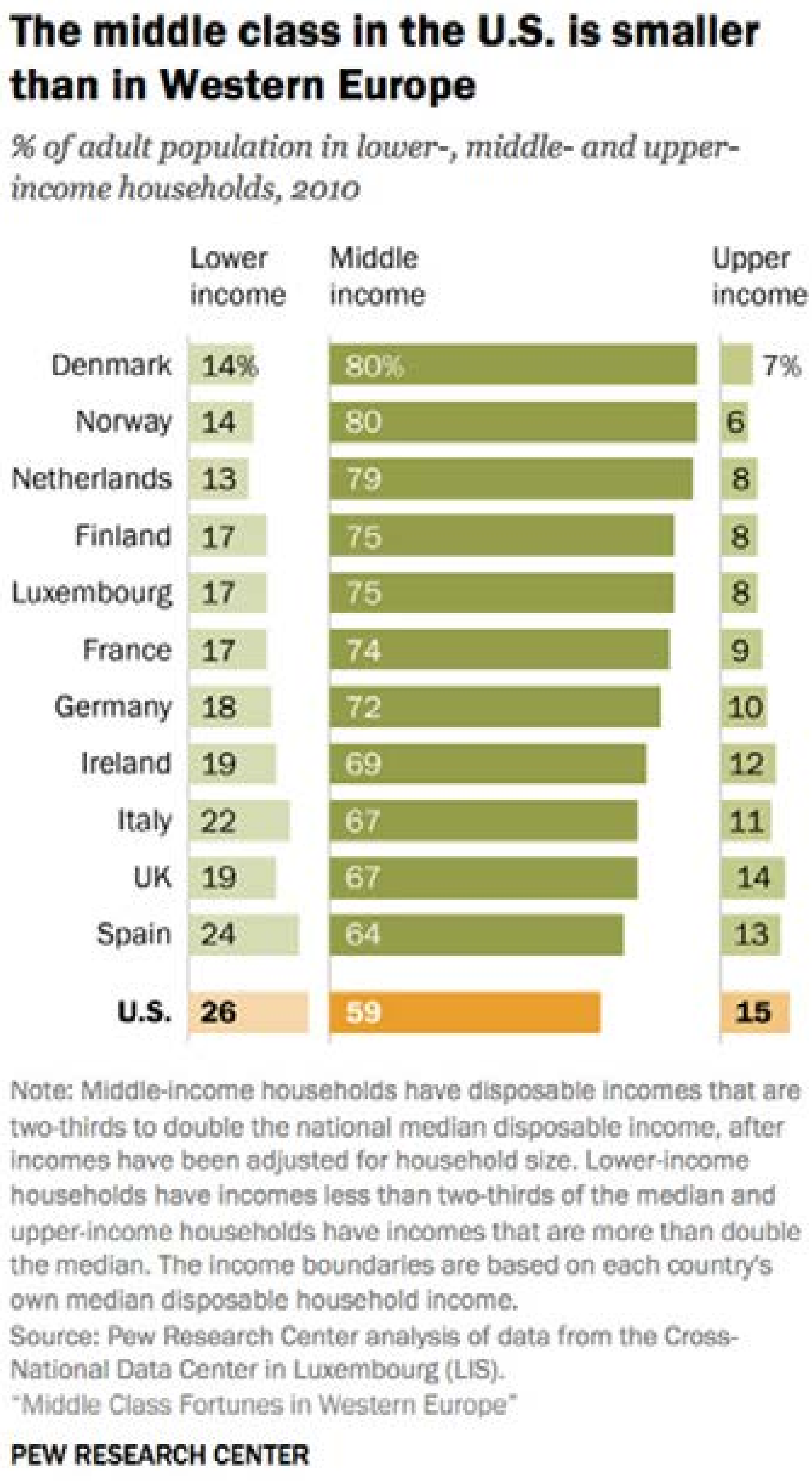
Morning Summary: Stocks continue to trade at or near record highs, with the S&P 500 up a whopping +12% during president Trumps first 100-days, the second-best performance over that timeframe since President Kennedy in 1961. The bulls argue there are many reasons to be optimistic and believe we will keep moving higher. One simple fact is a lot of money is on the sideline waiting and wanting to be a buyer on the next big break. That in itself can often be enough to keep a market supported. We also have several big-ticket items still being talked about in Washington by the Trump administration: Deep corporate tax-reform; Opportunity to repatriate billions of U.S. dollars currently being held offshore; Increased infrastructure spending, etc... As long as these items stay in the spotlight and have a possibility of happening, large money-managers can easily justify current valuations. On the flip side many of the bears say we are clearly overdue for a correction and eventually most all of Trump's big ambitions will be squashed by the mess of complexity in Washington. Former Fed Chairman Ben Bernanke told reporters yesterday that he thought Trump's goal of getting U.S. economic growth to +3% was a long-shot and probably not in the cards. Bernanke, who stepped down as Fed Chair in 2014, pointed to long-term problems in the US economy, including an aging workforce, low productivity and a global savings glut. Interestingly, Bernanke did say he broadly supports "smart policy" like tax reform and infrastructure spending, which are two big pillars inside the Trump agenda. As for today, traders will be digesting the latest in U.S. Auto Sales and the Fed will begin their two-day policy meeting. The Federal Reserve is not expected to raise rates on Wednesday, but investors are looking for clues and comments about the economy and the pace of future rate hikes. There's been more talk and speculation as of late that rate hikes might start to slow as inflationary data and consumer spending have pulled back. We still have an extremely strong labor market and the Fed may simply be looking to add a few arrows back into its quiver, so there is strong debate. The trade is also extremely interested in hearing more about how the Fed is going to go about reducing their balance sheet. Meaning even if there is no monetary adjustment associated with this meeting, comments will still be highly scrutinized by investors. Corporate earnings out today will be highlighted with heavily anticipated results from Apple. With the iPhone being Apple's bread and butter, and rumors being that they will be releasing a couple of really cool new models this fall, some insiders are worried that lots of people might be holding off buying iPhones until then. The first quarter also tends to be seasonally depressed every year. Given those factors, and that Apple's Q1 last year was not very impressive there could be some disappointment. What's nuts is the fact they will probably sell close to 52 million iPhones and bring in close to $53 billion in revenue for the quarter and some analyst will be disappointed. I'm personally interested in seeing how their "service revenue" grows and how things in China are shaping up? Remember, Apple's China sales have slipped below its European sales in the last three quarters. I suspect if the sales in China pick back up it could bring about a more overall bullish macro feel and renewed talk of improved global growth. Other earnings releases include Allstate, Anadarko, ADM, BP, ConocoPhillips, Gilead Sciences, Mastercard, Merck and Pfizer.

Japanese Warship Guards U.S. Vessel As North Korea Tensions Heat Up: *A Japanese warship is set to guard a US vessel for the first time in modern history as Tokyo uses the crisis in North Korea to activate a new security law passed in 2015. The helicopter carrier Izumo, Japan's largest warship, set sail from its home port of Yokosuka on Monday and met a US supply ship, according to pictures from broadcaster NHK. It is expected to escort the supply ship towards the western Japanese island of Shikoku. While the mission is of little military consequence, it marks the first time Tokyo has used its newly claimed right of "collective self-defense" to escort a US vessel, based on a controversial reinterpretation of Japan's pacifist constitution. The deployment highlights how tensions with North Korea have hastened Japan's shift towards a more active security policy. Tokyo is also stepping up military exercises and debating whether to acquire a first-strike capability to attack Pyongyang's missile sites. Izumo, launched in 2013, is the largest warship Japan has built since the second world war. Its primary mission is anti-submarine warfare. (Source: Financial Times)*

Venezuela Slipping Further Into Chaos: *The worst economic crisis in Venezuela's history is pushing the country to the brink of chaos. The country sits on the world's largest oil reserves, but, over the past decade, it has been the region's poorest performer in terms of growth of GDP per capita. Inflation is currently running at over $400 and there are widespread shortages of food and medicines. The state has tried to ration food and set their prices, but the consequence is that products have disappeared from shops and ended up in the black market, overpriced. Responding to protests, President Nicolas Maduro yesterday raised the nation's minimum wage by another 60%. It's the third pay hike he's ordered this year and the 15th since he became president in 2013. The wage hikes don't come close to keeping up with inflation though, and even if they did, there are simply not enough goods to buy. Opposition groups are calling for protests again this week. Hundreds of thousands of people took to the streets for "May Day" rallies yesterday, which ended up turning violent. Since the protests began in earnest last month, 29 people have been killed and over 400 injured. Maduro opponents are calling for immediate elections and a humanitarian aid channel from abroad. The President claims his opponents are part of a U.S.-backed conspiracy to put a right-wing government in charge of Venezuela's oil wealth. Observers are worried the situation is edging toward all-out civil war, which could have some major consequences in our own hemisphere. Thousands of Venezuelans have already fled to neighboring countries - most of which can barely care for their own people - and a refugee crisis is building. (Sources: Bloomberg, Aljazeera)*

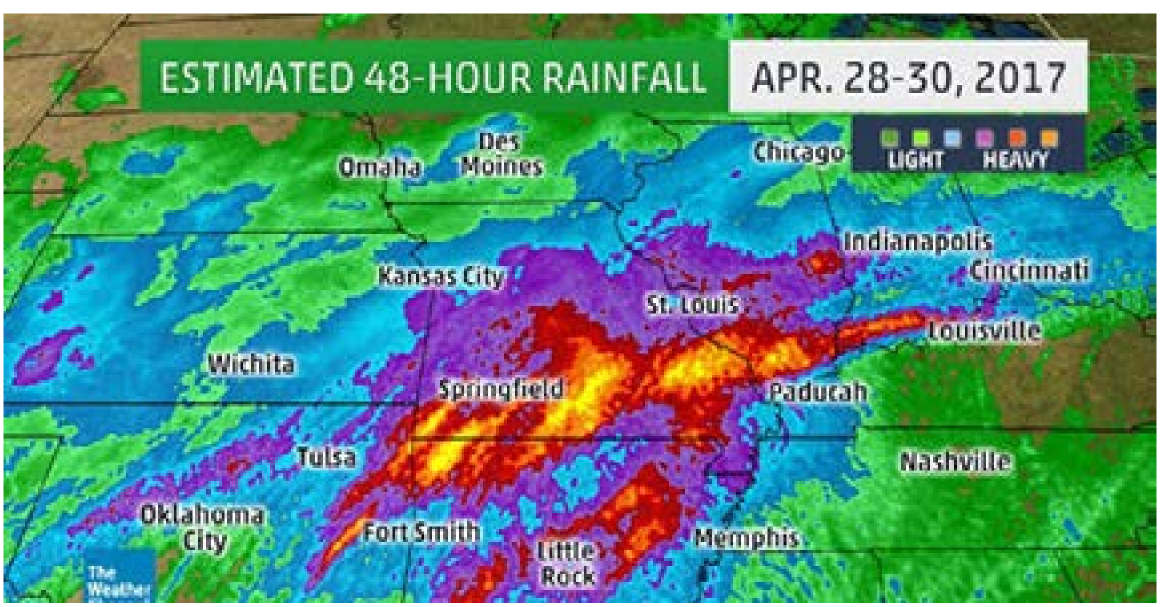
Is America's Middle Class Disappearing? *The share of people in the middle class in the U.S. is less than in any of 11 countries from Western Europe, according to a new report by the Pew Research Center. American economic growth has been a double-edged sword for many Americans. In 2010, households in the U.S. were more economically divided than households in the selected Western European countries analyzed by Pew. The U.S. is the only country in which fewer than 60% of adults were in the middle class. However, compared with those in many Western European countries, a greater share of Americans were either lower income (26%) or upper income (15%). The percentage of people who are middle class ranged from 64% in Spain to 80% in*

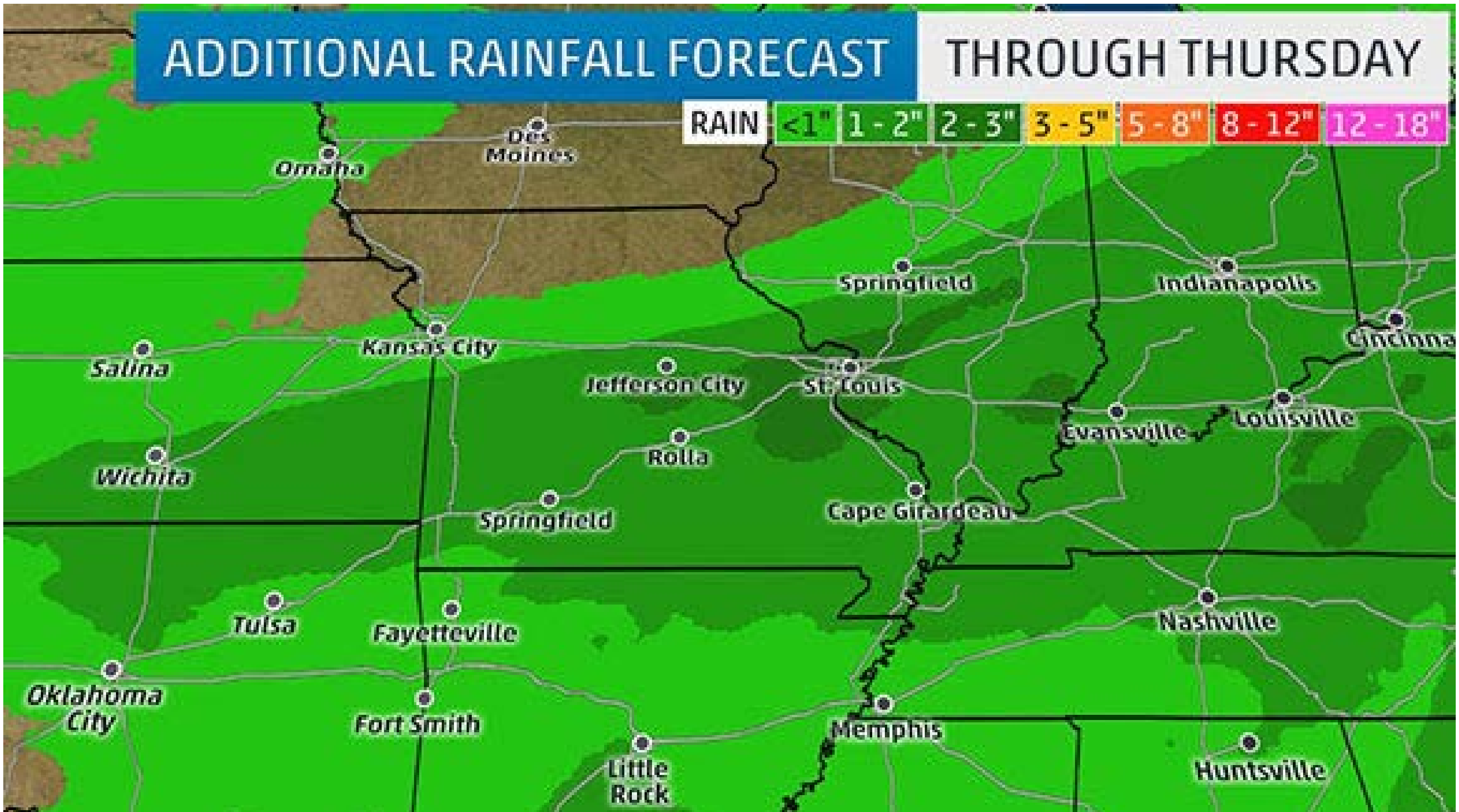
Denmark and Norway. "Income inequality, or the hollowing out of the middle class, has been seen in both the short-term and in the years going back before the financial crisis and the Great Recession," says Mark Hamrick, Washington, D.C. bureau chief for the personal-finance site Bankrate.com. "The loss, or migration, of manufacturing jobs is part of the story. "Income inequality, or the hollowing out of the middle class, has been seen in both the short-term and in the years going back before the financial crisis and the Great Recession," says Mark Hamrick, Washington, D.C. bureau chief for the personal-finance site Bankrate.com. "The loss, or migration, of manufacturing jobs is part of the story. (Source: MarketWatch, Pew)



Weather continues to center around extreme conditions including damaging snow to wheat areas in the southern Plains and extensive disruption to Midwest planting after heavy rain last weekend. In the Corn Belt, weekend rainfall totaled 4 to 8 inches or more in a broad area extending form central and southern Missouri into the lower Ohio Valley, causing extensive lowland flooding and putting nearly all fieldwork on indefinite hold. Wind-driven weekend snowfall on the Plains blanketed a strip from northern most Texas to northeastern Nebraska. The most significant accumulations occurred in western Kansas, southeastern Colorado, and the panhandle of Oklahoma. In the storm's wake, producers are assessing winter wheat for signs of damage, including lodging and stalk breakage. In the South, recovery efforts continue in the wake of weekend tornadoes that caused damage form east Texas to Mississippi. A broader area of the South experienced locally heavy rain and wind damage. Residual lowland flooding will persist for several days across the mid-South and lower Midwest. A new storm system will emerge from the western U.S. by midweek, bringing additional rainfall to the eastern half of the U.S. Meanwhile, warmth will gradually spread eastward from California and the Desert Southwest, reaching the High Plains late in the week late in the week. Looking to our neighbors to the South, Brazil's recent rainfall will favor development of second crop corn in Parana and Mato Grosso do Sul. Argentina continues with more favorable weather pattern for maturing summer crops and harvesting this week.

More Record Flooding This Week in MO, AR, IL: *Weekend flooding from the Ozarks into the mid-Mississippi Valley sent some river crests smashing records that had stood for over 100 years. Locations that have been hit hard by flooding are now experiencing drier conditions, however, more rain may arrive in these water-logged areas by midweek. A vigorous storm system will sweep across the South and mid-South on Wednesday and Thursday bringing the risk of sever storms and heavy rainfall. This will also affect flood-ravaged parts of Arkansas, northeast OK, Southern MO and southern IL. To recap this weekend's flooding, numerous flash flood emergencies were issued across southern Missouri and northern Arkansas April 29 and 30. Some locations saw as much as 11 inches of rainfall. A total of 267 reports of flooding or flash flooding were received by the NWS in a 36 hour period throughout the Midwest. Below is also a chart showing the ridiculous amount of water that fell over the weekend, forcing the Mississippi River to likely crest by this coming weekend. This will likely set a record at Cape Girardeau, MO, rising above 1993 levels. We will be closely monitoring river levels along both the Missouri and Mississippi during the next several days.*




ADDITIONAL RAINFALL FORECAST
THROUGH THURSDAY
RAIN
<1"
1 - 2"
2 - 3"
3 - 5"
5 - 8"
8 - 12"
12 - 18"
Des Moines
Omaha
Springfield
Indianapolis
Kansas City
Salina
Jefferson City
St. Louis
Evansville
Louisville
Rolla
Wichita
Springfield
Cape Girardeau
Nashville
Tulsa
Fayetteville
Oklahoma City
Fort Smith
Memphis
Little Rock
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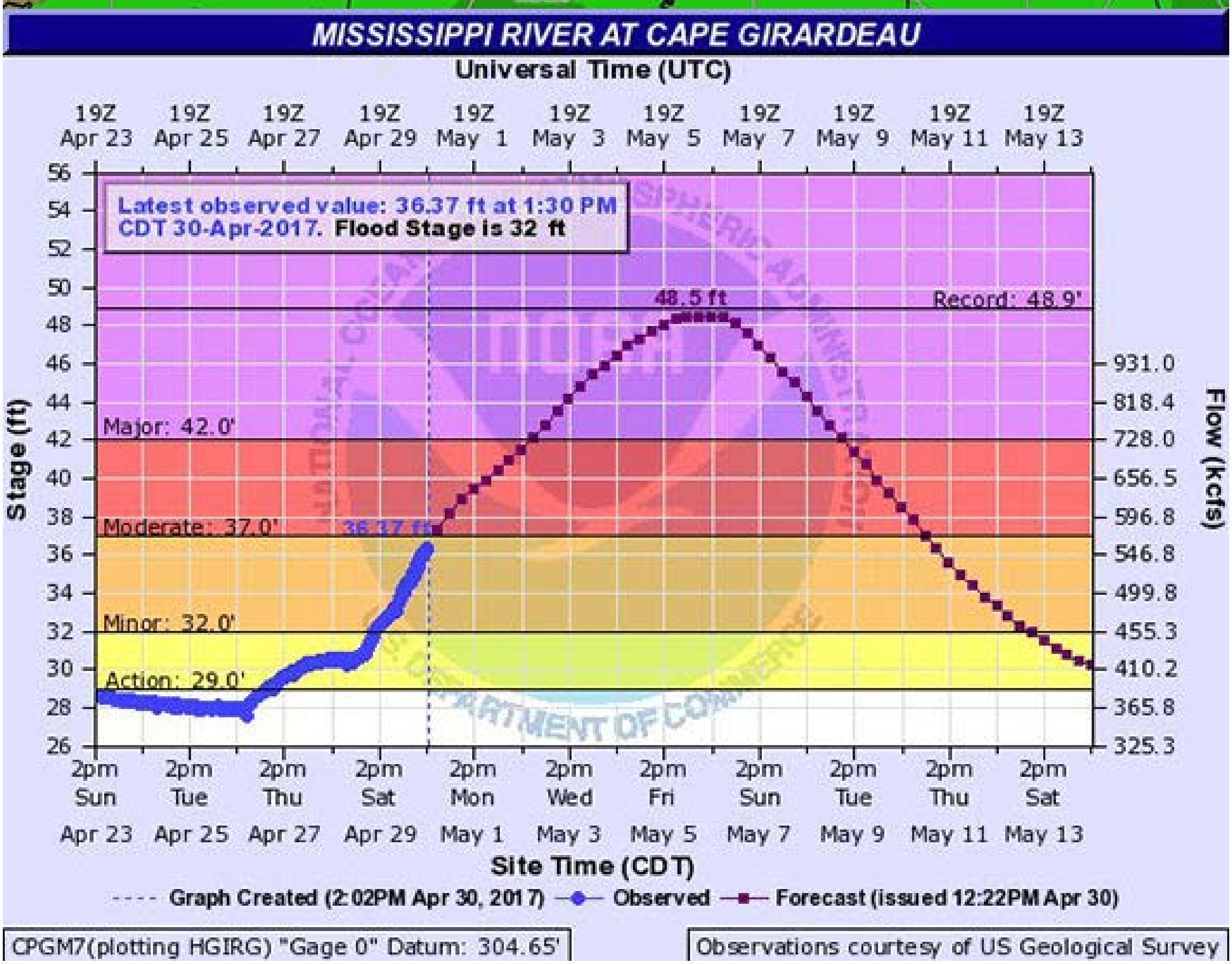
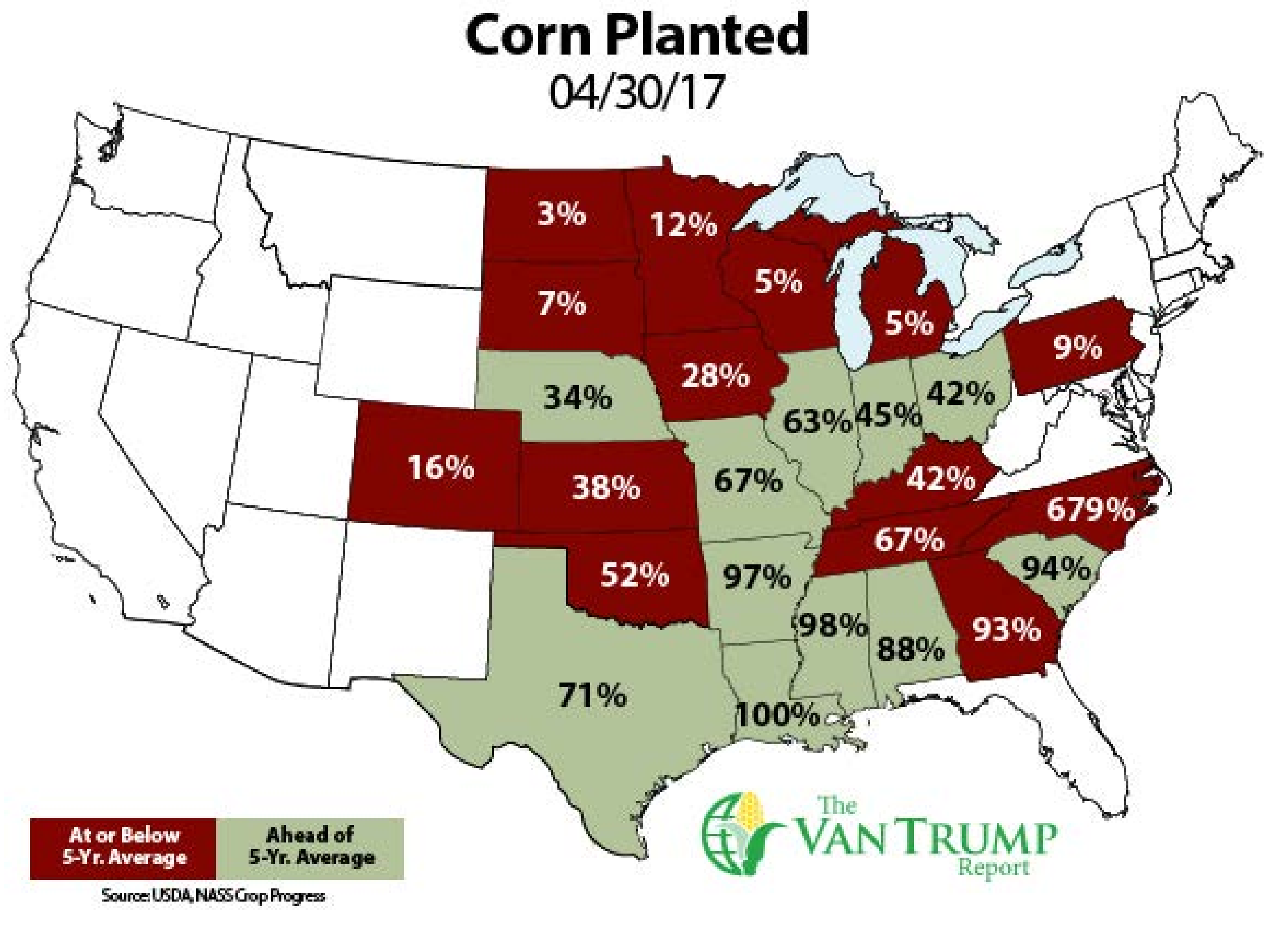
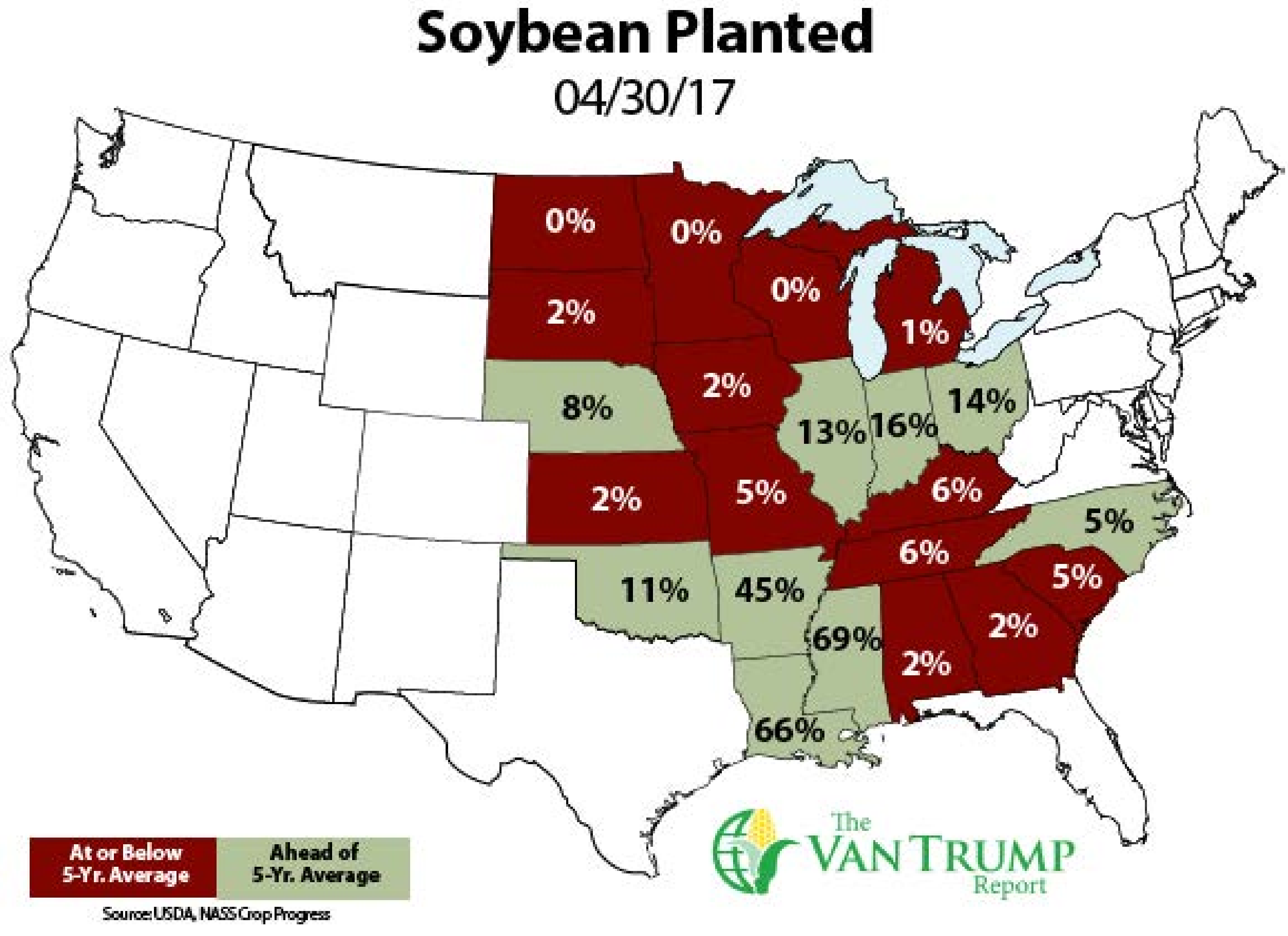

MISSISSIPPI RIVER AT CAPE GIRARDEAU
Universal Time (UTC)
19Z Apr 23
19Z Apr 25
19Z Apr 27
19Z Apr 29
19Z May 1
19Z May 3
19Z May 5
19Z May 7
19Z May 9
19Z May 11
19Z May 13
Latest observed value: 36.37 ft at 1:30 PM CDT 30-Apr-2017. Flood Stage is 32 ft
48.5 ft
Record: 48.9'
Major: 42.0'
Moderate: 37.0'
36.37 ft
Minor: 32.0'
Action: 29.0'
Stage (ft)
56
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
Flow (kcfs)
931.0
818.4
728.0
656.5
596.8
546.8
499.8
455.3
410.2
365.8
325.3
2pm Sun Apr 23
2pm Tue Apr 25
2pm Thu Apr 27
2pm Sat Apr 29
2pm Mon May 1
2pm Wed May 3
2pm Fri May 5
2pm Sun May 7
2pm Tue May 9
2pm Thu May 11
2pm Sat May 13
Site Time (CDT)
Graph Created (2:02PM Apr 30, 2017)
Observed
Forecast (issued 12:22PM Apr 30)
CPGM7(plotting HGIRG) "Gage 0" Datum: 304.65'
Observations courtesy of US Geological Survey

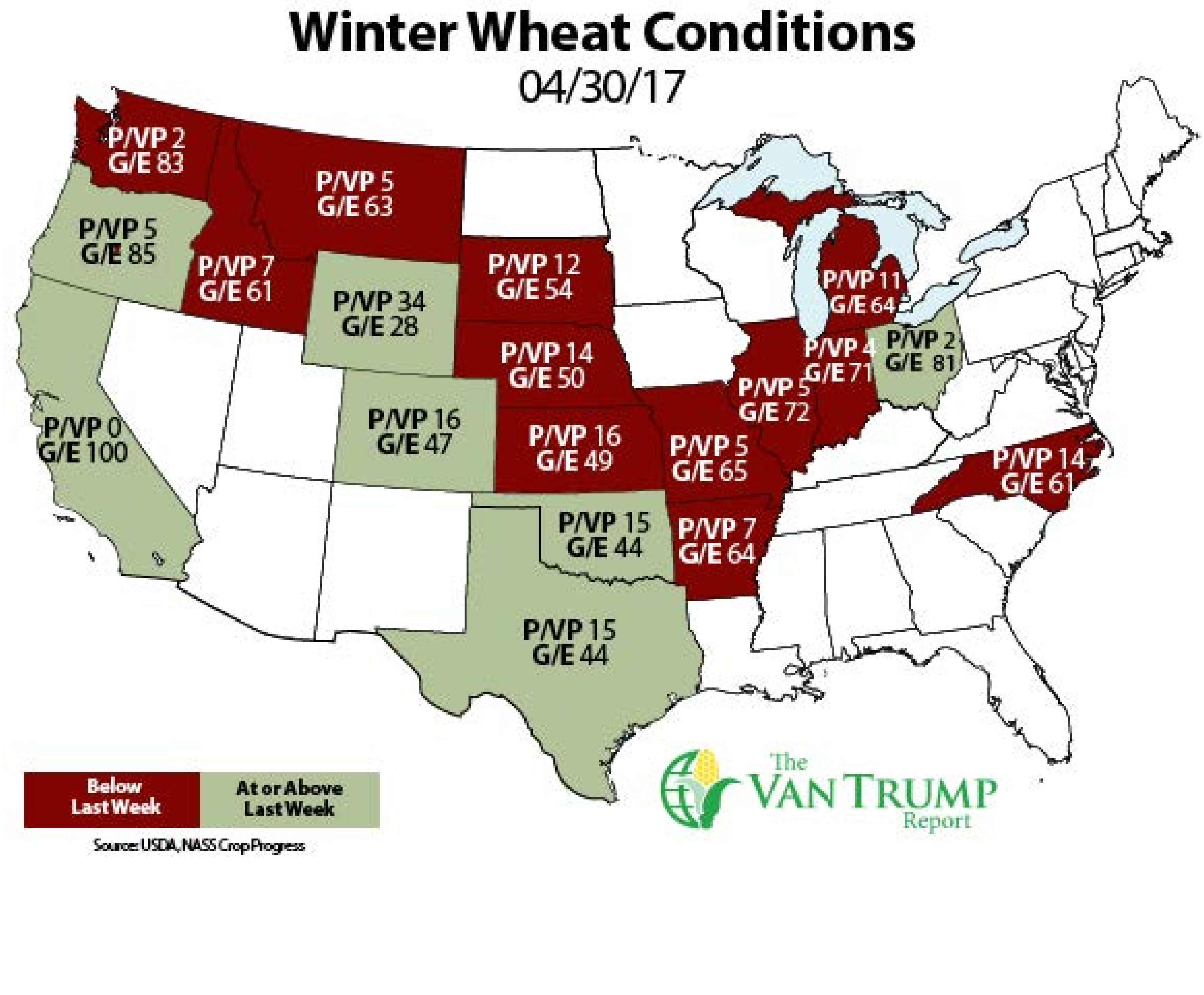
Corn bulls are happy to see the market regain some of its recent losses. The question is how many acres are at risk and what ultimately comes form some of the recent delays. Unfortunately the latest USDA data doesn't show much reason for concern as U.S. producers planted approximately 17% of their corn acres last week. This doubled planting progress form 17% the prior week to a total of 34% now complete. This is right in line with our historical average and actually shows Illinois, Indiana, Missouri, Nebraska and Ohio running well ahead of schedule. The specifics of the data show Ohio farmers planted +33% of their crop last week; Indian planted +30%; Illinois planted +29%; Missouri and Tennessee +21%; Iowa +20%; Kansas and Nebraska +17%; North Carolina +16% Kentucky +13%; Colorado +8%; Minnesota +6%; Michigan, South Dakota and Wisconsin +4%; Pennsylvania and Texas +3%; North Dakota +2%. I should also note that 9% of the crop is now considered "emerged", which is fairly close to our historical average. This type of data makes it extremely tough to argue any type of yield reduction will be coming down the pipe by the USDA. As a producer I took advantage of the recent rally and priced a small portion of our estimated 2018 production. With prices now north of $4.00 per bushel and extremely burdensome domestic and global supply, I like the thought of reducing some longer-term risk. I will continue to monitor the U.S. weather forecast and look for additional rallies as more opportunity. With cash-flow tight I have to continue with a two-strike approach. I see absolutely no reason to be swinging for the fences.



Soybean traders continue to debate if U.S. weather complications will mean more or fewer total soybean acres. The bears argue any acres lost will ultimately be regained by delays and switches in corn planting. The bulls argue that weather extremes, if they continue, will ultimately shave some of the early anticipated acreage. The USDA is now showing total U.S. soybean planting at 10% complete vs. an average of 7% by this date. Indian and Ohio both were able to plant +13% of their crop last week; Illinois and Mississippi planted +9%; Louisiana +7%; Arkansas +6%; Kentucky, Nebraska and North Carolina +4%; Missouri +3%; Iowa, Kansas and Tennessee +2%; Michigan and South Dakota +1%. As for the fundamental demand side of the equation, even though the weekly export inspections were one of the weakest of the year, the bulls believe the USDA will ultimately need to push exports a bit higher. Interestingly soymeal prices have traded back above their 100-Day Moving Average for the first time since January, so perhaps we are starting to see more widespread interest coming back to the market. As a producer I'm still a bit nervous about the downside risk and am currently electing to keep my hedges in place. I'm also keeping a close eye on prices out in 2018 as I would like to start reducing a bit of our longer-term risk.



Wheat bulls were extremely happy yesterday to see the HRW contract trade to near limit-up. Obviously the mix of extreme weather has the trade a bit more nervous about U.S. production and pushing some of the record short funds to the sideline until more details become available. Several sources are thinking that between 50 and 100 million bushels of HRW could be jeopardy. The USDAs latest crop-condition report left the overall winter wheat number at 54% rated "good-to-excellent". I suspect we will start to see those numbers come down a bit in the weeks ahead as damage becomes more apparent. There's also starting to be more talk and headlines about disease problems in many locations. Spring wheat planting continues to run behind its traditional pace, now 31% planted vs. 46% on average and 52% planted last year. The bears continue to point to burdensome fundamentals, not only are domestic and global stocks extremely large, but there's more talk that U.S. export sales may need to be trimmed. As both a producer and a spec I remain conservatively bullish. I will be keeping a close eye on the headlines form the Wheat Council Tour this week that runs through Kansas, Nebraska, Oklahoma and Colorado. I should note that I took advantage of yesterday's rally by pricing another 10% of my estimated 2018 winter wheat production against the JUL18 contract.



Connecting the Dots

> USDA Soybean Crush Rises In March: *USDA reports March 2017 soybean crush at 4.80 million tons (160 million bushels), compared to 4.53 million tons (151 million bushels) in February and 4.99 million tons (166 million bushels) in March 2016. Crude oil produced was 1.86 billion pounds up 6 percent from February 2017 but down 4 percent from March 2016. Soybean once refined oil production at 1.40 billion pounds during March 2017 increased 10 percent from February 2017 but decreased slightly from March 2016.*

> Brazil Government Will Subsidize Corn Prices In Mato Grosso This Week: *The Brazilian government is going to conduct three programs this week with the goal of aiding corn producers in the state of Mato Grosso who are concerned about very low domestic corn prices. On May 4th, Conab will conduct three electronic auctions designed to subsidize corn prices. The first will be options contracts offered by Conab. Conab will offer 7,400 options contracts for farmers to sell corn produced in 2016/17 to the government at the price of R$ 17.87 per sack (approximately $2.60 per bushel). Farmers will have the right to exercise the option until September 11th. Conab will also conduct the auction of 200,000 tons of corn through the Prepo program which is designed to aid corn sellers. The government will guarantee the minimum price of R$ 16.50 per sack (approximately $2.42 per bushel) when farmers prove they have sold their corn to authorized purchasers. The third action the government will take will be the auction of 200,000 tons of corn through the PEP program, which is designed to aid corn buyers in regions of Brazil where there is a corn deficit. Basically, there is too much corn in Mato Grosso and there is too little corn in northeastern Brazil and the PEP program is designed to help move corn from Mato Grosso to northeastern Brazil. (Source: Soybean & Corn Advisor)*

> Africa Corn Losses From Armyworm Invasion Seen At $3B: *Africa may lose $3B in lost corn production this year as crop eating pests, known as fall armyworms ravage farmlands, says the Centre for Agricultural and Biosciences International. The pest, which is indigenous to the Americas had not previously been detected in Africa until last year. It has since spread across the continent, posing a "frightening risk" to food security to some 200 million people, the South Africa-based research group says. Crop losses could further soar food import bills for many economies, already struggling under the effects of weak commodity prices. Africa Development Bank projects that the continent's food import bill could hit $110B by 2025, from the current $35.4B as exploding populations spur demand, amid sluggish production. (Source: Dow Jones)*

> Organic Industry Is Still Seeing Double-Digit Growth: *The organic industry continues to grow domestically and globally, with 24,650 certified organic operations in the United States and 37,032 around the world, according to recently releases data from the USDA. The 2016 count of U.S. certified organic farms and businesses reflects a 13-percent increase between the end of 2015 and 2016, continuing the trend of double-digit growth* *in the organic sector. The number of certified operations has increased since the count began in 2002 – and this is the highest growth rate since 2008. Organic certification is an opt-in voluntary standard managed through a public-private partnership. The USDA accredits and oversees approximately 80 businesses and state governments that directly certify organic farms and businesses. (Source: MeatingPlace)*

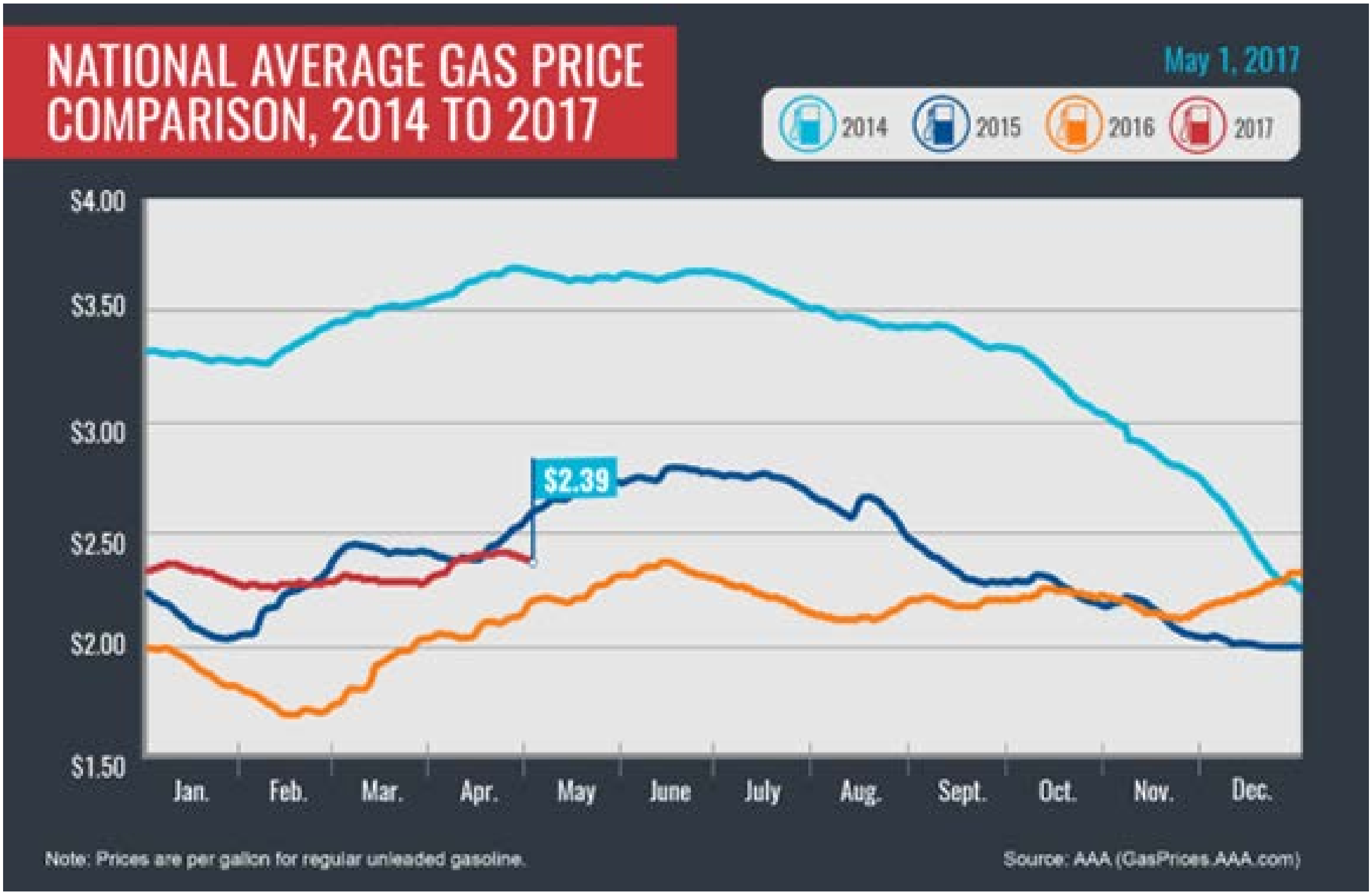
> Ag In The New Spending Bill: *Overall, Congress allocated $153.4 billion in mandatory and discretionary spending for programs at USDA and FDA, which is $12.8 billion above fiscal 2016 levels - a net increase the Appropriations Committee said is related to mandatory spending outside of its jurisdiction. Discretionary spending is $20.88 billion, or $623 million below levels enacted last year. Provisions that would trigger additional subsidies from 2014 farm bill programs to cotton and dairy farmers did not make it into the bill. Instead, included in a list of congressional directives accompanying the spending deal is a request that the agriculture secretary within 60 days issue a report on administrative options for providing financial relief to cotton growers, and also offer immediate assistance to dairy producers. A rider that would block USDA from enforcing a trio of rules under its Grain Inspection, Packers and Stockyards Administration, which are designed to protect chicken growers in their contracts with processors, also didn't appear to be included in the spending agreement. (Source: Politico)*

> Groups Call For Commodity Checkoff Reform: *A letter calling for reform of commodity checkoff programs and signed by more than 80 organizations has been sent to Congress. The letter expresses support for legislation that the groups say would "bring much needed transparency and accountability" to checkoff programs. They say the USDA has been lax in its oversight of checkoff programs, which has resulted in "collusive and illegal relationships between checkoff boards and lobbying organizations". The bill is called the "Opportunities for Fairness in Farming Act". The groups say it would ensure no farmer or rancher is forced to pay fees into programs that do not promote their market segment. (Source: Brownfield Ag)*

> Net Neutrality Case Rejected: *A federal appeals court on Monday declined to rehear a challenge to the Obama administration's landmark "net neutrality" rules requiring internet providers to guarantee equal access to all websites. The decision by the full appeals court in Washington not to reconsider a three-judge panel's decision that upheld the ruling comes days after Federal Communications Commission Chairman Ajit Pai proposed to undo the 2015 net neutrality that reclassified internet providers like public utilities. The 2015 order bars internet providers from blocking, throttling or giving "fast lanes" to some websites. Pai has proposed reversing the reclassification and scrapping internet conduct standards, and has asked for comment on whether the FCC can or should retain any of the rules barring blocking, throttling or "fast lanes." Websites like Facebook Inc, Alphabet Inc and others back the rules, saying they guarantee equal access to the internet. Internet providers such as AT&T Inc , Verizon Communications Inc and Comcast Corp opposed the Obama order, saying it made it harder to manage internet traffic and discouraged investment. (Source: Reuters)*

> Gas Prices Have Fallen For The First Time In Three Weeks: *Gas prices dropped slowly in the last week, hitting a national average of $2.39 per gallon as of yesterday, a three cent drop from on week ago, but still nine cents higher than last month and 18 cents more than this time last year. This was the first price decrease in three weeks. With decreases as much as 13 cents, prices at the pump have dropped in the Great Lakes and*

Central States. In the region, six states made the top ten list of largest weekly decline: Indiana (- 13 cents), Ohio (-10 cents), Michigan (-10 cents), Illinois (-6 cents), Kansas (-4 cents) and Wisconsin (-4 cents). Overall, the region is seeing gasoline demand flatten while production grows. Currently, the region's gasoline stocks are about 1-2 million bbl higher than levels in the last two years and could potentially increase as the region is typically a receiver of other regional gasoline during the summer driving season. Across the board, demand for gasoline in 2017 is lower than 2016, but prices are higher. South and Southeast states reign with the country's least expensive gas prices. (Source: AAA)



Southern Minnesota - *There is no one doing anything in the fields right now as we are extremely wet and it snowed again last night. I do have just a little corn planted, some sugar beets and a few acres of edible beans. I would say we are a good week away from getting back in the field. That would be a best case scenario. The soil temps have dropped to 40 degrees 2" below the surface. I think we will see this drop a little more over the next few days. There are some guys that have a good part of their corn planted but we like to wait. I don't think many will switch to more beans unless we get out to May 20th and still not having the corn planted. I know that three years ago we had similar delays as now and there were not any more bean acres planted. The 2015 and 2016 crops went in the ground very well, in great conditions, except in 2015, we had a hard freeze in May that nipped some of the early corn. Hopefully, things dry out soon and the temps warm up.*

Central Missouri - *We have had all of our corn planted for about two weeks but waiting to plant any beans until this cold rain gets out of here. The early planted corn has emerged very good and the stand seems to be off too a good start. We are waiting now to get in the field and it looks like the heaviest rains could come this weekend and bring as much as 4" or 5" in a short period of time. Up until now the rains have been very friendly to building up moisture levels with limited run off. There are some guys waiting to plant to push things out later to harvest but not for sure what they are thinking. We have planted 110 to 113 day maturing corn ands the variety has done very good. That maturity has not changed much over the years. We have seen the basis improve over the past few weeks and we have rewarded it. If we miss some of these heavy rains it will be off to the races to get beans planted, late next week.*

Southern Manitoba - *We are up here in the northern tip of the Red River Valley but we do not have anything planted. We have had too much moisture and it has been unseasonably cold for this time of year. If it warms up this weekend we may be able to plant some spring wheat next week. The corn guys are chomping at the bit to get some acres planted and behind them. The soil temps are way too cold too have corn seed sitting in it. The corn hybrids have continued to improve. We are now planting 75-76 day maturing corn. Further to the north the hybrids have been improved to 70 day maturity. There are more and more soybeans being planted up here. I think that there may be close to 10 million acres bean acres this year. We have been able to book great bean sales for this years crop with the help of the currency swap to US dollars.*

CROSSING WIRES

A place to share intelligent thoughts…

U.S. Soy Exports Big Beneficiary of Brazil's Price Woes: *The Brazilian farmer's reluctance to sell newly harvested soybeans may have finally paid off for U.S. soybean merchants, who could be in for some better-than-expected export sales in the coming months. By the end of March, Brazilian farmers had sold 49 percent of their soybean crop, the lowest in seven years and well behind the five-year average of 63 percent, according to consultancy AgRural. And although the country's harvest is nearly complete, farmers are still holding on to their beans, hoping for prices to rise. In the week ended April 20, net U.S. soybean sales totaled an impressive 808,000 tonnes. Weekly sales are generally closer to 300,000 tonnes at this time of year, and traders were not expecting to see more 450,000 tonnes in the latest report. The recent uptick in U.S. sales by itself is not enough evidence to quickly overhaul U.S. export forecasts. But if this trend continues over the next several weeks, the U.S. Department of Agriculture may have to adjust its 2.025 billion-bushel forecast for 2016-17 upward. Read more from Reuters'* Karen Braun*.*

So-Called Blend Wall Exceeded For First Time In 2016: *Recent data from the U.S. Energy Information Administration (EIA) confirm that the so-called "blend wall"—the point at which ethanol makes up 10% of the U.S. gasoline supply—was exceeded nationwide for the first time ever in 2016. The data dispel the myth that 10% is the marketplace "limit" for ethanol content in U.S. gasoline, and demonstrate that the "blend wall" is not a real constraint on ethanol consumption. Growing consumption of E15 (gasoline blends containing 15% ethanol), mid-level blends (containing 20-50% ethanol) and flex fuels (containing 51-83% ethanol) was responsible for the increase in the average ethanol content of U.S. gasoline in 2016. Based on EIA data and assumptions about the demand for ethanol-free gasoline (E0) from the American Petroleum Institute (API) and U.S. EPA, we estimate that consumption of mid-level blends and flex fuels was no less than 450 million gallons and as much as 1.7 billion gallons in 2016. Volumes at the high end of this range are based on API's assumption that E0 consumption is approximately 5.3 billion gallons annually. A summary of key findings is provided* HERE*.*

A River in Canada Just Started Flowing the Wrong Direction: *Climate change has a sent a river in the Canadian Yukon flowing the opposite direction. The finding, from the University of Washington, shows one of "the less anticipated shifts" due to climate change. The Kaskawulsh Glacier is located on the Canadian side of the St. Elias Mountains, which extends into America and is the highest coastal mountain range on Earth. The Glacier is large, covering around 15,000 square miles. It feeds into two rivers, the Kaskawulsh River and the Slims River, supposedly named after a horse that died there during a minor gold rush in 1903. However, the glacier retreated last spring to such a degree that what's normally a geologic event happened in four days. It's called "river piracy." The glacier retreated so far back that the lake that was feeding the Slims changed its outlet, and now solely contributes to the Kaskawulsh River. Read more from* Popular Mechanics*.*

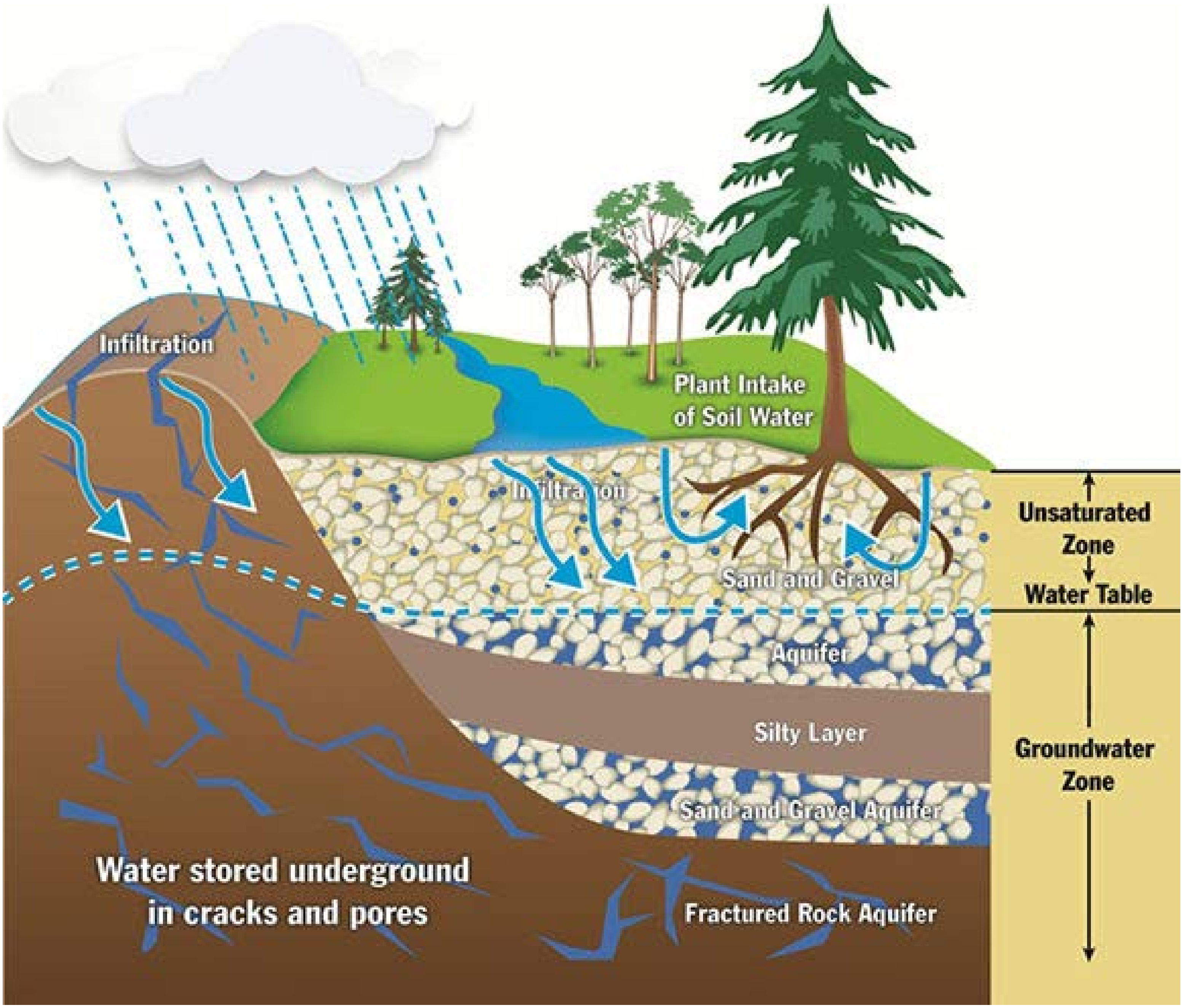
$50,000 Minivan Explains Why U.S. Auto Sales Might Be Slowing: *To understand why the U.S. auto market isn't growing, consider a top-of-the-line minivan from Fiat Chrysler Automobiles NV now costs about $50,000. With twin second-row touch screens, reclining third-row seats, a vacuum and automated parallel parking, the Chrysler Pacifica packs plenty of features to justify a hefty expense. But this big a price tag puts the prototypical family vehicle out of reach for most Americans. After U.S. auto sales fell in each of the first three months of the year, the annualized sales pace, adjusted for seasonal trends, probably slowed in April as well. With marginal buyers beginning to balk due to sticker shock, Ford Motor Co. cautioned last week it's not going to be able to count on price increases to boost North American profits the rest of this year. The average new-car price in the U.S. rose about 2 percent over the past year, according to data from TrueCar Inc.'s ALG. That's an increase more consumers may have been able to stomach when borrowing costs were low and loose credit made pricier trucks and sport utility vehicles more attainable. Industrywide sales have declined 1.5 percent this year through March, according to researcher Autodata Corp. Read more from* Bloomberg*.*

Einstein vs. The Clash: How I Used Music To Hack My Brain! *Flow is a state of pure focus and concentration, when the outside world falls away and you lose yourself in the task at hand. "It's very enjoyable," says Henshall. "When a human is in a flow state they are doing the thing they are doing to the best of their ability. When Einstein got himself into a flow state by playing the violin the part of his brain that was disconnected from the real world was able to then go and figure this stuff out." Music is useful for helping you enter the flow state because the things you hear can distract you from a task. While you can devote your endogenous attention -- your eyes and hands -- to the task in front of you, you can't shut off the exogenous attention of your ears, which are scanning all around you for warnings -- even when you're asleep, a loud noise will wake you up. So in order to properly focus on a task, you need to tune out the distractions of the world around you. One way of doing that is to listen to music. Read more at* C-NET

How Baseballs Are Made: *This is very interesting even if you are not a baseball fan. On average each major league team uses somewhere around 100,000 balls a year - maybe a few more for the teams that hit a lot of dingers. This Youtube video is the first time cameras were allowed in the factory. I can't believe how much is done by hand. I always remember as a kid when we used the same ball too much the seams would start to come apart. My grandfather use to hit me a ton of ground-balls on the black-top and or concrete and that would really take the toll on a ball. Once they were no good I would always take them apart, some had string other didn't. This video was too cool not to pass along. Click* HERE

What You Need To Know About Aquifer Depletion
Every sector of agriculture is seeking to be more sustainable. One of the biggest resources needed for growing crops is water. In fact, 70% of all the world's freshwater resources goes toward the production of food. Unfortunately, new research shows that pumping of groundwater for irrigated agriculture is accelerating rapidly around the world. Quantifying the impact of withdrawals from aquifers has become a little easier since the introduction 15 years ago of the satellite program known as GRACE, for Gravity Recovery and Climate Experiment, developed in a collaboration between the U.S. and German space programs. The satellites utilize special sensors that can measure changes in the earth's gravitational field, which in turn helps scientists determine what is going on below the ground. Underground water reserves can take decades to replenish, happening via rainfall and surface water filtering slowly through the soil. The groundwater depletion for irrigation or GWD has increased +24% in just then past 10-years and now stands at over 624 billion gallons. Two-thirds of the GWD calculated in 2010 came from four countries: India, Iran, Pakistan and China. It should be noted that during the same time period the acceleration rate was most rapid in China at 102%, the U.S. at 31%, and India at 23%. The crops leading to the most water depletion globally, both because of their large production and high GWD intensity, are wheat, rice, sugar crops, cotton and corn. Because many of the crops driving

GWD trends are globally traded commodities, the threats to agriculture posed by over-consumption of groundwater for irrigation are also threats to the economies of exporting countries, and to essential food supplies in importing countries. The big and unanswered question, is how much water remains in the world's aquifers. GRACE can measure changes in volumes but not the volumes themselves. Scientist truly have no way to accurately gauge how much groundwater is left, they just know it is being depleted quickly. Many of us have already experienced significant changes in either regulatory issues regarding water use in our area or worse yet our wells running dry. This is simply another reason why we all must stay aware of the latest technologies that can help create better efficiencies in water use. (Source: Minn Post)



Electric Aircraft Could Expand Services Into More Rural Areas

Boeing and JetBlue recently invested in a small start-up called Zunum Aero. The three-year-old company makes hybrid electric-aircraft and plans to build up an entire fleet that would make short trips between regional U.S. airports. Relatively short trips, like from San Francisco to Los Angeles, would have no need to refuel. Zunum believes cutting out fuel costs, the flights could be up to as much as 80% cheaper than they are currently, with a route between Boston to New York City, for example, running as low as $25 each way. Zunum's initial aircraft are designed to carry 10 passengers and have a range of about 700 miles. The hybrid electric motors run primarily on battery power with an aviation diesel or turbine range-extending power generator on call if necessary. With battery technology continuing to improve, Zunum believes they will be able to expand the range to up to 1,000 miles by 2030 and have plans for aircraft that could carry up to 50 passengers. The technology behind the aircraft's engines also reduce noise emissions by up to 75%. That is one feature that makes them particularly suitable for regional airports, as many areas these smaller operations are located have strict noise pollution policies. Expanded regional services also means that air travel could become more accessible to much wider areas, cutting down on long commute times for travelers in outlying areas. Today, 97 percent of US air traffic comes from 2 percent of the more than 5,000 airports in the country. More regional services would also deliver door-to-door speeds that are two to four times as fast as those of highways, high-speed rail, or conventional aircraft. With the advancement of electric cars, it seems like electric aircraft would be then next logical step. However, electric airplanes have some engineering requirements that a bit more complicated than cars. Not surprisingly, weight limits are significantly more complex when flying through the air. Zunum says they have completed all the preliminary design work and are currently in the "build phase." Kiruba Haran, an electrical engineering professor at UIUC, is one of the cofounders of Zunum Aero, and has worked with NASA on high power density motors for electric-hybrid aircrafts for the past three years. He notes that while key components like motors, drives and batteries have finally gotten to the size and weight that makes electric airplanes feasible, there are still plenty of engineering challenges ahead. Electrical distribution, protection and fault tolerance, airplane integration and thermal management and just a few of those challenges, and Zunum currently has various teams working on them all and is hoping to have its electric jets taking off by the mid-2020s. (Sources: Popular Mechanics, Boston Globe)

Cheat Sheet For The NBA Playoffs
I'm not a huge NBA fan but I start paying a bit more attention once we reach the playoffs. I have several friends that are avid fans so I like to be able to follow along if the conversations arise. Below is a little cheat-sheet for those who are like me and need to be brought up to speed:

Where We Are At: *The NBA Playoffs move to round two as some teams are coming off long breaks and others are riding the momentum of battling through a tough series. Round one highlights saw the Celtics battle back from a 2-0 deficit to win the series 4-2 while Cleveland ran right through the Pacers to win 4-0. One item of note is that the brackets line up for a potential rematch of last years NBA Finals where the Cleveland Cavaliers overcame a 3-1 deficit to comeback and beat the extremely tough Golden State Warriors.*

Eastern Conference:

> **Washington Wizards vs. Boston Celtics:** *Both teams had to battle through six tough games in round one. The spotlight in this series will rest on the starting guard's matchup. Boston's backcourt of Isaiah Thomas and Avery Bradley provide both incredible offense-Thomas and lockdown defense-Bradley. In four games this season against the Wizards, Thomas averaged 27.8 ppg, while Washington's dynamic guard duo of John Wall and Bradley Beal combined to average 39.8 ppg against the Celtics. Keep in mind though that Wall and Beal enter this series red-hot, combining for 73 points in Game 6 against Atlanta. While both teams rely on their backcourts, they'll need to get*

scoring from other places as well. The Celtics Al Horford -18 ppg and Jae Crowder -17.7 ppg came up big in the regular season against the Wizards, while Washington saw big performances from Otto Porter -17.0 ppg and Markieff Morris -13.0 ppg and 7.5 rpg against Boston. With Boston winning game one on Sunday night 123 to 111, I suspect they will go on to win the series in six.

Toronto Raptors vs. Cleveland Cavaliers: *The regular season series won't be offering up much to this matchup from a strategy standpoint as three of the four games were played in the first six weeks and the fourth game saw Cleveland rest LeBron James while Kyrie Irving, Kevin Love and Toronto's starters played limited minutes. What else needs to be said when you have LeBron James on your team and you are the defending champions. Coming off a sweep of the Pacers the only thing the Cavs are worried about is losing their rhythm. Seriously though, James has now won 21 straight first-round games, the longest such streak since the playoffs expanded to 16 teams in 1984. This series will provide some drama as the Raptors acquired forwards Serge Ibaka and P.J. Tucker at the trade deadline to improve for the final seven weeks of the regular season and for a potential playoff matchup against the Cavs. They will get their chance to throw an upset at the Cavs along with Kyle Lowery who will need to continue his strong play despite his healing wrist injury. Though some outsiders are saying that Cleveland doesn't have the defensive abilities it did in the past and may struggle to hold off the Raptors - I have the Cavs winning this one in five. Game #1 of the series was played last night in Cleveland with the Cavaliers winning 116 to 105.*

Western Conference:

Golden State Warriors vs. Utah Jazz: *If I had to give this matchup a label - that's easy - David vs. Goliath. The Warriors convincingly disposed of the Trailblazers in round one by an average of 18 points per game. The biggest challenge facing the Golden State comes from injuries as they have been banged up as of late. Star Kevin Durant was able to return in game four against Portland and looks to be available for the upcoming series. There's also optimism that Shaun Livingston and Matt Barnes can return from injuries. The injury list doesn't stop at the players - temporary head coach Mike Brown will seek to seamlessly develop a rotation while Head Coach Steve Kerr addresses complications from a back surgery. No one is truly giving the Jazz a realistic chance to win this series but with cool heads and solid play - they might take a game or two. They've got good depth with Joe Johnson-16.7 ppg, 3.7 rpg coming off the bench and a defensive stalwart in7' 1" Rudy Gobert. Perhaps most importantly, veterans Gordon Hayward and George Hill weren't fazed by a hostile Game seven road environment, which could bode well for what they're about to face in Oracle Arena. I like the Warriors in five.*

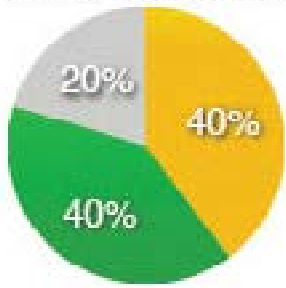
Houston Rockets vs. San Antonio Spurs: *I have to believe this conference semifinal will be the most exciting one to watch, especially considering the fact that when these two teams met in the regular season, three of the four games were decided by two points. These two franchises battled 20 years ago, in the days of Olajuwon and Robinson. And yet, despite how often they've each both made the playoffs, even with all their regular-season battles, these two teams haven't faced one another since.*

This series will center around subtitles like the Spur’s Danny Green getting the defensive assignment against James Harden of the Rockets. This frees up Kawhi Leonard to save his energy for offense and his fouls for defense until later in the game. I suspect the Rockets will simply have to let Leonard score his 40 and force the other Spur’s to step up and score 80 more. The Rockets will never be out of it, even if they go way down, because they can hit 3-pointers in flurry’s which slice deficits quickly and San Antonio has a nasty habit of their offense going sub-zero. As well, San Antonio is never going to be out of this thing, even if the Rockets go way ahead, because Houston is turnover prone. I have Spurs in seven.

CASH SALES & HEDGING TOTALS

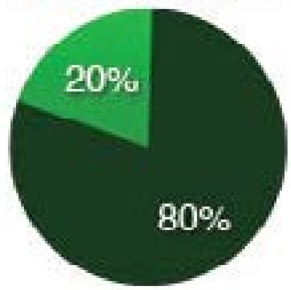
CORN 2016 CROP

40% SOLD
40% HEDGED
20% UNPROTECTED



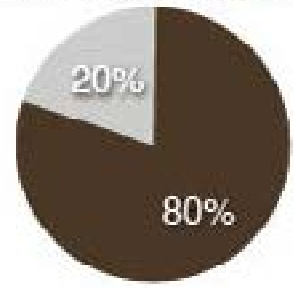
SOYBEANS 2016 CROP

80% SOLD
20% HEDGED
0% UNPROTECTED



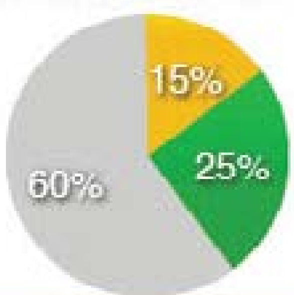
WHEAT 2016 CROP

80% SOLD
0% HEDGED
20% UNPROTECTED



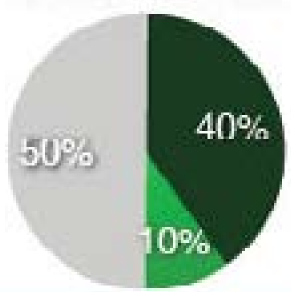
CORN 2017 CROP

15% SOLD
25% HEDGED
60% UNPROTECTED



SOYBEANS 2017 CROP

40% SOLD
10% HEDGED
50% UNPROTECTED



WHEAT 2017 CROP

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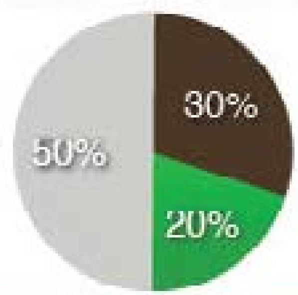
20% HEDGED
50% UNPROTECTED



CORN 2018 CROP

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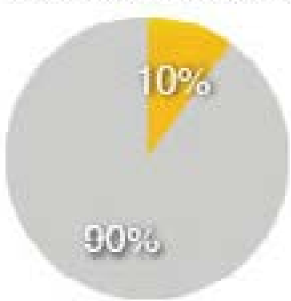
0% HEDGED
90% UNPROTECTED



SOYBEANS 2018 CROP

0% SOLD
0% HEDGED
100% UNPROTECTED

WHEAT 2018 CROP

0% SOLD
20% HEDGED
80% UNPROTECTED