USDA Fall Data Users' Meeting
October 13-14, 2021
Question and Answer Summary

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Question & Answer Summary

The following is a summary of questions and answers from the Data Users' Meeting. Material is organized based on the order they were answered in both the Open Forum and breakout sessions. There was not time to answer all questions in all sessions, but any unanswered questions were reviewed, and the appropriate agency has provided a written response. Slides are appended at the end.

Note: Questions and answers were lightly edited for readability.

Open Forum: Question and Answer Summary

Question: Jerry Gidel

When is FSA going to release its October sign up data?

Answer: Mike Walter

The FSA-578 data will be released any day now. Work is going on behind the scenes to do data validation and how we pull that report together and how we consolidate it rolled up through the state and county crop level. That is actively being worked on, so I anticipate any day now. Within the first couple of days of next week it will be out there.

Question: Laurie Showers

I am interested in the Overhead for dairy producers. That has changed to only being published twice a year - May & October I believe. Are there plans for that to be more frequently generated? Thanks. ***Clarification:*** Milk Cost of Production Estimates. The data was released 10/1/2021 (2020 was the latest year); the next release date is 5/2/2022.

Answer: Jeffrey Gillespie

We do release the Milk Cost of Production and the Commodity Cost of Production estimates twice a year in May and October. We don't release it more often but we will have 2021 estimates released in the May release.

We used to update those data monthly and we had monthly Milk Cost of Production estimates. We discontinued that in 2018. We just did not have sufficient data to continue doing that, so we discontinued that at the urging of a data review that we had. In order to release this more frequently, we'd have to look at what data are available and be confident in it for more frequent releases. At this point we are just doing twice a year releases for the annual to provide the annual releases on Cost of Production.

Question: Tim Martinson

The last NASS acreage/variety survey of NY grapes was in 2011, and annual tonnage estimates were discontinued in 2018. Are there plans to reinstate this vital resource for the NY wine and grape industry?

Answer: Lance Honig

At this point in time we do not have any intentions of specifically adding New York grapes back into our annual program. We are continuing to look for some of the correspondence you had asked about, so we're continuing to dig into that side of things. But as of right now, there are no specific plans to make that addition.

Question: Ken Lovett

If FSA is having to validate the latest updates of their crop acreage data, how was the data used for NASS's interpretation for the October release?

Answer: Lance Honig

I will not speak to details for FSA but I can tell you that the data validation issues had no impact on the crop totals for the things that we're reporting in our Crop Production report. It has to do with some other categories. It should have no impact on the data that we used for incorporating into our acreage estimates, neither September nor October.

Answer: Mike Walter

Yes, I agree. The issue we found was on non-cropland for non-commodity crops.

Question: Paul McAuliffe

What exact tools does USTR have to enforce China to meet ALL of their Phase 1 obligations?

Answer: Patrick Packnett

I would say that this is really more of a trade policy question. We are focused here on data. I think Mr. McAuliffe might want to reach out to USTR directly to answer that question.

Question: Benjamin Diamond

What is the difference between how NASS and RMA estimate yield data? Are RMA yield estimates used for certain crop insurance policies?

Answer: Dan Kerestes

NASS is going out and doing a survey, collecting information from producers. I don't want to speak out of line for RMA, but I would assume that they are asking farmers to come in and report their yields.

Answer: Lance Honig

The first point I would make is that RMA does not estimate, so that is one difference right there. RMA does collect yield information from producers who purchase insurance products. So yes, they have yield information available. They do not publish estimated yields in any county, state or any other level. They just report what is reported to them through the insurance agents that collect that information. In terms of how that information can or cannot be used in conjunction with the NASS estimates, the biggest issue comes down to timing. Most of that yield information that RMA gathers does not get reported until after the season. Once that data is even available to RMA, it is typically after NASS has published our final estimates for the season, including our final county level estimates. So there is really a big timing factor in terms of being able to utilize the data that RMA has available on yields in the NASS estimating process.

Question: Brian Carroll

Given the delay in FSA October Crop Acreage data to the public, were the data also delayed to NASS? Was updated FSA data able to be considered in the October Crop Production report?

Answer: Lance Honig

NASS has access to that data in real-time, so it had no impact on our ability to access the information.

Answer: Joe Parsons

We do have a great working relationship with the team at FSA and we get that data in real-time.

Question: Dale Durchholz

Did NASS make any adjustments in their ag yield survey model after last year's experience when producers misjudged their potential early, only to find yields disappoint in the end.

Answer: Lance Honig

The short answer would be no. We did not make any changes to our methods or procedures. But I can tell you that as part of our analysis process every year when we look back at history, we will see previous years. We identify, what I would say for lack of a better term, anomalies. So we are not necessarily making the assumption that what happened last year is going to be the case this year. It certainly appears to be the case last year that the producers were surprised. They were surprised where their yields came in. And looking back at the data that we typically collect monthly from producers, that does not normally happen. At this point we have no reason to assume that it's a new thing that is going to happen every year. So, we are kind of assuming business as usual again this season and that producers have the normal handle on what their yields are looking like, that they would've had in most other years.

Answer: Dan Kerestes

When we are looking at the yields, we are looking at a series of yields over 10 years and over 15 years. So, we are taking all that into account, how last year's forecasts came out to the final. That all figures into how we set our estimates. So, what happened last year is a beneficial thing for NASS because it allows us to build in for outliers, so to speak.

Answer: Joe Parsons

Not only do we look at the last 10 or 15 years, but we also think about analog years. Is there another year out there that looks like what we are seeing in front of us now and what might be learned from that. So, that is definitely one that last year and the end of the season run out will be one of those things that is now in our collective memory.

Question: Bill Lapp

Census revises monthly exports in a 13th month report, the following June/July. Getting this data correct but in a very timely matter is especially important in years of a tight supply/demand (eg 20/21 US soybeans). Would USDA consider deviating from adherence to Census as their source of export totals, especially when FAS and AMS export data are similar but in disagreement with Census? -- this has particularly important implications for the adjustments USDA NASS makes to Sept 1 soybean stocks and final soybean production.

Answer: Keith Menzie

We do review use data with NASS at the end of the marketing year. We do try to provide the best data that we can so that they have accurate data to look at going into the end of the marketing year. To your suggestion, we track all the different sources of data for trade. This particular year your observation is correct in regard to which pair happened to track the closest: inspection data and the export sales data. If you track those over time, there is no consistent pattern which is the most paired up, or in agreement. I think it would be something to consider over a long period of time if there was a little bit more consistency to a pattern. At this point if we were to switch data sources, not only would my phone ring to the point where I would have to hire somebody else to help answer it, we also would not know for sure that we were on a better track for reporting. I will close by saying that we did go over all of the sources with NASS and talk about that when we have a year like this when inspection and Census are more out of line than they usually are. We'd be pretty cautious about switching data sources, but there is nothing to say that we have to use Census as our source for exports and imports.

Answer: Joe DeCampo

Our release is a collaboration. It is Census, Stats Canada, and the Bureau of Economic Analysis. So, we really cannot put forward corrections more than once a year. It takes a lot of effort even to just do it once a year.

Question: Jerry Gidel

Any ideas to improve the US grain stocks that have had some dynamic changes from the initial posting. Where have the changes been coming from and any ideas how they might be improved going forward.

Answer: Lance Honig

First of all, that question refers to changes from initial posting, so I take that to mean revisions. Generally speaking, if you go back to the previous year, we did have some fairly significant revisions that happened in a couple of quarters. We had lot of conversations about that at a couple of Data Users' meetings. Over the course of this past marketing season, we really didn't see any significant revisions happening on an ongoing basis. I think that has kind of calmed itself down. If the question is referring more to changes in ending stocks, when we get to the end and we're actually measuring them, versus what was forecasted in the WASDE leading up to that

point, that is a completely different conversation. I don't think that is where the conversation was going but if it is, I will probably defer to my friends over at the World Board to talk about that aspect of things. Those changes would simply be, again, up until NASS measures the ending stocks it's going to be forecasted based on external conditions and an analysis of what it looks like going forward, as opposed to when we get to the end of the marketing season. We actually collect that information from both the commercial facilities and the producers holding the stocks on the farm. The only other thing that I would mention is that when it comes to grain stocks, just a reminder, NASS is in the process of a complete review for that program. That has been going on most of the last year. This first year we spent a lot of time really doing a deep dive into gathering information, reviewing the entire program. As of right now we are in the process of putting all of those pieces together, identifying any recommendations for changes moving forward. Over the next several weeks we will probably be focused on prioritizing some of those recommendations and identifying what items we might need to take action on moving forward. Just as a reminder, if there are any significant changes coming in that program, before we would implement them we would make sure that everyone is made aware of those changes before they come into play.

Question: Paul McAuliffe

Why is it that the China attaché uses 30 MMT corn imports from this past week and WASDE used 28 MMT?

Answer: Mike Jewison

We actually addressed this a little bit yesterday during the foreign production and trade breakout session. I would just reiterate what I said there. The short answer is timing and data sources. We don't control what the attaché does. This is one piece of information. The final import data source that we are trying to forecast in the case of China corn imports is what China Customs says the corn imports were.

Question: Joe Kleinman

Is RMA county level yield/production data available for download?

Answer: Joe Parsons

I know that the Book of Business is available for download. I am not certain on the status of the county level yield data. I think it is most complete by about August or so reflecting the prior year.

Answer: Mike Walter

I believe county level yield production data is made visible to the public. We rely on that data at our county office level for some of our programs. It is out there on their website.

Answer: Post-meeting follow-up from Mike Walter

RMA offer the data in business terms, in particular the transitional yield which is typically meant to represent an average of actual yields. The best source of that data is on RIRS (RMA Information Reporting System) > "Insurance Offer Reports" > "Insurance Offer Transitional Yields/Revenues"

https://webapp.rma.usda.gov/apps/RIRS/InsuranceOfferTransitionalYieldsRevenues.aspx

Question: Bill Lapp

Through NASS Sept 30 adjustments, the US soybean balance sheet table appears to be "managed" each year to avoid a significant negative residual term for the entire preceding crop year. If true, why is same methodology not used for US canola OR for US wheat by class?

Answer: Lance Honig

That is actually one of the topics being discussed and considered as part of our review that we have been working on for the past year. That is something that we will be addressing one way or the other here in the next upcoming cycle.

Question: Paul McAuliffe

What Will WASDE do in 2021/22 to improve their forecasts each month?

Answer: Mark Jekanowski

I think the bottom line is that we are always putting the Departments best resources and best efforts towards reporting these forecasts, getting together every month. It is always a learning process. We are always striving to improve, always striving to do better. We will continue to do that every year. Every year is unique, every month is a new set of challenges. I think overall if you look at the track record it has been strong and we are always striving to improve it. We'll take all steps necessary to always do the best job that we can.

Question: Matt Clark

My Hawaiian ranchers are not eligible for RMA PRF insurance, are there RMA contacts that I can work with to help coordinate the need for this product?

Answer: Post-meeting Follow-up from Mike Walter

Please contact your RMA Regional Office, which for Hawaii is in Davis, CA.
https://www.rma.usda.gov/en/RMALocal/Field-Offices/Regional-Offices

Question: Chris Eggerman

After the September Grain Stocks report, several analysts and reporters stated that soybean stocks were well above expectations because NASS revised its 2020 production estimate higher. Is that an accurate statement, or are soybean production revisions at the end of the marketing year made based on the survey-based ending stocks estimate and known usage?

Answer: Lance Honig

I think there's a misconception out there getting this in reverse. The reality is we get to the end of the marketing season, we do two surveys to measure the ending stocks. When we find that last piece of information, those ending stocks, we also have all the measured usage for the year. We have got all the inputs going into the year. So as a result, that is what really drives the production change back to the beginning of the season. Now we see what is truly left in the bin. We know what the measured usage is, especially for a crop like soybeans where almost everything is measured. As a result, it dictated the need for us to revise that production feeding into the crop season. So that is the driver. It is the ending stocks driving the revisions of the production and not the other way around.

Answer: Joe Parsons

The way I kind of think about it is every number in a balance sheet has some uncertainty about it. It becomes less if we are talking about export data as we get through the year, but as we think about the uncertainty that we have available in different areas, that is how we think about where we are going to set an estimate and also we might choose to make a revision.

Answer: Dan Kerestes

The process that Lance mentioned, that has not changed. We have been doing that for years. So that is not anything new or anything that we needed to tell folks about. It has been done that way back when I did soybeans in the 90s. No change.

Question: Jerry Gidel

Do you think that 2020 low grain moisture was a factor in the Jan drop in corn yields last year?

Answer: Lance Honig

Maybe. I wish I knew exactly what the cause was. I can’t say that definitively was the cause. Is it a possibility? Certainly. But I'm sure there's other possibilities out there as well.

Answer: Joe Parsons

Sometimes we might be asked why. We try not to get out past what the data are available to tell us. In that particular case, I don't think we have collected data that can say something about why.

Question: Benjamin Diamond

The FAS PS&D database has data at the geographic level of country but not state or province. Why not? Will data at the level of state or province be included in the future?

Answer: Patrick Packnett

The PS&D database is structured around national data. All of the production estimates we have in there are the official USDA estimates that have gone through the interagency commodity

estimate process with input from the World Board, ERS, and FAS. There would be no way to have committee blessed estimates for every province and state in every country around the world. I just don't think it is possible or feasible with the way that the database is structured. We do use provincial level data in our work to arrive at the country estimates. Our folks in the FAS International Production Assessment Division (IPAD) that are estimating crop production for FAS have access to a lot of that data, and it is a great tool for us. But I don't see any way in the future of publishing it within the PS&D database.

Answer: Joe Parsons

You have remote sensed products right? That one might get a sense in one country or another that at least gives a little bit of flavor where there might be a crop problem or the vegetative health of crops in different areas.

Answer: Patrick Packnett

That is absolutely true. We have a lot of resources that look at crop production, crop progress, and crop conditions around the world on our IPAD website. This afternoon we will be doing a breakout session highlighting our Global Agricultural & Disaster Assessment System (GADAS) where most, or almost all, of our remotely sensed information is available to the public. The GADAS system will allow users to follow crop conditions, drought conditions, rainfall, moisture data, satellite imagery, and the satellite-derived normalized difference of vegetation index (NDVI). You name it, we have it there within GADAS. The IPAD website is a great resource, GADAS is a great resource that you will hear about this afternoon. So, a lot of good information we have out there from FAS.

Question: Sam Funk

We have Census engaged in this meeting with data provision. Could we also have EIA engaged with the importance of soybean oil data in biofuels?

Answer: Joe Parsons

It just so happens Mr. Mike Connor from Energy Information Administration is joining us.

Answer: Mike Conner

Thank you for having me. EIA has been engaged in collecting soybean oil for a while now. And I am here if there is a question.

Question: Karen Braun

Can you please describe the process that recently led to the conclusion the 2020 soybean crop was 81 million bushels larger than previously stated? Is it simply the remainder after collecting September 1 stocks, export and crush data, or is there some actual re-evaluation process of the production components?

Answer: Lance Honig

As I said earlier, once the marketing season is complete you get the ending stocks and you've got all the components of the balance sheet, that is what drives us to look at potential revisions to production. So, that is the driver. I would go on to say that when we look at whether or not to make those revisions, we do look at the components of the production estimate. We do reevaluate that based on all the information that we had. There is always some level of precision around all of the data that drives those production numbers to start with. So, any adjustments that we make will still be within the bounds of the data that we have to set those estimates with. It's not that we just blindly adjust that production by whatever number that we think is going to make the balance sheet look good. We actually work all the numbers together and make adjustments as needed within the bounds of the data that we have to arrive at the best fit overall.

Question: Ryan Nielsen

Yesterday we were discussing CONAB and StatsCan influence for estimating crop S&Ds, a comment was made "NASS is the gold standard, then a few countries are close, then a sharp drop off". My question is: is there a similar organization in China? Where does USDA get data from in estimating Chinese ag S&Ds and how reliable are the data?

Answer: Mike Jewison

I would say for the grains and oilseeds in general, the National Bureau of Statistics for area, yield, and production, is a key source for us. In addition to that there are quasi-governmental sources, in particular the one that's got the most longevity and most reliability as far as China goes would be the National Grains and Oilseeds Information Center (NGOIC). Unfortunately, they only do their reports, as far as I know, in Chinese but certainly a lot of useful information that they put together. Those would be the two key sources that we would look at on the grains and oilseeds side and also for wheat too.

Question: Jerry Gidel

This year's bean ending stocks has a negative residual of 3 million. How does this happen?

Answer: Lance Honig

We have to go back to the conversation from a little while ago about the issue with exports versus inspections and when the opportunity is for those revisions to be made. I think there is an expectation that there could be a revision coming to soybean exports that when the next window opens up that could very well take care of that negative residual.

Question: Joe Kleinman

At the end of the season NASS has to choose whether to revise production or stocks. Why do all of the revisions seem to fall on production when NASS has no new survey information on

production? Couldn't the revision be spread to both production and stocks? Especially for soybeans in the September 30 report.

Answer: Lance Honig

The first thing I will say is that ending stocks are happening in real-time. So any adjustments we make there you're not going to see as a revision because it has not been published yet. When we're setting those ending stock numbers at the end of September, we have the complete balance sheet at that time. So any adjustments we made to the stock level at that point we're making before you ever see the number. With that being said, if you think about soybeans in general and you think about the magnitude of revision that was necessary, and look at the quantity of stocks that were remaining at the end of the year, there is simply not enough stocks left to make all of that adjustment in the stocks portion. We would literally have to make an adjustment larger than the data would support. Clearly, it points to the fact that there was a production revision also needed in conjunction with us considering how we would set those ending stocks relative to the data that we collected on the surveys to feed that process.

Question: Brad Fuller

Is NASS still releasing charts/graphs on implied ear and pod weights for corn and soybeans?

Answer: Lance Honig

No, we have not for a couple of years. Those are charts that we used to include the executive briefing package that we post on the website and share with the Secretary or the Secretary's designate in the briefing. Basically, the reason that we stopped doing that was because there was a lot of confusion around those. There were a lot of folks that would misinterpret what those charts were saying. We chose to present some similar information in different format on those slides. If anybody is interested in re-creating that same information, you can go back to the previous briefings that are posted to our website. The formula to calculate those values is posted at the bottom of those slides. It was literally just a mathematical function based on information contained in the report. You can easily re-create those yourselves or if you are having trouble finding that you can reach out and we'll provide those formulas for you.

Question: Karen Braun

Can you comment on what market factors you are seeing in China that would keep 21/22 Chinese corn imports fairly close to 20/21? Most other outlooks, including the one from the attaché, sees a much bigger year on year decline in Chinese corn imports than USDA is projecting.

Answer: Mike Jewison

To simplify the answer, there are two components I would break it apart into, an economic calculus or view that there will be supplies available for exports and the two primary suppliers for China's corn imports: US and Ukraine, and that the economics will be there for the imports. And secondarily, there's also, as we have seen recently, a political calculus that one could

loosely characterize as a consort with an import program. Our assumption is, given the most recent year we've seen, a consort with a large import program obviously the largest importer of corn in the world now and we expect that to continue.

Question: Dale Durchholz

I've had a few questions this summer about how the analysts at WAOB arrive at their average price paid to farmers for new-crop years. Is the early forecast model driven; what are the basic inputs? Are current new-crop futures prices a part of that mix? I know that old-crop comes from the monthly ag prices, weighted by the historical monthly marketings. But I would like to understand the new-crop better.

Answer: Mark Jekanowski

It is complex. It is model driven. Lots of different inputs including futures prices and historic marketing weights.

Answer: Keith Menzie

You touched on it. Most of the inputs that you mentioned, futures prices, forward cash prices, general supply and demand conditions, we look at cross-commodity prices, and then consensus within the committee. The issue for the past year, which was a little strange, was there was a lot of forward pricing at lower prices to a year where the prices began to rise sharply in January. So we were playing catch-up for most of the year as the NASS prices came in. The spread between spot and forward pricing was a little bit hard to get a handle on this year.

Answer: Mike Jewison

Just to reiterate, that's a marketing-weighted price. The comment from outside users, how could your price be this? Sometimes we assume a certain level of forward pricing because, with the example of this most recent year, you can have a NASS reported price that varied quite significantly from the spot prices. Some confusion out there as to what exactly that price is, it is a marketing weighted price.

Question: Peter Meyer

Always appreciate Lance's transparency on StatChat around the percentage of farmer surveys returned. Not a surprise that the numbers are variable at best. Is there any discussion about securing additional funds for more objective yield plots and get that number back to where it was some 5 years ago given they've taken on more importance with reduced farmer responses?

Answer: Joe Parsons

Speaking of #StatChat. It is not exclusively Lance's domain. We have also started a series around hog and pig production with Travis Averill, Chief of our Livestock Branch. We expect to have additional #StatChat there. Make sure to look Travis up and give him a hard time too.

Answer: Lance Honig

A couple of things I will point out. First of all, back when we made the adjustments lower on the objective yield sample sizes, a reminder I will share is, what we really focused on there was optimizing those sample sizes to maintain our accuracy in particular at the combined regional level. So we were able to use considerably fewer samples at that level and then used all the other pieces of information that we had to help distribute those yields back down to the state level. In conjunction with that, when we initially made those cuts back in 2019, you'll notice the counts shot back up quite a bit in 2020. As we were optimizing those sizes we did have to make an adjustment the following year and bring counts back up, about half as much as we had cut them back in 2019. They've remained stable since then. At this point I think we are pretty stable at the level that we are at. Whether it's objective yield, ag yield, quarterly ag surveys, more samples are always better. We are constantly trying to balance the resources that we have available with the need for data that we have. We will continue to monitor. The same metric that we use to control those sample sizes is largely driven by those measures of uncertainty, or CVs. The Methodology and Quality Measure reports that we've been publishing recently give you some of those hard numbers that show how those are performing over time. That is some of the same information that we monitor year after year to see where sample sizes need to be adjusted. Sometimes the totals don't change nationally but we will redistribute those counts across states to help balance the performance across those smaller geographical areas as well. Again, short answer is, right now I think we are fairly stable at the level that we are at.

Answer: Joe Parsons

One quick point that I will add. If you're interested, take the deeper dive into those methodology and quality measure reports. In most of them, in the interest of brevity we usually put in two years of performance. That is the measures of uncertainty, or CVs. But we went back and we looked at a longer series and often include it in the text. You don't really see a trend in the CVs or uncertainties. Now in some cases we have bumped sample sizes a little bit. But in terms of a real degradation in response rate, that's not really true. There is a trend downward. We are, generally speaking, maintaining our performance standards with regard to CVs or uncertainty. It is something we're always working at on every survey and fundamental to having good, strong statistics. This public good is to have good, strong cooperation and engagement of our stakeholders too.

Answer: Dan Kerestes

It's probably worthwhile to point out that we have seen a stabilization in that response rate.

Answer: Joe Parsons

Which is really quite amazing during this pandemic. Because some of the tools in our arsenal to get cooperation, being out in front of people face-to-face is sharply curtailed at the moment.

Question: Darrell Holaday

Has there been any discussion of discontinuing the Crop Condition rating within the Crop Progress report. This section of the report is "extremely questionable" in how it is reported on a weekly basis and has had a poor track record in regard to yield. Just consider the last 2 years. I have never felt it felt the standard of quality data collection that NASS and agencies require. If it cannot have a more consistent data collection system, then I ask if it should not be discontinued.

Answer: Lance Honig

The short answer would be, no, we don't have any plans to discontinue the condition ratings on a weekly basis. This topic has come up probably every year that I've been a part of the Data Users' meeting. At the end of the day, what we find on this particular topic is that we have roughly half the people who think it's one of the best things out there and half that think it should go away. There is not a lot of middle ground on condition ratings and I think that has a lot to do with how you use it. I tell people to use it for what it is. It is a subjective report of conditions based on what people are seeing across the country and it is not an attempt to measure yield. It's simply an attempt to provide a weekly update on what people are seeing in their local areas. The various reporters that we have are typically county extension agents or other agents similar to that who have an opportunity to either observe crops across their county on a weekly basis or those that glean information from those they have contact with on a regular basis throughout the week. The real strength in the condition rating and the progress information is not so much in the actual values themselves but in the comparisons that happen over time. We use exactly the same procedures week after week, year after year, and in most cases even the reporters are consistent over time. If you're looking at that data, I would strongly encourage you to look at the comparison aspect of it and then also I would caution you with trying to make a direct link to yield because as was pointed out in the question, it does not always match up. It's very similar to how we use the satellite information for measuring yields. A lot of times it works really well, and sometimes it doesn't. It has to do with what you're looking at. Satellites, in the same way, are very vegetative driven and so it is based on what you see and as you know, in some years what things look like and what they really are not always in sync. You can have beautiful, lush plants using soybeans as an example, but if there are no pods under those leaves, the beautiful looking plants will not generate a high yield. I think you can see some of the same challenges if you're only looking at condition ratings when you try to measure yield. That is a long answer to say, no, we are not planning to discontinue condition ratings.

Question: Benjamin Diamond

For the FAS IPAD Crop Explorer, there are maps of Weather, Drought and Soil moisture. Will the data behind the maps be made available in a tabular format?

Answer: Joe Parsons

I just want to share that NASS, for major weather events like hurricanes and such, has a disaster analysis webpage. We also have some resources like our Cropland Data Layer, for example. Domestically, you may find some of these maps of use as well.

Answer: Post-meeting follow-up from Patrick Packnett

The IPAD website provides several options to get at this data via the "Geospatial Data" menu. Crop Explorer provides weather, drought, and soil moisture data broadly available in maps and time-series charts. Now, with the addition of GADAS, much of the data is available for download in a tabular format when each chart is created with Map Analytics. Multiple sources provide precipitation data, the World Meteorological Organization (WMO) and the U.S. Air Force also provide temperature attributes, and we are working on bringing back more soil moisture data. MODIS Terra and Aqua provide NDVI data, a measurement of vegetation health, but these are more easily downloaded through the Global Agricultural Monitor (GLAM) application from the National Aeronautics and Space Administration (NASA). WMO Station Explorer also provides tabular data for the various WMO attributes.

Question: Sam Funk

What level of strategic importance for the available supply of soybean oil would trigger us to have continued biodiesel soybean oil use and renewable diesel soybean oil use? The changes in demand and available supplies for this area are critical for oil, meal, whole soybeans, and competitive ag commodities.

Answer: Mike Conner

I am definitely aware that this is an area where people want us to start to report some additional detail. In particular this split between soybean oil and other things consumed for renewable diesel versus biodiesel. For a number of years we had a set of data that was just for biodiesel. Then starting in 2021 we had a more comprehensive view including both biodiesel and renewable diesel but the two were combined together. So it gives you a bit of a break in series, where starting in 2021 the number is bigger than it was historically. Unfortunately, you don't have a continuous time series for that consumption of feedstocks for biodiesel production. I am aware that is something that people want to see. Because we do have to do disclosure control on biofuel feedstocks data, if we have a number that is only one company or two companies, and I'm not really an expert on all of the details of disclosure control, but basically you're trying to only publish data that has enough people reporting that you can publish it safely without revealing individual data. Initially the priority was to get as much of this out as we can, and now having heard the feedback that you really want to see this continuous data series, I've asked our statistics team to go back and take another look at that and figure out what it does to disclosure. In other words, how many additional numbers do we have to withhold in order to report that additional detail. When you report additional detail you end up having to withhold more numbers because the number of companies gets thinner and thinner as you slice it more finely. If you have a total you have to withhold enough data so you can't

back into numbers by subtraction. So anyway, the short answer is yes. We're looking at that and I want to try to get something out certainly in 2022, that will have the additional detail. The other thing I'll just add is that people may or may not be aware of is that we have the biodiesel consumption, but really we have ethanol, biodiesel, and renewable. Those are the three things that we have. The piece that we don't have yet, but I really want to add, is to capture the biofuel feedstocks consumed in oil refineries where the oil refineries co-process biomass feedstocks along with petroleum to produce additional renewable diesel. That is the part I want to add, but 2023 would be the earliest that we might be able to do that. That is when our current survey is up for renewal.

Answer: Keith Menzie

Just a comment that as far as the soybean oil balance sheet goes, what we are really concerned about is the total use. The information provided by EIA at this point does allow us to provide both forecasts and eventually estimates of how much soybean oil is used for biofuel. I would not want to get to the point where I had the parts but unable to find the total. It is the total that matters with the soybean oil balance sheets. We're able to do that with the data you're currently providing. We have done a little bit of feathering back based on some estimates we made back to about 2017 or 18 on what we considered to be probably what the level of renewable diesel was to add to our biodiesel based on data from the EPA and other sources. So our WASDE soybean oil balance sheet has that built in. For some of what Mike was talking about back a little bit further in history. If he does that we can actually pick that up and incorporate it.

Answer: Mike Conner

If I could just add, initially we started a more comprehensive survey of biofuels. We have a fairly high level of data reported on the survey, but we're publishing at a less detailed level. As we get into it, I've asked the team to start looking at what additional detail can we start to publish, both in the area of feedstocks and also in terms of production. That is the direction that we are headed.

Answer: Joe Parsons

I'm sure, as we do, when we go for a new information request which requires Office of Management and Budget approval, you will be engaging stakeholders on any changes you might make and get comment on any changes you might consider to the questionnaire or program.

Answer: Mike Conner

Yes, that's right. We have a whole Federal Register process. We will hold some meetings and different things. If people are interested in participating in that, please contact me and we will get you connected.

Question: Jenny Kim

Is there a plan to change PS&D's granularity of demand to be akin to WASDE (e.g., ethanol use and biodiesel use as a separate line item)

Answer: Patrick Packnett

As far as I know, we don't have plans to try to break out usage for all the countries in the world for these commodities to that level. We can't show anything in the PS&D database that is not an official estimate coming out of the ICEC process.

Answer: Mark Jekanowski

I agree with you. I don't think there are any plans. Largely I would assume it's a data availability issue. I would leave it at that. No plans to be more granular in that data.

Question: Evan Brandt

AMS stopped providing Dried Egg Inventories after February 2020. This is a critical piece of S&D data for price exploration. This became evident when USDA published prices for Dried Eggs did not move in the March '20 – July '20 period, when all other ag commodities saw dramatic double-digit declines. At the time, it was apparent that driers were working around the clock without the traditional outlets for liquid eggs (food service, schools etc), but the lack of visibility shielded the realities of the market. Is there any way we can get this data set reported again?

Answer: Mike Lynch

Unfortunately, the dried egg industry has become very consolidated. There may be several plants out there doing that work, but there are just a few companies. The information that we collect is collected on a voluntary basis. One of the larger companies, sometime in the last year or two, decided to stop cooperating. We do not have enough participation now to accurately reflect the inventories for the industry if the largest provider is not giving information and also we get into issues of confidentiality as someone alluded to before. If you don't get data from enough participants, you could be divulging somebody's inventory or position in the market. We just have to be very careful about that. At this time unless there is some change of participation or change in new entries to the industry, I just don't see how we will be able to pick that up again at this time.

Question: Jerry Gidel

Any potential for faster update of the EIA monthly renewable stats? We just got the July report on 9/30, a two-month lag. The final month isn't done until degradent is reported in 25 days. Any help on faster data?

Answer: Mike Conner

This is actually the first time I am hearing of that one. I'm assuming that we are talking about the actual production of ethanol, renewable diesel and biodiesel. We do report on a weekly basis the production of ethanol. That would be something that we could potentially take up when we look at our survey forms again for 2023. Currently I am not aware of any plans to add those extra biofuels to the weekly report.

Answer: Keith Menzie

I think the question may be in reference to the lag on release of feedstocks data.

Answer: Mike Jewison

I'm pretty sure that is what he is referring to. For example, the grain crush for corn latency is very good on that. And then maybe a month later you get the actual EIA release in your feedstocks. It would be the latency on the feedstock utilization.

Answer: Mike Conner

That is not something that is on the radar at the moment, but I can take that back and we can look at it.

Question: Dale Durchholz

Lance has been questioned and discussed the process of making production revisions for soybeans after the final stocks are reported. That is more straightforward as demand is documented. But with corn, what is the process of making the decision of how much might be a revision to the prior year's crop and how much goes into adjustments on feed/residual?

Answer: Lance Honig

So the process itself is the same. But the question really becomes how much do you really need to adjust? Soybeans are pretty clear most years because, like this year, you don't want a negative residual, so that makes sense. For corn it is a little bit more vague in terms of amounts because we don't know what that feed and residual number is. We don't claim to know what that feed and residual number is. When we look at a year like this and it becomes fairly apparent to us that before the revisions were made, that residual number was growing much more rapidly than it should based on livestock inventory level and things of that nature. It prompts us to go back and look at the same data that we look at for soybeans. We look at production for corn and say within the balance of the data that we have, how much movement could we make in a direction that would help provide a more appropriate or realistic feed and residual number. We make that adjustment based on that. We don't have a targeted amount to move, but rather we have a direction. We evaluate the production number as well as that ending stocks number before we publish it and make adjustments to make the best fit based on the data we have and provide the best overall picture.

Question: Matt Clark

Any chance the AMS will get the weekly feedstuff reports and national daily ethanol report (SJ_GR113) into a format that can be pulled via an API?

Answer: Jason Karwal

We are very close to releasing all those reports in the new system, so they will be available to the API. I believe the plan for feedstuffs is mid-November. As soon as that's out, the bioenergy

reports will follow closely behind. The co-products reports that tie that data together has been the delay on that one. By the end of the year all of that should be available.

Written Question and Answer Summary

Question: Bill Lapp

Renewable diesel has become an important part of US soyoil demand. Within the CAIRS data, is it correct that USDA does not measure the inventories (stocks) of soyoil held at the RD plants? How can we begin to capture this critical piece of data?

Answer: Post-meeting answer from Lance Honig

Although we recognize the importance of this information, it really falls outside the scope of the NASS CAIR reports and would require expanding the target population for reporting. A more appropriate avenue for obtaining these valuable data would be through the work done at EIA since they already gather data from the entities that would ultimately need to report it.

Question: Karen Braun

Could you please comment on the acreage registration data leak that occurred September 8? How did it happen? Has anything been done since then to prevent this happening in the future? Also, thanks for eventually posting it later that day and making sure everyone could see it before the Friday report.

Answer: Post-meeting answer from Mike Walter

The early posting of the crop acreage data on September 8 was due to human error—specifically, the requested posting time was misread. To prevent this in the future, the process has been restructured so that there are additional touchpoints in the system to verify that this sensitive report is posted at the correct time.

Question: Benjamin Diamond

China Agricultural and Economic Data located at https://www.ers.usda.gov/data-products/china-agricultural-and-economic-data/ is no longer being updated. Why has it stopped being updated? Will it be updated in the future?

Answer: Post-meeting answer from ERS

ERS decided to cease updates of the China Agricultural Economic database when the product was reviewed approximately 7 years ago. The database was initiated during the 1990s when data were only available from publications obtained in China. Nearly all of the data are now available from online Chinese Government publications or commercial entities. ERS has had only one staff member conducting research on China during most recent years, and ERS never received any inquiries about the database. Therefore, ERS determined that the database's limited use did not justify diverting resources from the research function to continue updating the product.

Question: Darrell Holaday

Why can't we change the release time of the primary grain reports by NASS and WASDE to 8:00 am instead of releasing while trade is taking place? I have heard the excuses, but they do not make sense. If this is considered OK, then why not change the livestock reports to 11:00 am.

Answer: Post-meeting answer from Lance Honig

Back in 2012 USDA engaged with the data user community to gather input on the best release time for both crop and livestock related reports. All of the input/feedback was considered before the decision was made to move the crop-related reports to Noon ET, and leave the livestock-related reports at 3:00 pm ET. Regarding the issue of release time versus trading hours that you mentioned – this was one of the factors considered. Like many of the other factors considered, there are people who prefer reports released outside of trading hours, and some that prefer they be released during trading hours. Past experience showed that trading times were sometimes altered to specifically provide trading options at release, a factor that USDA has no control over.

Question: Ken Lovett

How can I interpret Sep 1 grain stocks with the consideration of Aug harvest?

Answer: Post-meeting answer from Lance Honig

NASS instructs respondents to exclude new crop corn and soybeans from stocks reported in September. We also carefully review the responses and if it appears that new crop was included we follow up with the respondent to verify and remove if necessary. Obviously, it is possible for some new crop to be included in the totals, especially in an early-harvest year, but we do our best to limit it to old-crop.

Breakout Session 1A: AMS AgTransport Platform

Question: Katelyn McCullock

What are some of the logistical challenges with collecting this data and reporting it? I'm specifically looking at the refrigerated truck report, last dated 4th quarter 2020.

Answer: Jesse Gastelle

In general, there's a lot of logistical challenges to collecting the data, separate from the platform. From that perspective, the platform itself, has been a marginal improvement over the data collection we were always doing. We have a team of people that are making phone calls for some of our data to shippers around the country. We collect data from a variety of different sources. The phone calls are the most manual. Some we get through email. Some we pull off a website. Some of it we download through scripts. That covers the whole spectrum of logistical difficulties. But for the platform itself, it was really just a matter of writing some scripts that take the data we already have and upload it to the platform. The platform makes it very easy to do that, which is cool. A good example of that is the refrigerated truck report you are talking about, which is behind, so we are working on getting the PDF publication out right now to catch up on a couple of those quarters. At the same time, we do have the refrigerated truck weekly data up on the platform, up to date every single week. It's an improvement over the prior process in terms of timeliness. It's also weekly and sometimes daily data. In the past we only posted at the quarterly level. The platform has given us the opportunity to provide a much more frequent and more in-depth data set than we have been able to in the past. So in that way, it's removed the logistical challenges of getting that data out there.

Answer: Adam Sparger

I will add to that. One of our visions is if we could do away with PDFs completely and just have the data live on this portal, with reports customized by the user. I think that's a little bit science fiction and hard to transition to practically at this point in time.

Question: Chris Keistler

In regard to ag rail to port data, destination car unload totals have been referenced as not being complete in reported data. Are some rail lines not reporting, and if so, is it possible to identify who?

Answer: Jesse Gastelle

That data set is definitely not comprehensive. We don't have all the data. But I do think we get a decent sample of data from around the country.

Answer: Post-Meeting Follow-up from Johnny Hill

We estimate we are capturing around 70-75% of the movements in our data. They should be seen as representative but not comprehensive. Some of our data come from railroads; others

come from ports. There are a few ports not reporting all of their data as this is provided voluntarily, so it is not an issue with specific railroads. However, we continually work with the ports to improve reporting.

Breakout Session 1B: Foreign Production, Trade, and Imports/Exports

Question: Joseph Lardy

Why do we get 2 separate sets of export inspection data? One set comes out on Monday, and then the next set comes out on Thursday. Which one is the version that eventually equals the USDA export figure on the WASDE?

Answer: Patrick Packnett

FAS does not issue inspection data. The FAS data that comes out on Thursday is from our export sales report. That data is reported to us by law by the exporters. We then compile that data over the course of the week and issue a report on Thursday. The data that you may be referring to on Monday would be the AMS inspection data, which we are not responsible for in FAS, but that is actual data on commodities that are inspected as they are loaded for export.. I don't think either of those numbers by themselves would necessarily equal the export number in the WASDE, however, they are both key inputs that our staff looks at in arriving at what would be the export estimate that we have that would go in the WASDE.

Answer: Mark Jekanowski

I think that is right. They both inform the WASDE process, those forecasts that go in each month. Keith or Mike, you guys want to say a word or two about why you track inspections, and how you use export sales?

Answer: Keith Menzie

We use both of those as indicators for tracking what will ultimately be the official export number, which is the Census provided numbers for exports. Inspections gives us a heads up. Export sales gives us a heads up. Both of them, while in particular inspections, have reasons that they don't necessarily inspect everything so you would not anticipate they line up exactly with the final Census export number, but they do give us a lot of guidance along the way.

Answer: Mike Jewison

The other important caveat for corn is that they don't line up completely and part of the reason for that is truck and rail shipments to Canada and Mexico are not required by law to be inspected. One of the reasons it does not line up well for corn.

Answer: Keith Menzie

One other thing they are not required to inspect every single container. There's a limit on the amount they have to inspect. So, to the extent there is shipping by container, not all those are inspected, so that's another reason why you could have a difference.

Question: Karen Braun

Last year there was a lot of noise about USDA's China corn import forecast being too low, but the defense at the time was the TRQ limits. Obviously USDA has bypassed that as the forecast far surpasses these quotas, which were recently set again at the same levels as previous years. What official rule now allows USDA to bypass those TRQ restrictions and issue a higher forecast?

Answer: Mike Jewison

So, I guess we could backup, since the WTO session, it was generally agreed that was a constraint in terms of policy that would at least limit imports beyond the 7.2 million tons. In the empirical world, we react to the data, right? The empirical data said it is going to exceed that. But I would also add, there are some caveats too. Recall that NDRC roughly around this time a year ago, perhaps it was a little earlier, I seem to recall September. They actually issued an announcement that they were not issuing a quota for calendar year 20 or 21. We have seen recently, this year, the same announcement. But the empirical data says the TRQ is no longer a constraint. So again, in the empirical world we react to the data. The data says the TRQ is not a constraint for corn.

Question: Allie Wells

Should we expect any reporting delays from FAS as there may be an increased employee turnover rate due to vaccination requirements for federal government employees?

Answer: Patrick Packnett

I am not anticipating any delays in our reporting due to vaccine requirements. At the moment, we are in maximum telework status. Since the pandemic, we have been able to issue all of our reports on time. Nothing so far has prevented us from doing it. I do not anticipate the vaccine requirements would be an issue for us, but if we have issues then we will do our best to work around them and ensure that we continue to issue our data on time.

Question: Warren Prosser

Is it possible in the future to get data on wheat by class for international data? For example Australia/Canada HRW/HRS/SRW etc.

Answer: Patrick Packnett

I would doubt it, but I do have some of my team on the call who might be able to speak to whether or not we have any idea about wheat classes or if we are probably just looking at wheat in total for foreign production.

Answer: Bob Tetrault

We don't have that information for wheat by class for foreign countries.

Answer: Mark Jekanowski

Essentially, that data does not exist and it would be, therefore, hard to estimate.

Question: Joe Kleinman

Is there documentation for how the WAOB uses FAS and Census data for final trade estimates in the WASDE?

Answer: Keith Menzie

We take Census data for soybeans, code 1201, as the final estimate at this point. I don't think cotton necessarily uses Census, but the rest of us do various compilations. In general, we just use the Census data as our official data. I don’t think there is any documentation requiring that.

Answer: Mike Jewison

Generally speaking, it is across the board for most commodities, obviously cotton is an exception, we would utilize the Census data.

Question: Ryan Nielsen

For 2020/21 soybeans: Census bean exports summed to 2.265 bbu (matches Oct WASDE), CAIR fats and oils summed to 2.1404 bbu (Oct WASDE @ 2.141). So to get to NASS's count 256 ending stocks where did the -3 mbu residual come from, any inclination on where it may go and how frequently have beans had a negative residual after the Sept 30 report?

Answer: Keith Menzie

The arithmetic: we get the beginning stocks, imports from Census, production from NASS, we get crush from NASS, we get exports from Census, we get ending stocks from NASS. We make an estimate of seed use and then break out the residual. That's just the way the arithmetic goes this year at this point. Not to say there will not be data revisions coming in the future, there were numerous adjustments to exports this year through December, not to say there wouldn't be, I don't know that there would be, but the difference between Census and inspections this year is bigger than normal. There has really, at the single digit level, not been a negative residual in the past. There was one year, I cannot remember the exact one, something a bit less than 0.5 negative, just the way the data turned out. So, I would not consider that to be in any sense use, it's just an accumulation of various statistical errors in reporting. And then maybe someone from NASS can explain a little bit how they take all of this data at the end of the year and make crop adjustments. That would be what I have to say to it.

Question: Don Close

Given the explosive growth in beef exports to China. What is the long-term view of those shipments?

Answer: Lindsay Kuberka

We don't have a bilateral trade forecast, so we do not explicitly forecast what U.S. exports to China will be. We have seen explosive growth in beef exports to China this year, and we continue to see very strong demand in China, so of course we are optimistic about continued growth in that market. China is the biggest beef market, and still a lot of demand there. Looking at next year, I think the only thing that would give me pause is that we have lower U.S. beef production in 2022. So, perhaps higher prices and some headwinds but overall, we see China as a strong growth market for beef.

Answer: David Boussios

I would also reiterate, we do not do bilateral, but in general, we have baseline projections which go 10 years out and we have a new one coming out in February which will have a general outlook on some of the import projections for U.S. and China.

Question: Karen Braun

Can you retouch on the loss of the Moscow attaché? That went by quickly in the intro session but it seems like a big deal. Is there any timeline as to when that might be re-established, and what are the biggest challenges that now exist when putting together S&D tables for Russia? Where are the biggest information gaps?

Answer: Patrick Packnett

So, why don't I generally comment on the first part, and then perhaps, the board wants to talk about how we are going to approach S&D's for Russia, given the loss of the attaché report. The simple answer is, we don’t know. We don't have a timeline, and I really don't have insight into the U.S.-Russia diplomatic discussions and when those relationships might be improved to a point that allows our diplomatic presence to be restored. Hopefully it will be soon. As I mentioned in the session this morning, we are looking at all available data and options that we have at our disposal to understand that market, and to continue to do good supply and demand estimates. We do have our satellite imagery, weather data, we have trade data, and there are probably other sources of information that our analysts have access to, coming out of Russia, that could be used.

Answer: Mike Jewison

Keep in mind that obviously it helps to have an attaché presence. We don't have it for every single country in the world. That does not mean that we cannot come up with objective and unbiased estimates for the various commodities that are important for that country. And, obviously, Russia is a key player, not just in the wheat world, but in the coarse-grain world. You do your best with the tools you've got, and not having an attaché hurts, but that does not mean that we cannot provide reliable estimates for that country.

Question: Karen Braun

On what date will the early tables be published for the long-term projections? Recently it has been late October.

Answer: David Boussios

We are putting out a press release on October 26th and it will be the following Thursday that the tables will be released, that is November 5th at noon.

Question: Joe Lardy

Is there any chance that the WASDE will ever break apart feed and residual on the corn balance sheet? That category always seems to be a mystery and splitting them would give users more clarity.

Answer: Mark Jekanowski

The short answer is that, it would be easy to do if there were data to do it. Feed use in corn is a complicated variable, and there is a lot of uncertainty there. We don't have good information on it.

Answer: Mike Jewison

Keep in mind, if you believe the data that we have for the United States is the best in the world, which I would believe. Before we would even attempt to do it for other countries we want to be able to do it for the U.S. and currently as it stands, that is not possible. That might be a question for NASS in terms of the additional survey work they would need to do in order to facilitate that. As it stands right now with the data at our disposal, that is not possible.

Question: Allie Wells

Does FAS have any insightful reports or indicators for growing beef demand in Asian countries? Specifically China and South Korea?

Answer: Patrick Packnett

Yes. We have attaché reports coming in from most of the major markets, for most of the major commodities. I'm pretty certain we would get a livestock attaché report from China and South Korea. In addition to that, we have our quarterly world markets and trade report for livestock and poultry which would have the latest information that we are aware of and also reflecting global supply and demand numbers that are discussed through the WASDE process with the board. Our circulars, as well as our attaché reports would be what I would point to. I should also mention that perhaps ERS has some reports or data on livestock that might be relevant.

Answer: Lindsay Kuberka

Both Korea and Beijing put out a livestock report twice per year. So, the annual reports were just submitted in the August/September timeframe. We will get a mid-year report from them in

March. These reports summarize the current demand, current market conditions and talk about next year. They do not talk about long-term demand, long-term changes in the market. ERS has done some of that work. I would urge you to check out GAIN to what is coming in beyond the normal livestock reports. They also submit reports from posts throughout the year on different topics. That is probably your best source, and then, ERS might have some additional publications that look at longer-term trends.

Question: Warren Prosser

Attaché vs WASDE has been very different on coarse grain imports (coarse grains + wheat to be specific) for China. Is there a particular reason for this? Currently WASDE has coarse imports of 55.4 mmt 21/22 (OCT) and attaché (SEP shows 47.5 mmt). These two estimates have not seemed to follow one another lately.... what is the reason, if there is one?

Answer: Mike Jewison

It is worth reiterating here, the attaché reports are one component of the monthly process, right? It's a critical component but it is not the only one. When we go through, for example in the coarse-grain world, we are taking a look at the entire supply and demand balance for the rest of the world, as well and how China fits in with that. For example in coarse grains, differences could occur between what the attaché expects for barley versus what we expect and that could actually be expected given that perhaps they don't look as closely at what is going on in other parts of the world like Ukraine or Europe for example, or what's happening with sorghum. So, obviously China has been an enigma on the grains side and has just emerged as a large coarse grain importer. I would say the differences would be expected, because depending on who you talk to you would also get different opinions amongst private analysts. Not unusual to have a difference there. At least early on in the forecasting cycle for a year.

Question: Joe Lardy

When it comes to foreign production, the WASDE report seems to lag reality. For example, the corn production numbers from Brazil. The trade knew the crop was smaller but it seemed that it took the USDA a few months to catch up (a big 5.5 mmt drop from June to July WASDE on Brazil corn). Are we relying on CONAB or our attaché to help us along or why the lag?

Answer: Mike Jewison

The first point I would make is, we generally follow—in the case of corn and coarse grains and on the oilseed side—we follow CONAB as a guide. They are not the only entity that puts out numbers as far as Brazil goes, as everyone here knows. Part of the challenge with Brazil is, especially as the safrina crop is concerned, the last few years and in particular this year, the dry weather that occurred in the South in combination with how the rain season has bared out, we do our best to try to be out in front of numbers in terms of our best judgment of where things will be when it's all said and done. Yes, the trade may have been out in front of us that one but I am old enough to remember the 19/20 crop when trade thought the U.S. corn yield would be 160 and it wasn't. Not to say the trade gets it wrong or right, it's just that there's a lot of

opinions out there and we do our best to balance all of the available information in a given month. So, take that for what it is worth. That is not to say that we are not without improvement. We certainly look at our methods and look at how each forecasting cycle goes and try to improve in the next cycle.

Question: Ryan Nielsen

Piggy backing on the best available information, are the estimates (numbers published) for "if the MY ended now" or "if the MY returns to normal" or "continues along the most likely path" I'm thinking of the Derecho last year, or the Brazil's corn referenced, or the ND and Canadian drought.

Answer: Mike Jewison

If I'm interpreting that correctly, are you asking, so you have weather today plus weather going forward we assume normal weather going forward. When you say, “continues along the most likely path”, are you implying that we would use persistence for weather? We wouldn't forecast weather. You have weather to date. I guess the North Dakota and Canadian drought would be an example. You have weather to date, and weather going forward, we would not forecast weather going forward we would just assume normal weather.

Answer: Keith Menzie

I have a little bit of a strong opinion of how our forecast season went on the Canadian canola crop and I would just say, we were late on the uptake. We had signals and it took us longer than it should have. It wasn't anything to do with what we were assuming about weather upcoming, it was just how we were interpreting the signals that we had. A little bit of a mixed bag between on the ground reporting, and some of the satellite data that we used. Not anything about assuming weather coming though. It is a bit complicated, in the case of a drought season, you're kind of in a persistence mode, as opposed to normal climate assumed. So, those seasons get more difficult.

Answer: Mike Jewison

The other thing, too, is that for some countries where the data allows it, you could very well update your crop estimates a year after the fact.

Answer: Keith Menzie

U.S. corn yield for the 2021 year with the September 1 stock report changed more than the corn yield did for 21/22. That was harvested a long time ago, right? The other issue temporally is when is it final? Well, it obviously helps to have utilization data where it is available, to use a NASS term, the administrative data, to give you at least a feel for how close you are in terms of what is reasonable for production, especially in extreme years. Going back to Brazil corn, I think one of the other elements would be, how do the exports fare? There is a bit of a difference in opinion on what the exports will do this year, too. Amongst private analysts, that is.

Question: Benjamin Diamond

What is the difference between a calendar year and marketing year in the FAS PS&D data?

Answer: Patrick Packnett

Each commodity has either an established marketing year which would apply to all countries, or, a marketing year which would apply to individual countries around when the crop is harvested, and when most of the marketing occurs. For some commodities in PS&D we might be using the calendar year as a standard for livestock for example, because production happens all year round. Whereas, for some of the seasonal commodities, you have a seasonal planting and harvest of the crop and marketing of that crop. It varies in the database, which marketing year is applied to which commodities, depending on the specifics of each of those.

Answer: Keith Menzie

We do have, on the FAS website, definitions of all of the marketing years for all of the crops, by country.

Answer: Patrick Packnett

There is a lot of documentation in the PS&D system that basically explains all of those terms. If you want to go there and look, you will find all of the specifics.

Question: Joe Lardy

Looks like the USDA is interviewing less farm operators year over year. In 2014 there was 13,300 surveyed and in 2021 there was only 8,900 surveys. I'm curious if there is a reason behind the trend to less and less surveys every year.

Answer: Lance Honig

I would say what they are referring to based on those counts are our monthly yield surveys we do. I can tell by the sample sizes where that falls. I guess there are really three different factors I would touch on. First of all, we have obviously over the course of the last number of years, we have seen some reductions in sample sizes due to cost. Budgets don't grow, they shrink. So as a result we have had to use smaller sample sizes to keep costs down. Another factor that can come into play is that we have also made some improvements over the years and how we draw samples and how we select people. We have gained some efficiencies in that department and therefore, we have been able to reduce sample sizes in some cases, and still maintain the level of quality that we need to. One of the things that we do with all of our sampling work is, we have target CVs we shoot for on major items. And so we evaluate every year and if it looks like we can decrease samples and still maintain those target level CVs, we will do that. In some cases, we have to increase samples. Most of the time it is an allocation of those samples across the states that changes. You won't see big changes nationally. The last thing I will mention is, specifically this year, we have seen some drops in monthly yield sample sizes even compared to last year. This year in particular really stems back to June. We actually had a lower response on

the June acreage surveys that we do every year. That survey serves as a screener for these monthly yield follow-on surveys we do August through November. Because of some of the response issues we had in June it actually reduced the pool of folks we had available for the yield surveys August through November. Now, based on that, we are going to go back and look at our procedures for that next season, to see if there is something we need to do to expand that pool in the June survey so that if we encounter a similar problem it wouldn't have such a big impact on our monthly samples August through November.

Question: Jerry Gidel

The decline in the field samples has also occurred. The same reason?

Answer: Lance Honig

To some extent, it was largely cost driven. That was when we made cuts in objective yield sample sizes. Actually, over the last couple of years we have been stable and in some cases increased. The biggest change we really made on the objective yield, though, was for corn, soybeans, and cotton delaying the beginning of that from August to September. Sample size wise as I mentioned before, the counts we have now allow us to maintain the same level of statistical reliability that we need. So, we try to be as efficient as we can and not sample more than we have to. We are very content with the objective yield sample sizes that we have at this point.

Question: Benjamin Diamond

Will there be Readme Documentation available that defines the columns in the FAS PS&D database?

Answer: Patrick Packnett

Yes. We do have documentation on the PS&D system in general, that defines a lot of the terms that are there. Documentation is under the FAQs. So, if you tool around in the PS&D system a little bit you will find it but I did put the link in the chat:

https://apps.fas.usda.gov/psdonline/app/index.html#/app/about

Question: Jerry Gidel

Re: decline in the field samples: 10,000 to less than 5,000 seems too harsh.

Answer: Lance Honig

I suspect he is referring to the objective yield sample counts and probably comparing August counts from years back to September counts now, you have to remember that the August counts back then would have included winter wheat as well because that extends into August. And so, you cannot compare August counts of the past with September counts of the current timeframe. So, the drop isn't as drastic as that might imply.

Question: Rabail Chandio

I have a question with overall datasets. For the "true" value of ag variables how are the PS&D data different from the NASS data?

Answer: Mike Jewison

I have said this many times before, NASS is the gold standard for public ag indexes worldwide. Not debatable in my view. So, there are degrees, right? When you step beyond what NASS does and the survey work they do for the U.S., some countries are comparable and then it falls off sharply. So, the PS&D is the aggregate of the U.S. plus the rest of the world. You have all of it at your disposal. I would say, too, before I wander off too much, that U.S. data by commodity varies but for example, in the case of corn, the production number is a NASS production number. The ending stock number is the NASS survey ending stock number. So, the NASS data for corn appears in the PS&D for the U.S. and then we combine with the rest of the world.

Breakout Session 2A: NASS Milk Production Program

Question: Geoff Vanden Heuvel

What is administrative data?

Written Answer: Mark Apodaca

Administrative data refers to those data and reports obtained from agribusiness firms, regulatory agencies, and other governmental offices. Examples include slaughter data, soybean crushing data, export and import data, farm program participation data, and processing or milling data.

Answer: Travis Averill

We consider administrative data to be data that is not from a survey. So, if we are getting data that might be collected from another USDA agency, or a state department collects it, that is what we consider administrative data. Data that is not actually associated with our surveys or data collection processes.

Answer: Mike Miller

No, that covers it. It is data that is non-survey data. So, data that we get from any other source, other than a survey, would be what we consider administrative data.

Answer: Scott Hollis

Right. And luckily, for now, we have quite a bit, probably more than any other commodity in our group. We have a lot of administrative data that we have access to, so that helps us only survey on the quarters.

Answer: Mark Apodaca

We have been working really hard to partner up with our FSA agency to utilize more of their data that they collect. They had the Coronavirus Food Assistance Program and we are utilizing a lot of that information to help build up and improve coverage of our list frames. We are also doing a lot of record linkage work with FSA data, to try to get lat/long on our list frame. FSA acreage data is also used in our estimation program. So there are several different types of information that we use from administrative data sources to improve our estimation program.

Question: Laurie Showers

I am interested in the Overhead for dairy producers. That has changed to only being published twice a year - May & October I believe. Are there plans for that to be more frequently generated? Thanks.

Answer: Travis Averill

That is not a report that comes from NASS, so that is probably a reference to something at the Agricultural Marketing Service Dairy Program.

Answer: ERS response during Open Forum from Jeffrey Gillespie

We do release the Milk Cost of Production and the Commodity Cost of Production estimates twice a year in May and October. We don't release it more often but we will have 2021 estimates released in the May release.

We used to update those data monthly and we had monthly Milk Cost of Production estimates. We discontinued that in 2018. We just did not have sufficient data to continue doing that, so we discontinued that at the urging of a data review that we had. In order to release this more frequently, we'd have to look at what data are available and be confident in it for more frequent releases. At this point we are just doing twice a year releases for the annual to provide the annual releases on Cost of Production.

Question: Geoff Vanden Heuvel

I am interested in more detail around the acceptable CV error rate at the state level. The speaker mentioned 4-5% difference is acceptable. What does that mean?

Answer: Mark Apodaca

The best precision around our survey indications is at the national level, because the sample size is the largest at that level. Typically for a lot of our major surveys, whether it is crop acreage or inventories for livestock, we are targeting a CV of about 1% at the U.S. level. Now for some of our critical states, the states that have a large amount of that total production or total acreage, we won't be as precise in those states as we are at the US level, but we will still target a CV in the 3 to 5% range. As you get further away from being a large production state, we may let that CV go as high as 10 to 15%. We have quality and standards memorandum where we have target CVs for most of our national estimation programs but again, the key there is the indication is most precise at the U.S. level, and those precision levels are usually in the 1 – 2% range.

Question: Jacob Thompson

How do you calculate a milk production per cow # as part the DRP [Dairy Revenue Program] program at time of endorsement? I believe that USDA is providing this number?

Answer: Travis Averill

That comes from RMA.

Answer: Mike Miller

I am assuming that RMA must use our published milk per cow. When we get the survey, from that survey, we can look at the rate of change in that survey rate from the previous quarter and previous year. We get administrative data every month for some states, and we can also use

that administrative data to look at change from previous month and change from previous year, and to use that information to estimate the rate for the current month or the current quarter. Ultimately, the best data that we have is our administrative data for production. So you estimate the cow number based on the survey data and a production number based on administrative data that is solid, and divide the production by cows. If that rate does not look correct based on what we know about what rates would normally do month to month, quarter to quarter, then we make some adjustments to the cows, try to stay within the parameters of the survey indication, or the administrative data rate indication, try to stay within those parameters, and estimate a reasonable rate per cow.

Question: Geoff Vanden Heuvel

Is that CV rate public or internal?

Answer: Mark Apodaca

I believe that could be made publicly available. We could be asked to provide this information under the Freedom of Information Act. The targets are documented in a policy and standards memorandum that we do maintain internally, and if you want you can send us an email to see what surveys you are interested in, to see what our CV targets are. These are just our guidelines. As our response rates decrease, our CVs tend to get a little larger. For the most part, we are holding pretty good at meeting our target CVs, and we actually put out an annual internal report to measure how many CVs we hit or missed. For example, in one quarter we could have had a large atypical outlier that could have driven up that CV. A CV would need to be missed consistently before we take any action. But, I believe that information is publicly available and we could share that.

Answer: Post-meeting follow-up from Mark Apodaca

The internal Policy and Standards Memorandum – "Sample Designs and Statistical Precision" can be shared upon request.

Question: John McDonnell

Is any of the survey data estimated?

Answer: Mark Apodaca

Yes. For our largest entities, if we do not get a response, we will have the regional field office statistician manually estimate. It is called manual imputation, instead of a machine algorithm. Usually these entities are in our survey very frequently and we have pretty good information around them. There are some items that we do not allow to be estimated. I am pretty sure for our quarterly milk surveys, we do not have them estimate a rate per cow, but we will still have them estimate the number of milk cows associated with that entity.

Question: Geoff Vanden Heuvel

It seems that total milk production for the country or even region or state can be pretty accurate because of the milk check off data. But for cow numbers based on surveys I wonder because I know how many dairymen do not respond or respond accurately to the cow number reports.

Answer: Travis Averill

As Mark stated in his presentation, he was discussing the CVs, the precision, in the quarterly report, so that would cover those survey milk cow numbers from quarter to quarter.

Answer: Mark Apodaca

We hope that our respondents respond honestly. I think they would have to be a lot of collusion out there to really move that number significantly. We conduct these surveys quarterly, so we do have a lot of history. We do make comparisons for the previous quarter as well, those are the survey to survey ratios, to provide a gauge into how those inventory levels have changed. The Census of Agriculture is a mandatory survey that we often add in as a check, as well. Response and how they respond is critical from the largest operations, if we do not get a good response, we manually estimate. But yes, it would have to take a lot of collusion to really move that number. Turning to our estimation process, we did not go into some of the balance sheets and the tracking of our indications. We know that there is bias associated with some of our survey indications. We track these over time. If it is consistent, we can factor that into when we set some of our official estimates. But please, report honestly.

Answer: Travis Averill

That is important. The data is only as good as the respondents collaboration to our surveys, and it is important that the producers understand the importance of our data, and how the data from NASS is used across USDA and all of the other programs in policymaking, so it is critical for the industry to have the data that is necessary for the policies to be driven.

Answer: Scott Hollis

The data that we put out is only as good as what we are provided. We do a lot of outreach to get people to understand why the data is needed and what is used for, and we do spend a lot of time educating people. But it is only as good as the data that we receive.

Answer: Travis Averill

When administrative data comes in and you have some disparity going on we have analysis systems that we have built in to review the data at the operation level and the state processes. That whole process is designed to try to mitigate outliers or data issues impacting our data with some processes to review or to verify what's actually going on. There are a lot of built-in checks into what we do at NASS for all of our programs, and milk production is one of them. It also helps to have that administrative data to assist in that process and help make sure that the

rates make sense on a monthly basis, and what production is in cow numbers. We also look at slaughter, like dairy slaughter going in on a monthly basis, and the regional components all go in to assist Mike in setting those numbers, too.

Answer: Mike Miller

I think that administrative data for milk production keeps all of milk production estimates in line, because if you see those changes, that's a pretty good indication that there is something going on with cows, too. Milk production per cow tends to be very seasonable, and it tends to follow very consistent month to month patterns over time. So that kind of keeps us in line too when we are estimating our rates. So, combine that with our survey data, and with the administrative data on rate per cow, and I think the estimates are pretty good.

Question: Matt Stenzel

Piggybacking on the response rate issue - With the amount of consolidation going on, have you seen larger entities being less transparent than traditional smaller farms over time?

Answer: Mike Miller

From what I have seen, I don't know that you can say that that is necessarily always the case. I guess you notice the big ones that don't report, because those are the ones that have the big impact on the estimates. Those are the ones that you really like to get, and when you see that the one doesn't respond, that really stands out you. I think that we have small ones that don't report also, so my first inclination might be that the small ones might be more likely to report than the big ones, but we have good response rates on the big ones too. So I don't know that you can say that the big ones are necessarily more likely to refuse.

Answer: Mark Apodaca

Some of the things that we try to do and is a responsibility of our regional directors and state statisticians in our field offices is to build a rapport with these larger entities. Work on some operating arrangements, reporting arrangements. As you saw in my slide, these large operations they do tend to get sampled at a higher rate. They are in the survey more frequently than some of the smaller ones, especially in our cattle surveys, and we have so many cattle operations. If you are a small cattle operation, you will probably not be sampled for many years whereas our larger ones are going to have a higher probability of being included. Again, the key is building rapport with these large entities, working out reporting arrangements, maybe working with their accountant to provide the information. That is what our task is, to try and get the best estimate we can and the best response rate.

Question: Geoff Vanden Heuvel

I think you guys do a great job. I think the Dairy Revenue Protection crop insurance program now uses your milk per cow data to adjust indemnities. A 3-5% error in state data can result in literally millions of dollars of changes to indemnity payments.

Answer: Travis Averill

That is true, and depending on what state it is, that will vary. But as Mark stated, our quarterly survey CVs are really pretty good for milk production. But yes, 3 to 5% error in a state could potentially have an impact. If you were to look at our reports and go to our 24 major producing states, they account for 95% of the United States milk production. The impact there you can see there that it probably would not be as severe as you alluded to. Again, it goes back to a lot of us at NASS always say, that the importance of our producers in the United States is if they get a survey in the mail, it is important for them to complete it with integrity, and accuracy of their operation, because we are only able to do it with what data we receive. We have administrative data to assist in monitoring, analysis, and editing systems in place to try to mitigate any outliers, or potential concerns that would impact any of the commodities we are working on. For milk production, we try to make sure that we are doing our best job possible to make sure that the data is reflective and transparent of what is actually going on at a given month or annual basis.

Answer: Mark Apodaca

I was just pulling up the quality metrics to see the CVs. That would be a good source to look at: the quality metrics document. We do present the CVs by state. Looking at the last one that we put out at the U.S. level, the CVs around the rate per cow was half of one percent, so that was pretty tight and similar to the CV for the number of milk cows. The precision at the U.S. level is very tight, and I am trying to see here what some of the CVs were in some of the major states. A lot of the major states were all within the 1.0 to 1.5% range. Looking at Wisconsin and California, California had a CV of 1.3%, so little better. That is related to the proportion of the population that we sample, we do sample within our milk population a little heavier than some of our other populations. Looking at Wisconsin, we are at 1.7%. So, for our major states, it looks like our CVs are all in the 1.0-2.0% range, with the U.S. at about 0.5% CV.

Answer: Mike Miller

I would like to emphasize that the field office staff works really hard every quarter. They spend a lot of time looking at that data, looking for outliers, looking for potential problem records, and I look at all of that data too. We go over that data pretty thoroughly, and we look at the administrative data too and watch for anything that looks out of line. So, the data that we are using to make these estimates, they have been gone over very carefully. And I feel pretty good about the estimates that we are putting out there.

Question: Geoff Vanden Heuvel

Does NASS take into account weather and feed situation information in assessing if milk per cow drop (or lower than usual growth) is due to measurement error or genuine shocks to cow productivity?

Answer: Mike Miller

I think things like that can definitely help explain, when we see big drops in milk production per cow. We can look at things like high feed costs for example. We know extreme weather like what we have seen in the Northwest, extreme drought, hot weather in the southwest. That impacts feed supply. That impacts feed costs. Those things help to explain when we see big drops in milk per cow or when we see the cow numbers decline. I think those situations definitely help explain when you see big drops in milk per cow and drops in milk cow numbers. When you have major weather events in the winter, that definitely helps explain dips in milk per cow. So, we definitely take weather events and feed costs into consideration when we are looking at these estimates.

Answer: Travis Averill

Going back to our regional offices when they are setting those estimates, they are staying in tune. Our data collection processes have the ability, if the data shows a difference from previous quarter, previous year, ranges outside of what is established for editing purposes, it triggers a comment or asks for clarification. We have some systems built-in to get some of those comments where those things do occur, whether it is due to drought, weather, price of feed sources where they actually have to change feed sources because the prices are too high, especially with the milk prices, wherever they are at at that given time, dairy farmers are trying to be cost-effective and efficient with their resources.

Breakout Session 2B: Showcasing ERS Data and New Initiatives

Question: Ryan Nielsen

Is leverage and debt considered in commodity costs and returns (CAR)? Obviously that varies from specific farm to farm, but is there an aggregate assumption?

Answer: Jeff Gillespie

No, we really aren't considering that. We are really just looking at: what does it cost to produce the commodity? There is some information in the ARMS survey where we ask about debt. But, within the commodity cost and returns, we don't have any estimates there.

Question: Kelly Maguire

How frequently are the meat price spreads data updated?

Answer: Bill Hahn

We do it monthly. Our retail prices come from Bureau of Labor Statistics. Those are the last set of prices we get. Typically, it will be on the same day as they release the consumer price index.

Question: Kelly Maguire

So then, the lag between when the CPI data are released and when we update our meat price spreads, is it short? How recent are they?

Answer: Bill Hahn

The BLS data is released at 8:30 Eastern and we get it up by noon Eastern.

Question: Marvin Miller

How do we account for risk, which has certainly become a more important cost because of the food recalls?

Answer: Andrea Carlson

In these national average prices, we just calculate the cost of the food. This is only the cost of the food. It does not take into account things like risk, like from a recall, it does not include food that is purchased but not eaten, any of those kinds of things. However, we can't do all of them. We highly recommend that individual researchers account for all of those things, as appropriate for the research project. In policy decisions that is also done.

Question: Kelly Maguire

How does ERS decide when it will do new cost and return estimates for different discretionary commodities in its portfolio?

Answer: Jeff Gillespie

It is on a four to eight-year cycle between those surveys. The way we determine that is how fast we are seeing technological change for a particular commodity. Some of the different commodities, you're seeing pretty rapid technological change. Also, if they are major commodities that there is a major interest in, corn, dairy, you want to do those on a regular basis, fairly often. It is primarily on the basis of how quickly technological changes are occurring. You want to make sure your cost and returns estimates are as up to date as possible using the most recent technology. We hold that technology constant between the survey years and just update with prices and yields and so forth. It is important that we update the technology on a fairly regular basis.

Question: Brandon Souza

You mentioned development of national average food price estimates. Is there any intent to tie consumer food price estimates to regional, state, or county scales?

Answer: Andrea Carlson

We don't do that. We are not going to do that on the national average prices. The reason is because, it relates back to the IRI and proprietary data. However, the reason it is called a tool, is that anybody can go into the scanner data and calculate your own prices and conduct a study that way. The other thing is, these prices are related to NHANES and in the public use file of NHANES you do not have any geographical information. A final issue with geographic things is the retail data. We are developing store weights, but it is not necessarily representative at even a county level. When you connect county data to it, you use it in a regression data analysis. It is not necessarily appropriate to use it as an outcome variable.

Breakout Session 3A: Data & Programs Assisting Our Nation's Producers During the 2021 Western Drought

Question: Benjamin Diamond

Will there be drought outlook forecasts on a weekly basis based on the latest forecasts?

Written Answer: Brad Pugh

Seasonal Drought Outlook is released third Thursday of each month and the Monthly Drought Outlook on last day of the month. Week-2 hazards are released Mon-Fri and plan is to include flash drought on it by next growing season.

Question: Benjamin Diamond

Could there be a USDM product that is agriculture specific and does not include the other areas (e.g. hydrological, civilian)?

Written Answer: Dave Simeral

In the past, the USDM map did include agricultural impacts on the map. However, that changed in the early 2000's. As the USDM has evolved, we feel the comprehensive approach of looking at both short and long-term drought indicators as the best way to depict drought nationally. Also, other factors play into the picture in terms of ag, such as, farming practices, crop type grown within a certain region/climate, etc. So, we have continued to focus on ag, but it mainly comes via our weekly narrative that accompanies the USDM map and through various impact tracking applications/products available through the National Drought Mitigation Center and the USDM NASS and other USDA centers.

Answer: Post-meeting follow-up from Mark Brusberg

The USDM wasn't initially intended to be ag-specific but as vegetation health is one of the most visible things affected by drought, and USDA uses the USDM as a trigger for several of its programs, it has become the go-to for assessing eligibility for relief. As many are aware, this doesn't always adequately reflect on the types of losses producers are facing. USDA is working with the National Drought Mitigation Center to determine if some of the existing products can be blended to come up with an index that would better describe impacts on agriculture on a regional basis. If successful, this could be another tool that the authors can rely on for their assessments.

Question: Benjamin Diamond

Will there be irrigation challenges for California producers in the future?

Answer: Post-meeting answer from Mark Brusberg

California's farmers are already facing irrigation challenges and I expect conditions will get worse over time. Using the Klamath Basin as an example, irrigators were told at the beginning

of the season they would not receive supplies sufficient to “farm as usual”. In August, the State Water Resources Control Board issued emergency curtailment orders that affected some water rights holders during mid-season. Some producers are able to drill deeper wells, but that is only a short-term solution as the water table will just continue to drop. The combination of less runoff due to warming and increased competition for water will mean that every sector will have to make some sacrifices.

Breakout Session 3B: AMS Market News

Question: Allie Wells

Should we expect any reporting delays from varying market news offices as there may be an increased employee turnover rate due to vaccination requirements for federal government employees?

Answer: Jim Bernau

I think it is a little bit early or premature to assume that our staff is going to leave. We work under the assumption that everyone is going to get vaccinated and we continue to release the information, as we have previously here. We think we have a great team that understands the needs and requirements of industry. We can certainly cover most of our work with our staff.

Answer: Barbara Meredith

In cotton and tobacco, we don't have any concerns about any turnover. We are a really small group that is fairly well cross trained. It is hard even to tell when we have two or three people out. We don't anticipate any delays.

Answer: Janet Linder

I would echo what Barbara said. We are a fairly small group operating out of Madison, Wisconsin. We do have cross training for our employees and I would really not expect any delays in our reporting.

Question: Matt Clark

Has the AMS ever done a survey to understand the efficiency gains (among users) from the development of MARS? Every report added to MARS saves me multiple work hours per month... any validation of the impact may help justify additional financial support for further development.

Answer: John Gallagher

I will take that one because we are about to launch the customer satisfaction survey here in Market News. I think it comes out on the 18th of October and those questions will be in the survey. We encourage everyone to participate so we do gather that data. Know that the customer satisfaction survey is coming out in probably, the next week or two.

Question: Joe Kleinman

When will the full history of data be added to MARS to replace the need to run custom reports for history prior to past few years?

Answer: Jason Karwal

We'll be working on that as we move forward. As we release some of the specialty crops, we're going to have those histories there when we do it, which is another reason we've waited to do those, also as we release the retail. As we move through the year next year, we will be bringing up all the past releases for a lot of the livestock data sets up to date and get that data moved over. That has proved to be a very time-consuming and difficult task in a lot of areas because we have a lot of data to go through and realign, when possible and bring that up to date. Our hope is that by the end of 2022 to have all that completed as we move ahead from here.

Question: Allie Wells

When will historical data from the older AMS data pulling site (under the "run a custom report" tab) be transferred to MARS? Several grain and feeder cattle reports in MARS have historical data that only goes back through 2020 and it's a pain to go back and forth between the old site and MARS and then to reformat the data.

Answer: Jason Karwal

Yes, we are well aware that would be very useful and more efficient than our current process. We are working to get that completed as soon as we can. It's going to be a few months for some of them, but they will start showing up. We will try to get notice out as we do that.

Question: Bill Lapp

I would like to use an API to download grain data on a regular basis. However, your data retrieval system makes me more confused than an orphan on Father's Day. Can you have an individual call me or email to help me create a means to download daily or weekly grain prices/basis on a regular basis?

Written Answer: Jessica Newsome

Send an email to John (JohnT.Gallagher@usda.gov) or Jason (Jason.Karwal@usda.gov) and they would be happy to help you.

Question: Jeff Koenig

May I have the link to the latest reports and corrections?

Written Answer: Jason Karwal

Web API Links for Monitoring Report Publishing:

Reports Published Today with Corrections Marked:
https://marsapi.ams.usda.gov//services/v1.1/public/listPublishedReports
Last Publish Date of a Report With Corrections Marked:
https://marsapi.ams.usda.gov//services/v1.1/public/listPublishedReports/all
All Corrections We Have to list:
https://marsapi.ams.usda.gov/services/v1.1/public/listCorrectedReports/all

Corrected Reports in the Last 3 Days:
https://marsapi.ams.usda.gov/services/v1.1/public/listCorrectedReports/3

Page with Voluntary Market Report API Instructions:
https://mymarketnews.ams.usda.gov/mymarketnews-api

Page with Mandatory Market Report API Instructions (in lower left-hand corner):
https://mpr.datamart.ams.usda.gov/

Question: Pascal Blais

Outside of checking the reports list, is there a way to know when a given report will become available on one of the APIs?

Answer: Jason Karwal

Most reports (for sure on the mandatory side) are on a very usual schedule. If you have specific reports you are interested in, we can give you what that schedule is. Most of the time, for some reports especially like the auction reports, we don't have a lot of control and those are released. So, the best thing we can say is to monitor the web API that I just showed for when it is published or look for that last published version. A lot of times we can just give you the day we expect it to go out, but some of those sales can go particularly long and it is difficult to pinpoint when that will be released. You can also sign up for notices to Cornell or through the My Market News site to get emailed once a report is released. That is another way to monitor specific reports, as to when they are released. Once they're out the data set should be available through the API.

Question: Lucas Rooney

Particularly for feeder cattle reports, but interested more broadly as well, is there a report release schedule that can be accessed with times, days of week on which reports are generally released?

Answer: Post-meeting answer from AMS

LPGMN does not have a report release schedule at this time since there are several hundred reports released each day. However, we are looking into what level of effort would be needed to create this. Any type of release schedule would only apply to reports that are issued at the same time every day. Livestock auction reports are dependent upon how long the auction lasts. Typically, reporters make every effort to publish the report within an hour after the conclusion of the sale.

Question: Lisa Jones

Is there a process for 'recruiting' sale barns or other data sources to voluntarily give the AMS data?

Answer: Russ Travelute

As far as sale barns, we rely on the help of our state partners. We have cooperative agreements with 29 states. It really is a collaborative effort to work with them to find out where politically, as well as volume is within their state, what sale barns would be covered, and it ultimately comes down to State funding.

Comment: Jason Karwal

Send any questions to mymarketnews@usda.gov.

API Links:

Page with Voluntary Market Report API Instructions:
https://mymarketnews.ams.usda.gov/mymarketnews-api

Page with Mandatory Market Report API Instructions (in lower left-hand corner):
https://mpr.datamart.ams.usda.gov/

Breakout Session 4A: NASS Modernization

Question: Cole Henderson

On one of the slides you showed mentioned 578/Common Land Unit data. Are the CLU data available to the public or are they intended to be going forward?

Answer: Joe Parsons

Strictly speaking, the CLU data are not public as a result of the 2008 Farm Bill, and I think that was reiterated in subsequent Farm Bills. That being said, NASS has access to those data as a statistical agency and we make use of those data. I would say separately, and I don't believe this product is visible yet, but there has been a collaborative effort between NASS, ERS and some other folks to produce, and I will get the name wrong, but it is a boundary layer that is predominantly based on our Cropland Data Layer. It is not a CLU layer but it shows sort of fields or what might be thought of as field level boundaries. That product will be available to researchers, probably, in our geospatial pages. Look out for that.

Answer: Dan Kerestes

That is going to be called Crop Sequencing Boundaries. We will be coming out with those. Those will be made public but right now we are still in the final stages of going through some agreements with the three agencies that are participating, so please hang tight on that before you start searching for it.

Question: Allie Wells

Will QuickStats be retired once NASS undergoes these changes?

Answer: Bryan Combs

Yes, quick stats will be retired, at some point in the future. We anticipate that we will be doing some parallel between QuickStats and the new system while we work through making sure everything is up and running and we get all commodities moved into that. I will also mention that we recognize that a lot of users currently utilize our API and we think we can have some level of support for the current API as we build the new API structure. So that will continue at least for some period of time.

Comment: Marie Christiano

Glad to see your emphasis on searching.

Answer: Jackie Ross

We are focusing on the experience that our data users will receive as they work with this new platform, so our hope is to make our data more accessible and user-friendly.

Question: Bill Lapp

Will all my APIs that I have established need to be rebuilt?

Answer: Eric Norris

The goal is to provide backwards compatibility for those and, at the very least, a migration path for anyone using the current API endpoints to utilize the future ones. We are not 100% settled on exactly what that looks like just yet, but there will be a path forward for those who are using our APIs. We know we do have a lot of very heavy API users and we are definitely taking that into consideration. I want to take this opportunity to solicit feedback on APIs as they currently stand and API endpoints you might like to see in the future that might help you. That is something we would definitely appreciate and take into consideration as we move forward with this, as well.

Question: Augustine Akuoko-Asibey

Are you planning to use infographics to showcase the data?

Answer: Bryan Combs

Yes, we are anticipating we will have some visualizations, infographics, and other things that will appear. One of the other efforts I didn't mention today that is just getting underway is a website modernization effort, that is a little bit behind us. We anticipate that we will be heavily integrated with that and really be able to showcase a lot of our data through visualizations, infographics, and other things. So, we are looking forward to those.

Question: Bill McCary

In the October Crop Production report NASS did not adjust corn, sorghum or soybean area, as it has in the past, was NASS not able to review the FSA data since its release has been delayed or was it reviewed (with the same rigor as past Octobers) and the review did not suggest any meaningful adjustments at this time?

Follow- up question/suggestion - will NASS keep its previous schedule of adjusting rice cotton area in Sept crop production report and corn, sorghum and soy in the October Crop production report? Suggestion is to make the schedule of area changes clear and consistent.

Answer: Joe Parsons

As we said in our gray box note on the front of the release, we did not adjust corn, sorghum, or soybean areas because we took a change, the data were quite complete and we made any changes that we felt we needed to in September, and didn't see evidence that we needed to make a change in October. We have, essentially, a live connection with FSA, and so we have that data available to us. The issue that Mike Walter relayed in the general session was not related to any of those crops that delayed their release of the 578 data.

For the follow-up question, will NASS keep its previous schedule of adjusting rice, cotton area in September, I would expect so. Then corn and sorghum and soy in the October Crop Production report, the question about whether we will go back to October or not, really depends on how complete the data are from FSA. So, I think as we relayed in our note in the gray box of that release it's always an evaluation, the window is open for us to take that. If we think the data are complete enough and we can make any needed adjustments earlier, we should bring that information to the public. And, yes, we will try to keep things clear. In fact, we did an ASB Notice about the first of September so folks knew, and there was public notice many days in advance, that we would be considering acreage changes.

Answer: Dan Kerestes

We are pretty transparent in what we are doing. The option to adjust those commodities is there every September and every October. It is whether we utilize it. But the revision or adjustment option is always there, and so, I think the main thing is we are trying to be more transparent in the last year or so by attaching these gray boxes on the front of every release, where even sometimes when we are not making changes we put a gray box on their letting people know that we are not making changes. So, NASS is doing everything it can, but of course, we are always open to suggestions from the data users. If all of you out there have a better way for us to make these things known to you, please feel free to send us an email, give me or Joe a call. I think either one of us are willing to talk to any of you. So just keep that in mind. NASS is always trying to do the best it can in customer service. So, please stay on us.

Question: Natasha Sesl

When would approximately the transition from QuickStats will take place? Will the bulk data files be available after the transition?

Answer: Eric Norris

The way I envision the transition happening from QuickStats, is not until we have the complete data set available in DRUID, would we really sunset QuickStats. This is my opinion and perspective, but it would be very disruptive to have a split data set, partially in QuickStats and partially in DRUID. So, that is something we are being mindful of. When exactly that would happen, that is TBD. This is pretty long project, as Bryan showed in the slides. The actual date, we can't put a pin in it just yet, but at least that is my philosophy that I wouldn't want to see QuickStats decommissioned until we were ready to fully transition to the future product.

As far as the bulk files being available, again, I sound like a broken record, but that's To Be Determined because we need to find out if we can service the data user requests through the APIs. Right now QuickStats has a 50,000 row limit and that led to us making all of the data available in one bulk zone. We are not opposed to it, certainly. But we will have to see, once we get our API endpoints up and running, if we can service all of the data requests that we have. If not, then we're going to make sure that you can get the data you need, and how you need it.

Answer: King Whetstone

That transition from QuickStats, once you get into what we are trying to do, you will notice the magnitude of this project. So, patience will be the key. Obviously, we are trying to really simplify or enhance that customer experience. Sometimes that can be very difficult and painstaking. So, with the transition, we ask that you be patient. On the chart that Bryan showed, as far as the dates that we are trying to implement most of this, it'll be a couple years. So just be patient and we will still be able to provide the data that you need, in the format that you want. But that transition will take some time.

Question: Jerry Gidel

This is big project. Will the basic monthly NASS production data be available as normal without a landing pad?

Answer: Bryan Combs

Yes, it will. We will continue to release data in the current form and fashion until we have a smooth process for releasing the data through our new dissemination system. As I mentioned, our pilot with this project was dairy related data, so we took a somewhat broad section of various types of data to build the infrastructure where all this lives and all the behind the scenes that you don't really get to see. But it is allowing us to create these new landing pages, the enhancements to the API, etc. in our data structure. So, our current plan, as you notice from the data sets we used, milk production is one that is completely contained within the scope of our project, is that somewhere in early 2022 we will be able to start releasing the milk production data through this new process. We hope that somewhere hopefully early in the year we can start having that running parallel. And then move into fully releasing milk production data through this. We obviously will have user testing in there, so we will likely be reaching out to some of you and your colleagues to get feedback on how the system looks, how things are functioning, before we fully make that transition. But there will be plenty of notice and plenty of time so that our users will understand how to get the data when it is available. Our hope is that this will be a much more user-friendly process, for you to come in and get that milk production data, when we go that route. And probably you will be wanting more faster than we can churn it out, so please be patient as we work through the large amount of data that we have to convert and work through.

Answer: Eric Norris

To expand on that last part, as normal with other landing pads, we do envision an ad hoc querying interface, as well. Even if we don't specifically highlight it somewhere else, that we still envision you being able to access all of the data through the web interface, just as you do with QuickStats now.

Question: Karen Braun

Will all the data currently available in QuickStats - at minimum - be available in the new system? Will we lose anything? Suggestion would be to give users a very loud heads up whenever this transition happens.

Answer: Jackie Ross

Yes, we will submit notices in advance, as well as doing data user testing along the way. As we implement different phases of this project, we will reach out to some of our data users and get them to test it and see if it is user-friendly. The usability of this new system is what's key to us and to ensure your experience. Hopefully we will be able to give you additional information, more information. One of the things that QuickStats does not have right now is some of that data attached to the data that identifies where that data comes from. Hopefully with this new platform you will receive additional data and additional support to identify a what type of data you're receiving.

Answer: Eric Norris

To underscore that, will all the data currently available in QuickStats be available, and yes, the answer is yes, through that ad hoc interface as well as through the API. They'll be hitting the same back-end data set.

Question: Joe Kleinman

Will there be new "tidy data" csv files to replace/supplement the current txt and xml report formats?

Answer: Bryan Combs

Yes, you will be able to download the data currently contained in reports in a multitude of formats, that could be CSV, txt. There will be plenty of options there.

Answer: Eric Norris

The data from QuickStats will be available in the new system, as well as providing more contextual information about it. So QuickStats is, right now, pure statistics essentially. We are working hard to try to bring in some of the more contextual data that NASS uses to tell the story. So that will be available through the web-interfaced API, but also some of it will come out through these tidy data CSVs and you'll see some of that in there as well.

Question: Bill McCary

Follow-up to acreage adjustments: to understand, the data that was reviewed in October, but the review did not suggest a change?

Answer: Joe Parsons

Exactly.

Question: Eric Coronel

Can you repeat the information about field boundaries that will be available?

Answer: Dan Kerestes

I hesitate to say more at this time, as we try to finalize our agreement with the three cooperating USDA agencies. Basically, we are working on these Crop Sequencing Boundaries which will provide field level information. However, at this point in time, I think to state more on it, would be just to lead everyone astray, because the details aren't out yet. I think we need to be patient with that. We will have something coming out in the near future. Getting to all data users, at the same time and, as usual with NASS, keeping everything fair among everyone. So, thank you.

Question:

How are we included on the notification list for the release of dairy in the new system?

Answer: Bryan Combs

We haven't really worked out our full plan of communication for when that system becomes available yet, but we will be working on that with our public affairs team in the coming months. Likely, if you subscribe to NASS news releases or keep watch on our website, it will be highlighted pretty heavily there. We may approach some other avenues to get that out. I know our public affairs team has been using social media a lot more these days. They will probably advertise through that. So, definitely keep a watch on our website and the other emails and other things you receive from us and you will see some updates on that in the near future.

Question:

Do you anticipate the fundamental modifications in the data features fields?

Answer: Bryan Combs

As far as the data we are publishing, we don't anticipate many changes in that. Largely what we are doing is decoupling some of the metadata, or descriptive data, that is currently attached to the data within our QuickStats environment and moving it to a data dictionary to cleanup the format. So the tables are little tidier and makes it a little easier to consume without having to do a lot of manipulation that we know users currently have to do as they're pulling data from QuickStats.

Answer: Eric Norris

The data features, you could see that as the API endpoint and we do anticipate changes in the API endpoints. But, at the end of the day, we are still going to be producing and disseminating the same statistics and the same basis of everything. You might just consume it in a different way, or query it in a little different way, but from the most basic view, it will be the same data and same statistics.

Breakout Session 4B: Building Country Capacity with the Global Agricultural & Disaster Assessment System

Question: Benjamin Diamond

Is the tabular data downloadable in a csv format?

Answer: Lisa Colson

Yes, so once you pull out a chart. Using that analytics tool that I demonstrated, then click on the little download option, and that will allow you to download it as a CSV. So, therefore you will get tabular data for any of the data variables that you can chart.

Answer: Robert Tetrault

I think that would be the SPI drought variables, the precipitation variables, is NDVI included as well?

Answer: Lisa Colson

NDVI is included. We have another application we call GLAM (or NASA/GIMMS) that we work with NASA to provide. So this Global Agricultural Monitoring System, the GLAM application, is one way that you can download a greater variety of NDVI data. I recommend getting the NDVI data from there, honestly.

Question: Robert Tetrault

Did you mention that this is open to everyone, it doesn't require a login or password?

Answer: Lisa Colson

To have a website that provides so many different datasets, you would think that maybe we would have to hide it behind some sort of – no, it is easy to use, you can just open up GADAS and it is free and public, there is no need for you to login or maintain a username and password. We make it easier for you that way.

Answer: Robert Tetrault

Another comment is that we are always trying to make sure that this is useful to our ag community. So if you do have comments or suggestions that you do not want to post now but would like to contact us to make other suggestions for what you would like to see on GADAS please do not hesitate. We will put them in the queue for improving the site.

Answer: Lisa Colson

We welcome feedback and input because geospatial data does change over time. Sometimes we need to swap out layers to ensure that we are providing the most relevant and up-to-date information. That gives us some opportunity to incorporate your needs as well. Please let us know what feedback you have (GMA.GADAS@usda.gov).

Question: Robert Tetrault

How useful is GADAS for monitoring conditions in the United States?

Answer: Lisa Colson

It is useful for monitoring conditions in the United States especially with those large area events. When it comes to monitoring hurricanes, we do have MODIS multispectral imagery in GADAS, as there are very few other sources of information for looking at those hurricanes in real time as they're approaching land. It is possible to do that. The disaster data layers come from the Pacific Disaster Center (PDC) providing global alerts and these include the United States. Then, you have access to more information on any of those disaster alerts by clicking on them to find additional reports that a wide variety of agencies have contributed. It is very useful information. However, our geospatial data sets are global data sets and there are additional bodies of information for the United States that go way beyond what we have for the international community. I do think GADAS is a good place to start but not necessarily covering everything about the U.S. possible. We did not include the full body of the NASS CDL in here. Again because we wanted to have comparable data sets throughout the world. The Cropland Data Layer provides much more detailed information on crops than virtually any other data layer in the world. Because it cannot compare to what is provided around the world. You do have additional U.S. data outside of GADAS.

Question: Robert Tetrault

So, the recommendation would be able to use GADAS as well as something like CropScape to access the NASS CDL?

Answer: Lisa Colson

Yes, CropScape is a really cool tool. CropScape is much more detailed for the United States.

Question: From Open Forum

For the FAS IPAD Crop Explorer, there are maps of Weather, Drought and Soil moisture. Will the data behind the maps be made available in a tabular format?

Written Answer: Robert Tetrault

The answer is yes, through GADAS as Lisa just demonstrated.

Referenced Websites:

USDA FAS IPAD website https://ipad.fas.usda.gov/Default.aspx

GADAS website https://geo.fas.usda.gov/GADAS/index.html

Presentation Slides

Following this page are the slides presented during the Data Users' Meeting.

- Agency Updates
- Breakout Session 1A: AMS AgTransport Platform
- Breakout Session 2A: NASS Milk Production Program
- Breakout Session 2B: Showcasing ERS Data and New Initiatives
- Open Forum
- Breakout Session 3A: Data and Programs Assisting Our Nation's Producers During the 2021 Western Drought
- Breakout Session 4A: NASS Modernization
- Breakout Session 4B: Building Country Capacity with the Global Agricultural & Disaster Assessment System

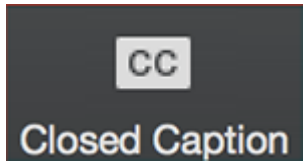
2021
USDA Fall Data Users' Meeting

October 13 & 14, 2021

Joe Parsons
Chair, Agricultural Statistics Board

Housekeeping

- Closed captioning available through the Closed Caption button in Zoom.



- All sessions will be recorded and available on our website: https://www.nass.usda.gov/Education_and_Outreach/Meeting/index.php
- Today's sessions will be available for viewing tomorrow morning.
- Slides and transcript of Q&A with any additional questions we don't have time to answer will be available on our website after the meeting.

Questions/Issues

Q&A – Questions will be addressed during tomorrow's Open Forum

Chat – Technical Issues

Email - Marisa.Reuber@usda.gov or Vincent.Davis@usda.gov

Day 1 Agenda

All Times Eastern

12:00pm	Welcome and Overview
12:10pm	Agency Updates
12:50pm	Break
1:00pm	Breakout Session #1
1:55pm	Break
2:05pm	Breakout Session #2
3:00pm	End

Breakout Sessions

All times Eastern	**Session A**	**Session B**
Day 1 – October 13		
1:00 p.m.	AgTransport Platform *Agricultural Marketing Service*	Foreign Production, Trade, and Import/Export Data *World Agricultural Outlook Board, Foreign Agricultural Service, and U.S. Census Bureau*
2:05 p.m.	Milk Production Program *National Agricultural Statistics Service*	Showcasing ERS Data and New Initiatives *Economic Research Service*
Day 2 – October 14		
1:30 p.m.	Data and Programs Assisting Our Nation's Producers During the 2021 Western Drought *World Agricultural Outlook Board*	Market News *Agricultural Marketing Service*
2:20 p.m.	NASS Modernization *National Agricultural Statistics Service*	Building Country Capacity with the Global Agricultural & Disaster Assessment System *Foreign Agricultural Service*

Day 2 Agenda

All Times Eastern

12:00pm	Open Forum
1:20pm	Break
1:30pm	Breakout Session #3
2:10pm	Break
2:20pm	Breakout Session #4
3:00pm	End

Breakout Sessions

All times Eastern	**Session A**	**Session B**
Day 1 – October 13		
1:00 p.m.	AgTransport Platform *Agricultural Marketing Service*	Foreign Production, Trade, and Import/Export Data *World Agricultural Outlook Board, Foreign Agricultural Service, and U.S. Census Bureau*
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2:20 p.m.	NASS Modernization *National Agricultural Statistics Service*	Building Country Capacity with the Global Agricultural & Disaster Assessment System *Foreign Agricultural Service*

Panelists

- Mike Lynch, Agricultural Marketing Service
- Spiro Stefanou, Economic Research Service
- Patrick Packnett, Foreign Agricultural Service
- Mike Walter, Farm Service Agency
- Mark Jekanowski, World Agricultural Outlook Board
- Joseph DeCampo, U.S. Census Bureau
- Dan Kerestes, National Agricultural Statistics Service

Agricultural Marketing Service

Mike Lynch

Director

Livestock, Poultry, and Grain Market News

Economic Research Service

Spiro Stefanou

Administrator

Foreign Agricultural Service

Patrick Packnett
Deputy Administrator
Global Market Analysis

Farm Service Agency

Mike Walter
Data Analytics Officer

World Agricultural Outlook Board

Mark Jekanowski

Chairman

United States Census Bureau

Joseph DeCampo
Section Chief
International Trade Indicator Micro Analysis Branch

2021 Fall Data Users Meeting

Virtual – October 13 and 14

Dan Kerestes, Director
Statistics Division

What's New - Crops

Methodology and Quality Measures reports	• Grain Stocks - April 2021 • Small Grains Summary - September 2021
Updated acreage estimates for corn, sorghum, soybeans, and sugarbeets	• *Crop Production* report - September 2021
Hemp	• February 2022

What's New - Economics, Environmental and Demographics

Chemical Usage	• Field Crops - May 2021 • Vegetables - July 2021
Farm Computer Usage and Ownership	• August 2021
Cash Rents	• County level – August 2021

What's New - Economics, Environmental and Demographics

Data Visualization	• US Congressional Districts https://www.nass.usda.gov/Data_Visualization/Census/index.php
Farm Labor	• November 2021
Conservation Practices Adoption Motivation Survey	• Spring 2022 • Two-year cooperative effort with NRCS

What's New - Livestock

Improvements….. Methodology and Quality Measures reports	• Catfish, Honey, Mink, Sheep and Goats, Trout - 2021
New….. Methodology and Quality Measures reports	• Chicken and Eggs, Honey Bee Colonies
Stat Chat	• Hogs & Pigs, Cattle

What's New - Census of Agriculture

Building the Census Mail List	• 2021
Testing and Preparation	• 2022

What's New - Modernization

Integrated Modeling and Geospatial Estimation System
• Estimates using more than survey data, possibly timelier
Respondent Portal
• Building a better way to collect respondent data
New Dissemination System
• Improve the accessing of data faster, friendlier and easier
Grain Stocks
Conducted a review of program. Finalizing recommendations for possible action in upcoming year

All reports available at:	• www.nass.usda.gov
Questions via phone	• (202) 720 - 3896 • (800) 727 - 9540
Questions via internet	• nass@usda.gov

Day 1 Breakout Sessions

All times Eastern	**Session A**	**Session B**
1:00 p.m.	AgTransport Platform *Agricultural Marketing Service*	Foreign Production, Trade, and Import/Export Data *World Agricultural Outlook Board, Foreign Agricultural Service, and U.S. Census Bureau*
1:55 p.m.	**10 Minute Break**	
2:05 p.m.	Milk Production Program *National Agricultural Statistics Service*	Showcasing ERS Data and New Initiatives *Economic Research Service*

Links to join can be found in

- Your registration or reminder email
- Emailed Booklet
- Chat window

Agricultural Marketing Service

Open Data

in the Transportation and Marketing Program

Agricultural Marketing Service

Some of Our Customers

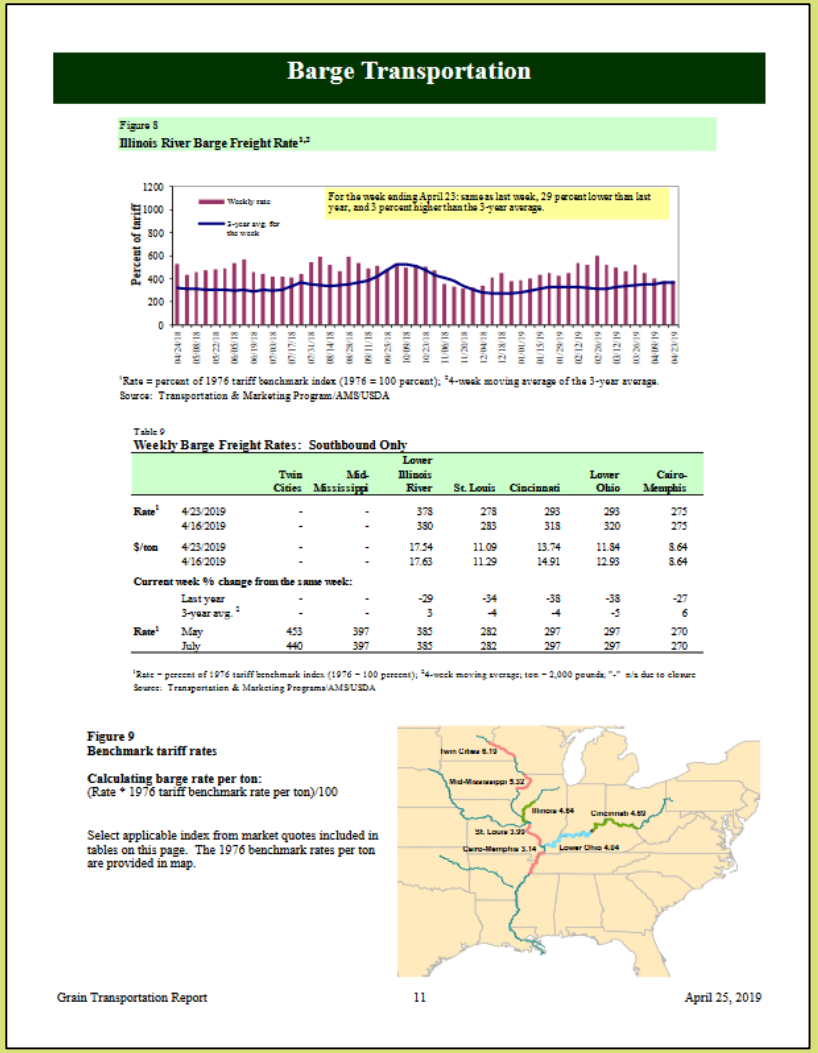
Farmers

Commodity Analysts

Elevator Operators

CURRENT CUSTOMER EXPERIENCE

Our Existing Reports



Barge Transportation

Figure 8
Illinois River Barge Freight Rate[1,2]

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average of the 3-year average.
Source: Transportation & Marketing Program/AMS/USDA

Table 9
Weekly Barge Freight Rates: Southbound Only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	4/23/2019	-	-	378	278	293	293	275
	4/16/2019	-	-	380	283	318	320	275
$/ton	4/23/2019	-	-	17.54	11.09	13.74	11.84	8.64
	4/16/2019	-	-	17.63	11.29	14.91	12.93	8.64
Current week % change from the same week:								
	Last year	-	-	-29	-34	-38	-38	-27
	3-year avg. [2]	-	-	3	-4	-4	-5	6
Rate[1]	May	453	397	385	282	297	297	270
	July	440	397	385	282	297	297	270

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; "-" = n/a due to closure
Source: Transportation & Marketing Programs/AMS/USDA

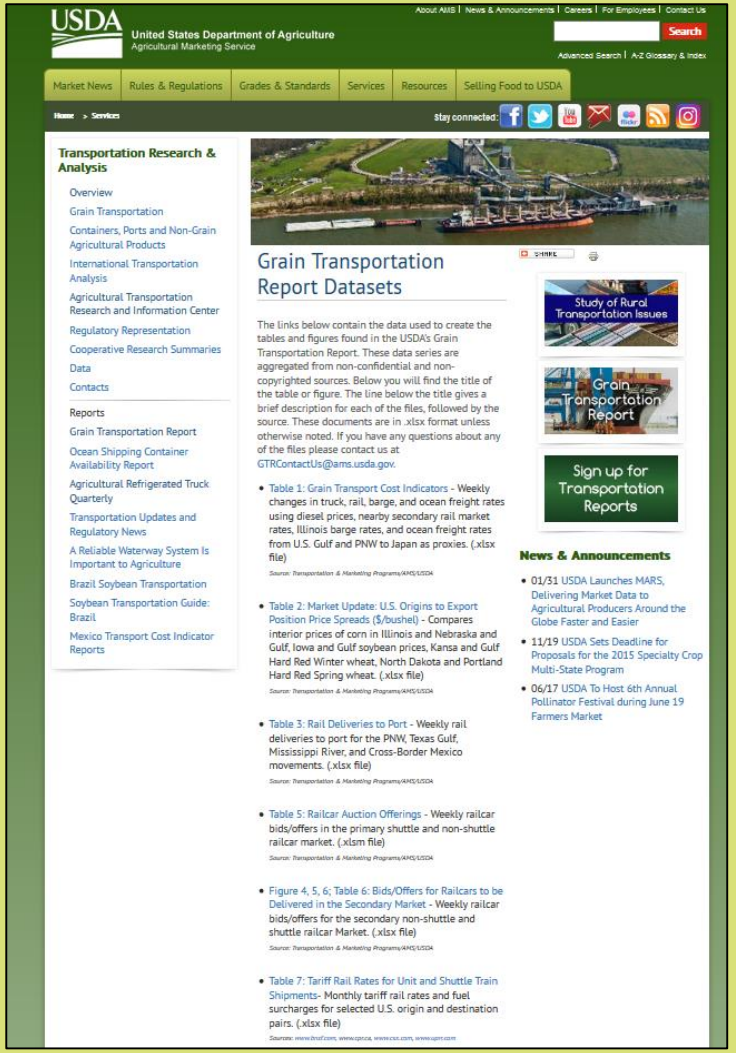
Figure 9
Benchmark tariff rates

Calculating barge rate per ton:
(Rate * 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map.

Static, not interactive

Downloading Our Data



Hard to find and use

Agricultural Marketing Service

Open Data

Usable

Sharable

Discoverable

Accessible

NASS Milk Production Programs

Fall 2021 Data Users Meeting

Mark Apodaca
Travis Averill

United States Department of Agriculture
National Agricultural Statistics Service

October 13, 2021

National Agriculture Statistics Service (NASS)

The NASS mission is to provide timely, accurate, and useful statistics in service to U. S. agriculture.

NASS Ongoing Agricultural Statistics Program

Crops

grains
hay
oilseeds
cotton
tobacco
potatoes
sugar
other field crops
citrus fruit
non-citrus fruit
nuts
vegetables
Floriculture
Organics

crop progress

acreage
- prospective plantings
- planted
- harvested

yield & production
- forecasts
- final
- by utilization

stocks
disposition

processing

prices received by farmers

agricultural chemical use

Livestock

cattle
hogs
sheep
goats
equine
poultry
milk & dairy products
aquaculture
bees & honey
Mink
Organics

inventory
- total
- by class
- births
- deaths
- predator losses

marketings
slaughter

production/disposition
- meat
- other products
(milk, dairy products, wool, mohair, eggs, honey, etc.)

prices received by farmers
inventory/production values

Other

number of farms
land in farms

land values
cash rents

agricultural labor
- number of workers
- hours worked
- wages paid

cold storage
- holdings
- capacity

cash receipts

production expenditures

Agricultural Industries

weekly ~ monthly ~ quarterly ~ annual

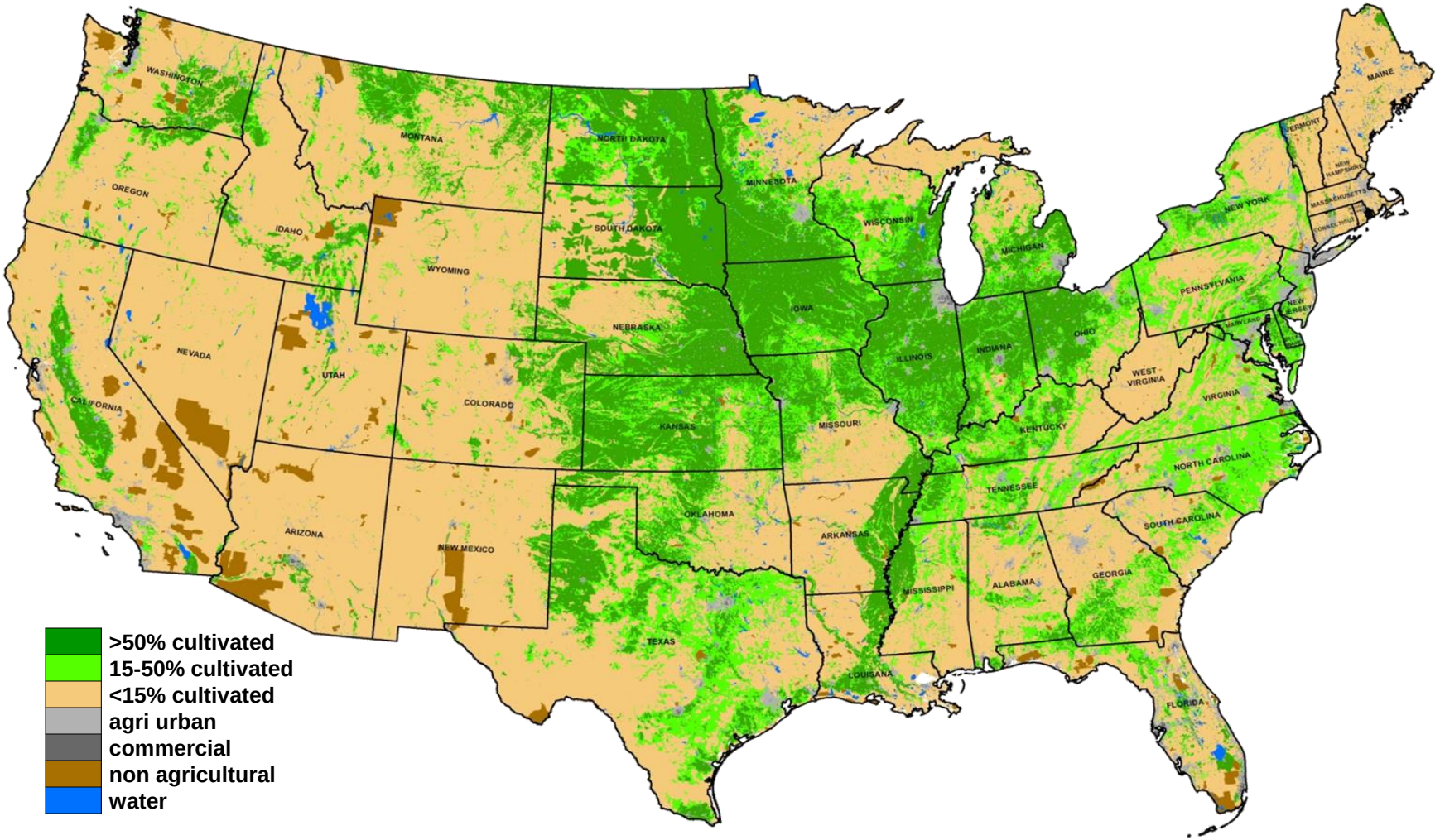
NASS Sampling Frames

- Serves as the foundation for the annual NASS Survey Program and the Census of Agriculture
- The success of NASS estimation programs depends on the quality of the Sampling Frame(s)
- A listing of elements of the population that allow one to select a sample with known probabilities.
- Effective if complete and unique
- Dual Frame Approach for Most National Surveys

Sampling Frames

- Lists
  - NASS maintains a list of names
    - Contact Information: Addresses, phone numbers, email
    - Acreages and livestock inventories
  - Extensive effort to have a complete list with little to no duplication
  - The list is maintained by the Frames Maintenance Group in St Louis
- Area
  - All land in the US – Divided into segments
  - Complete
  - Independent of the List Frame

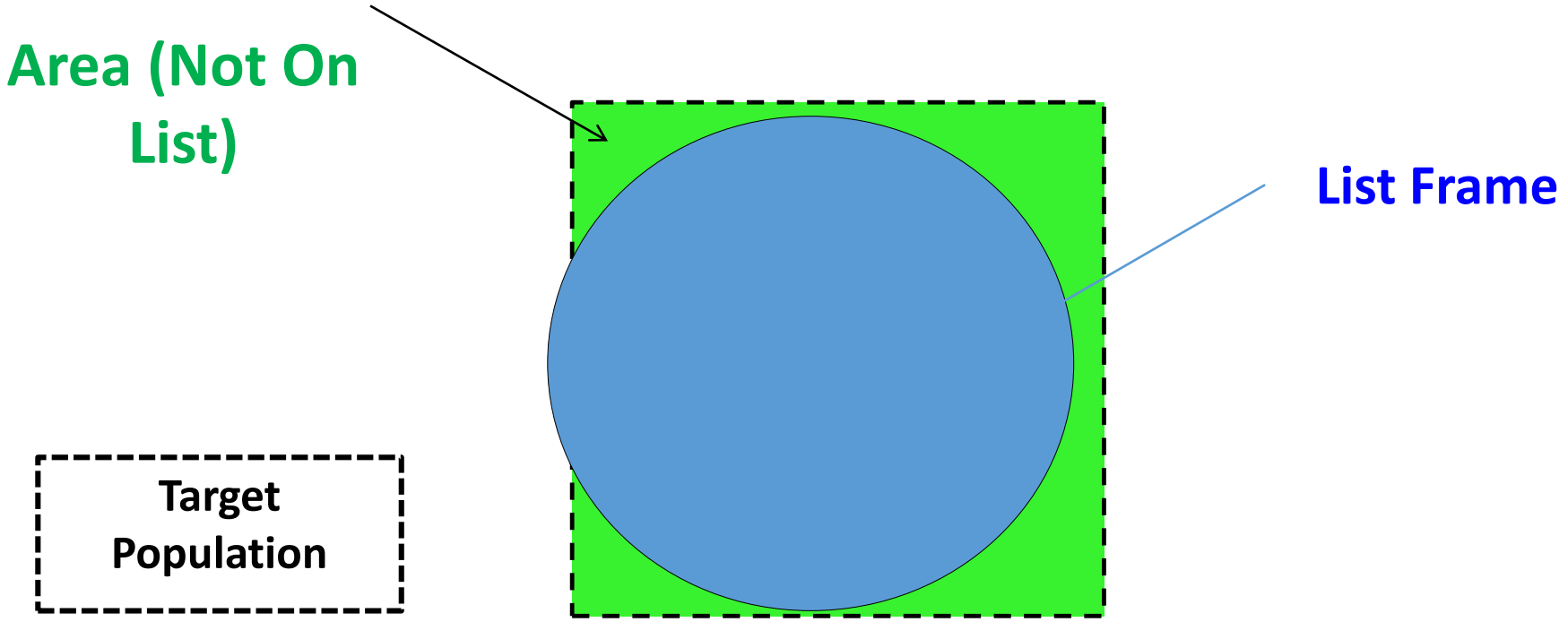
NASS Area Frame Land Use Stratification



United States Department of Agriculture
National Agricultural Statistics Service

October 13, 2021

Multiple Frame / Dual Frame



Sample Design

- List sample
  - Stratified by Inventory
  - Random sample within each strata
  - Replicates within sample used to measure change from survey to survey
  - Sample size
    - Targeted levels of precision at the US and State Level
    - Sufficient # of reports to set alfalfa and corn silage price estimates

- Area sample (January and July Cattle Surveys)
  - Measures undercoverage of list frame
  - Farms not on the list frame (NOL) identified in June Area survey
  - All data from NOL records used in July Cattle Survey
  - NOL sample drawn for January Cattle Survey
  - No NOL component in the Milk Production Surveys

List Stratification and Sample Sizes
Quarterly Milk Production Survey

Strata	Description (Milk Cows)	Population	Sample Size	Sample Weight
1	1- 29	1,717	116	14.8
2	30 - 49	1,720	107	16.1
3	50 - 99	3,135	276	11.4
4	100 - 199	1,321	288	4.6
5	200 - 499	752	383	2.0
6	500 - 999	285	162	1.8
7	1,000 - 1,999	134	77	1.7
8	2,000 +	69	69	1.0
		9,133	1,478	

Cattle Inventory and Milk Production Sample Sizes

Cattle and Milk Production Surveys	Sample Size
Jan – List Sample	~31,600
Area NOL Sample	~3,300
Total	~35,000
July – List Sample	~16,000
Area NOL Component (+ June)	~3,000
Total	~ 19,200
Quarterly Milk Surveys (List Only)	~12,000

Edit and Analysis

- Data collection
  - Mail, web, but mostly computer assisted telephone interview (CATI)
- Editing
  - All data items within record consistent with previous reports and reasonable
- Analysis
  - Interactive tools with graphs, listings, and charts to compare against previous data and other complete reports
  - Identify outliers and assess impact

Nonresponse Adjustment

- Response to the Milk Production Survey is voluntary
- Nonrespondents are accounted for by adjusting the weights of the respondents.
- The adjustment occurs by stratum as the bounded strata represent homogeneous groupings of similar sized milk cow farms
- Very large and unique operations must be manually estimated by analysts in RFO.

Estimators

- Direct expansions
  - Weighted total of reported and manually estimated reports using nonresponse adjusted sampling weights
  - e.g., total milk cows, total milk production
- Ratios
  - Ratio of two direct expansions
  - All records must have complete data for each item
  - e.g., milk per cow, current to previous inventory levels

Sources of Error (Uncertainty)

- Sampling error
  - Created by taking a sample rather than a census
  - Measured with coefficient of variation (CV)
  - Evaluated against target CV's each year
- Nonsampling error
  - Reporting, recording, editing, nonresponse error, etc.
  - Minimized by:
    - Questionnaire testing
    - Interviewer training
    - Validation of processing systems
    - Detailed editing tools
    - Extensive data analysis

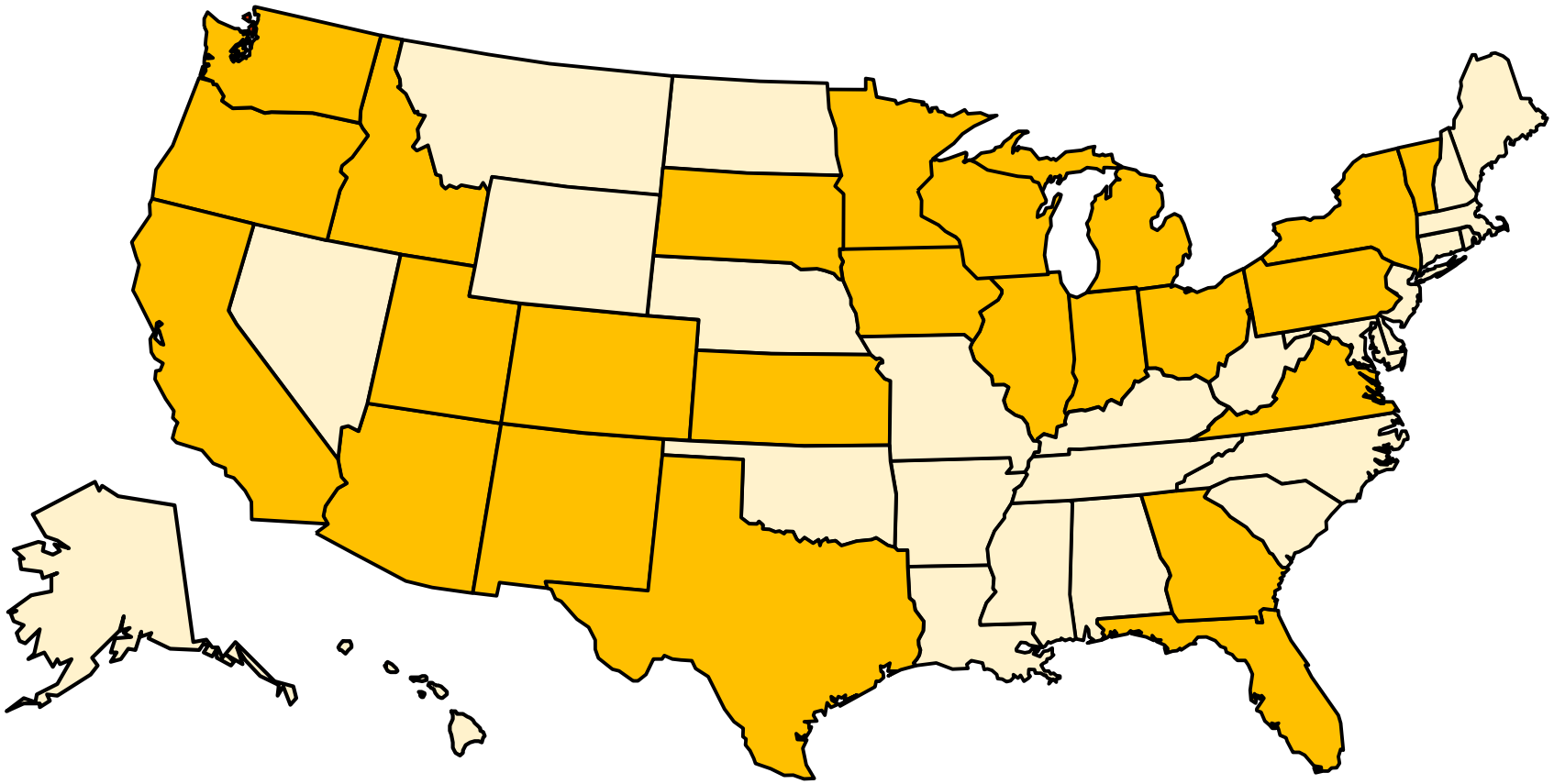
Methodology and Quality Measures Report

- Survey methodology discussion
- Sample size
  - Excluding out of business and no item of interest reports
- Survey Response rate
  - Proportion of above sample size that had a complete report (OMB definition)
- Weighted item response rate
  - Proportion of the survey estimate that is reported and expanded by original sampling weight
- Coefficient of Variation (CV)
  - Ratio of standard error to survey estimate expressed as %

NASS Milk Production Program

1. Monthly Milk Production
2. Licensed Dairy Herds
3. Monthly All Milk Price
4. Production, Disposition, and Income

NASS Milk Production Program



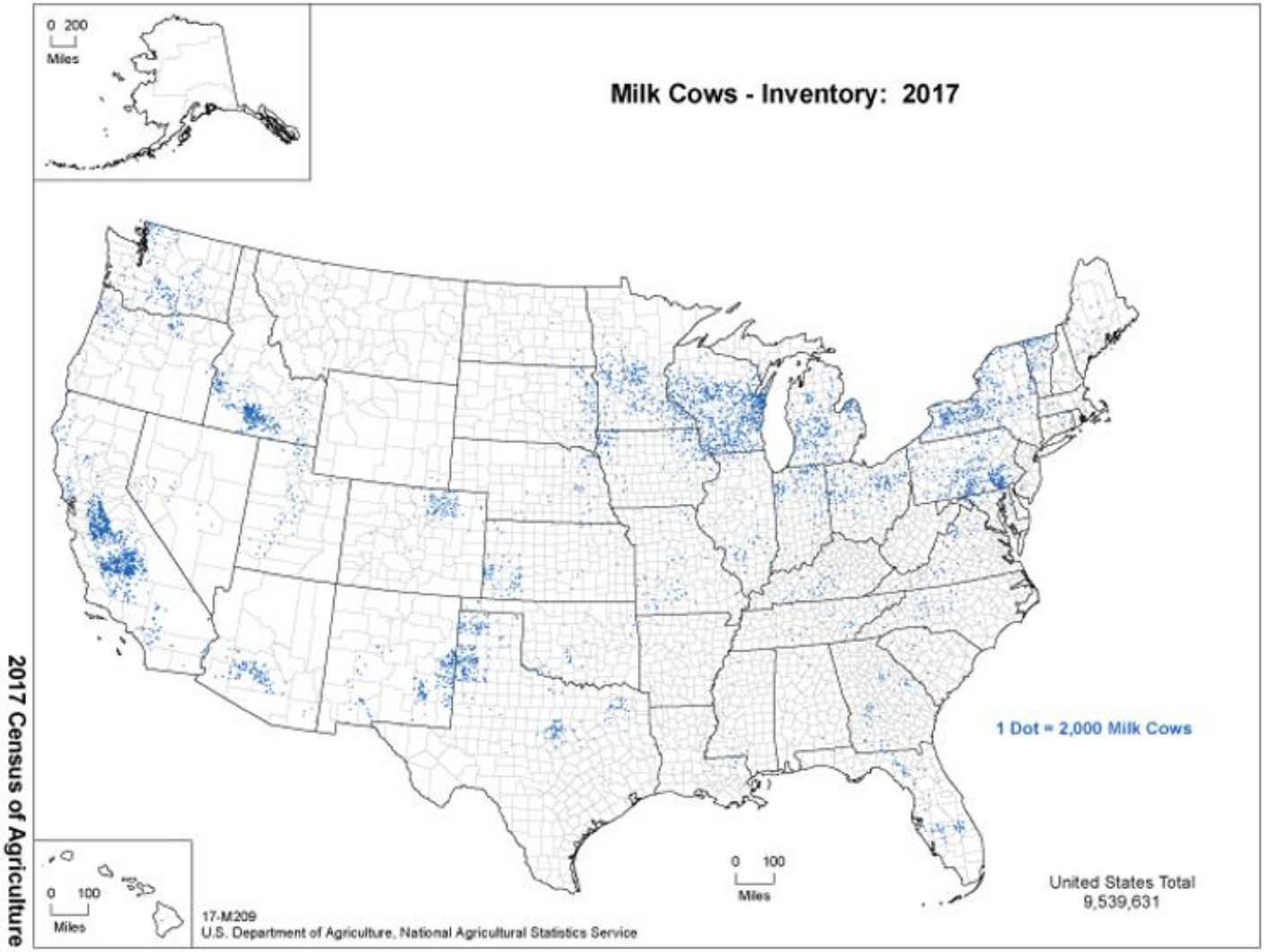
9.50 Million Head on July 1, 2021

223 Billion pounds of milk produced in 2020

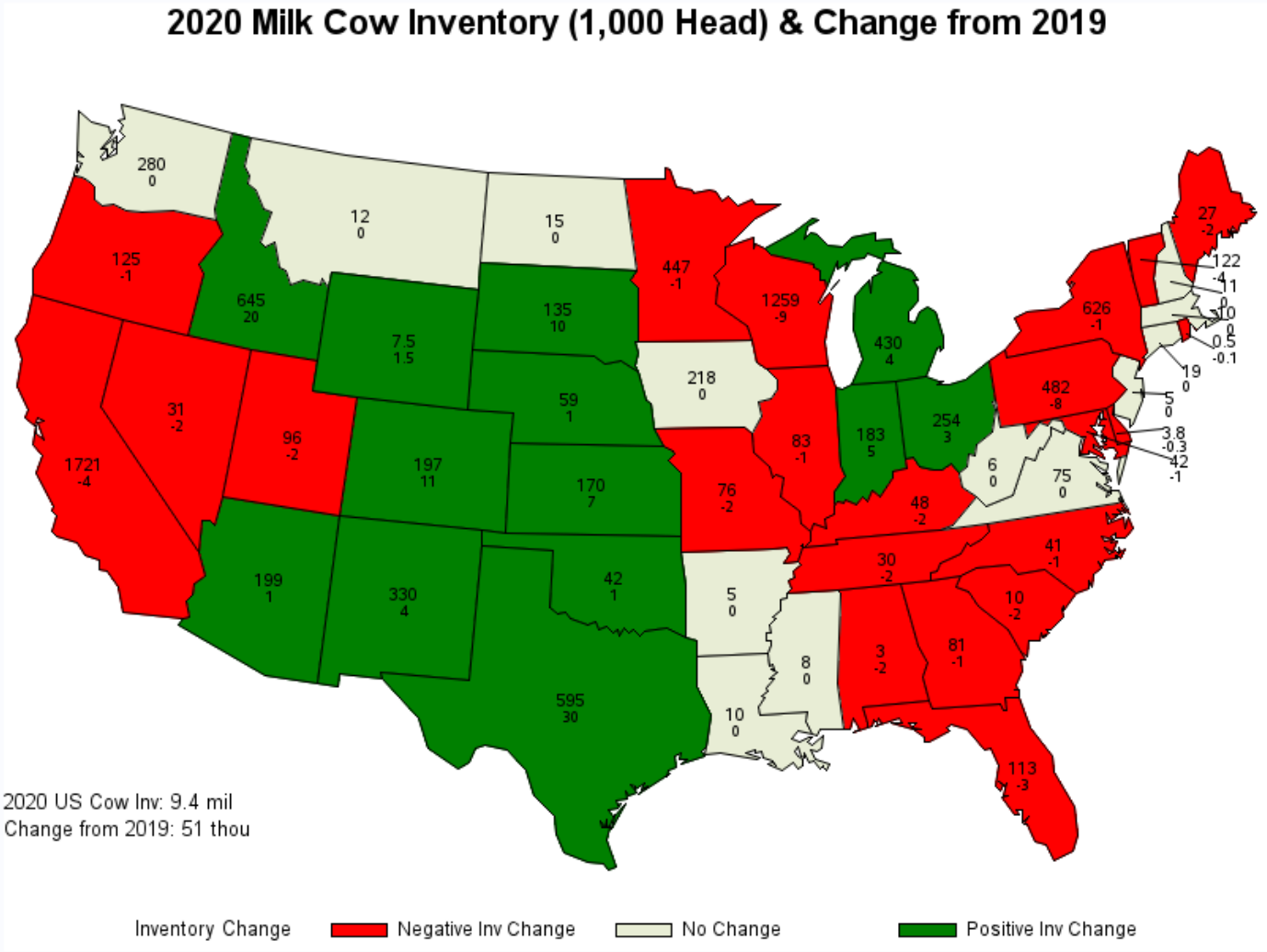
Quarterly Survey/Monthly Estimates Published

Quarterly Survey/Quarterly Estimates Published

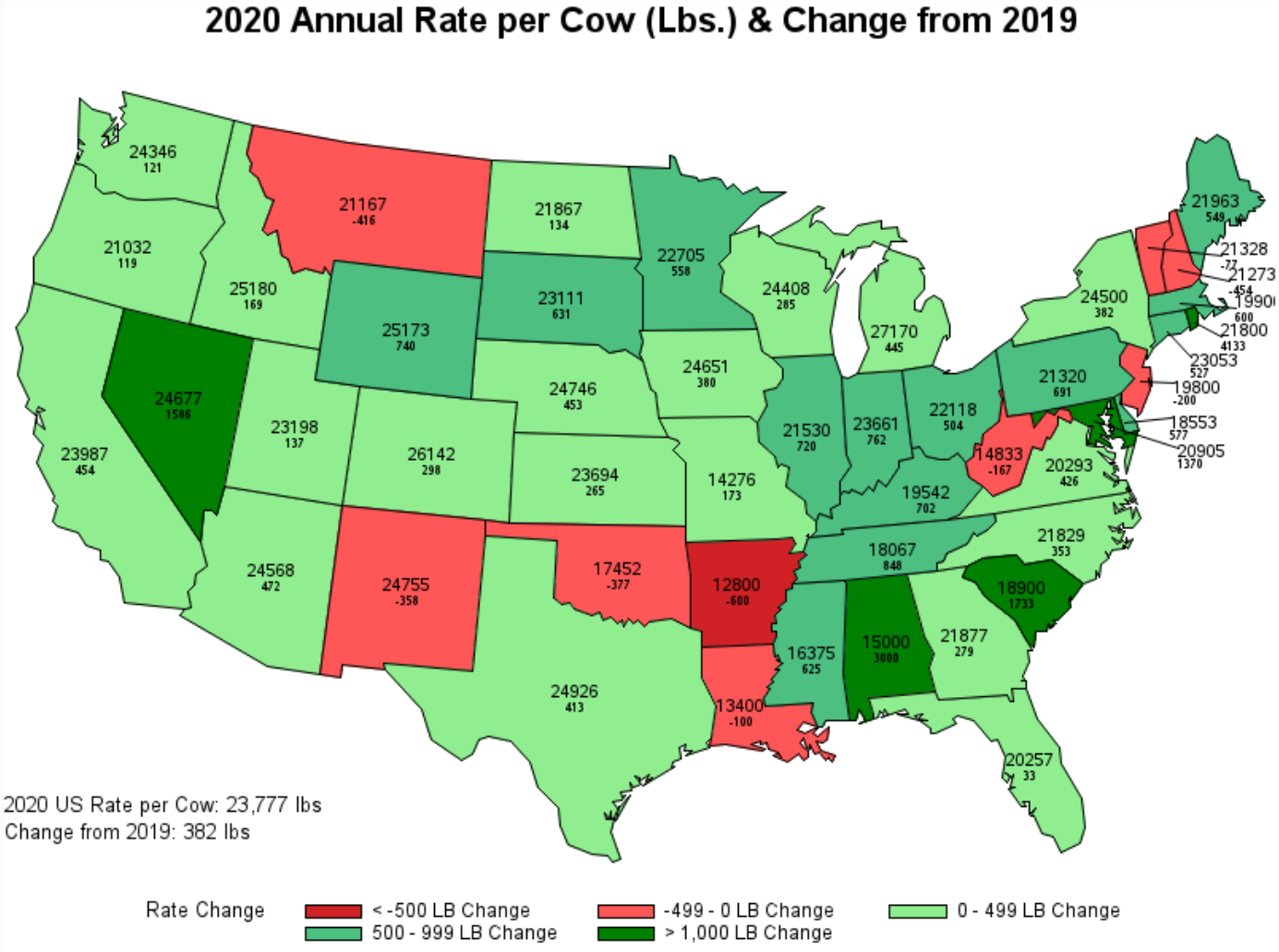
NASS Milk Production Program



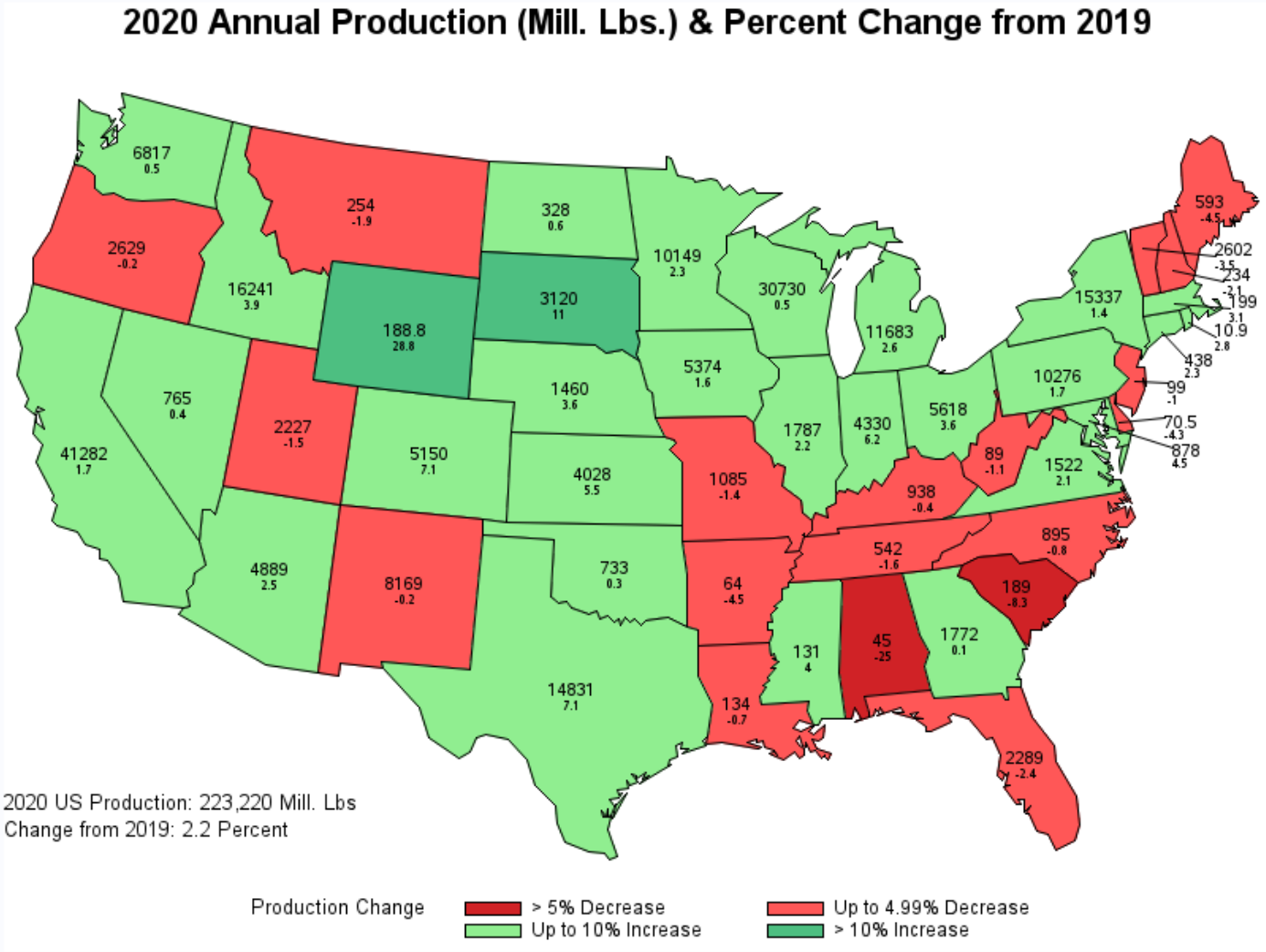
NASS Milk Production Program



NASS Milk Production Program



NASS Milk Production Program



Monthly Milk Production Report

- Survey sample of all operations with at least one milk cow
- Survey for quarterly reports, January, April, July, October, all states and U.S. published
  - Use both survey and administrative data
- During all other months, use administrative data, 24 states and U.S. published
- 24 states produce 95 percent of U.S. milk

Monthly Milk Production Report

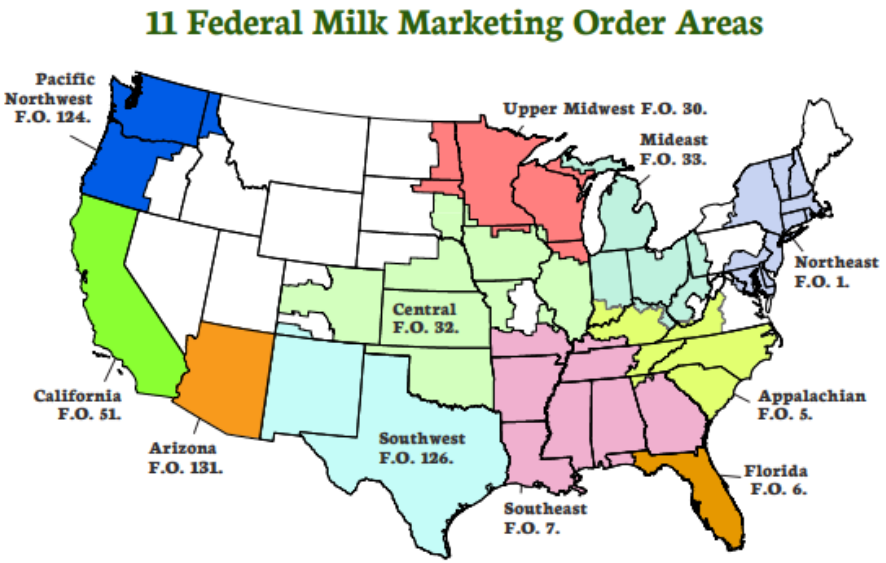
- Number of milk cows
- Milk per cow
- Milk production
- Preliminary and Revised estimates
- Usually released around the 19th
- https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Milk/index.php

Monthly Milk per Cow

- How do we estimate monthly milk per cow?
  - Survey data
  - Administrative data
  - Derived value

Milk Production Administrative Data

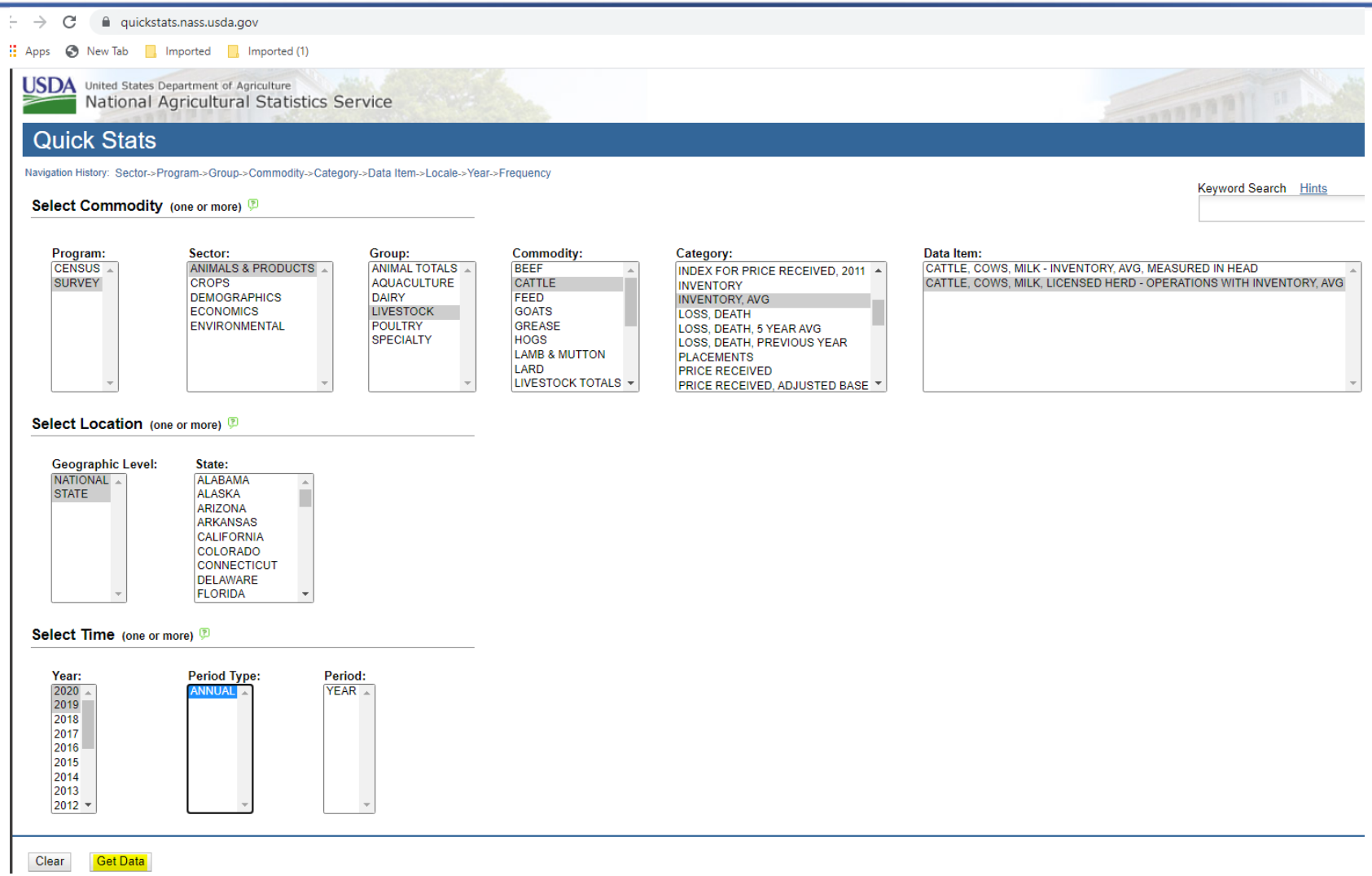
Federal Milk Marketing Order (FMMO) Data
Orders listed below in the map
State Department of Agriculture Data
CA, NY, ME, MO, MT, PA
Milk Check-off Data



Licensed Dairy Herds

- Published annually in the February Milk Production report
- Average number of dairy farms licensed to sell milk based on counts provided by State and other regulatory agencies
- Estimates published for all 50 States and U.S.

Licensed Dairy Herds on Quick Stats



Monthly All Milk Prices

- Estimates published monthly in Agricultural Prices for each of the 24 major milk producing states
- Gross price received by farmers per hundredweight of milk sold at average fat test
- Price prior to deductions for hauling, checkoff, and coop dues. Excludes hauling subsidies, includes premiums and discounts for quality, quantity, etc.
- Gross receipts divided by pounds sold

Monthly All Milk Prices

- Estimates based on administrative data from various sources and survey data
- U.S. all milk price = estimated all milk price in each of the 24 states weighted by milk production in the state during the same month, prior year

Milk Production, Disposition, and Income

- Published annually in April
- Total milk production, milk marketed, milk for home use, milk fed to livestock (Disposition)
- Average annual all milk price (marketing year average price)
- Cash Receipts, Gross Income, Value of Production

Milk Production, Disposition, and Income

- Cash Receipts = milk marketed x all milk price
- Gross Income = Cash Receipts – value of home use
- Value of Production = Gross Income – value fed to livestock

All Reports Available At

www.nass.usda.gov

For Questions

(202) 720-3570
(800) 727-9540
nass@usda.gov

USDA

United States Department of Agriculture

Meat Price Spreads Data

USDA Data Users Conference

Washington, DC

October 13, 2021

William F. Hahn

Overview

- General discussion of why and how meat price spread data were developed
- Uses and users of data
- Examine data series

Why Does ERS Calculate Meat Price Spreads?

- According to the Agricultural Marketing Act of 1946, USDA must estimate the spread between retail and farm-level prices for various commodities in various forms (i.e., “marketing” costs)
- USDA started comparing retail and farm prices in the 1920s (or earlier)

ERS Estimates Two Sets of Price Spread Data

- *Meat Price Spreads Data* covers meats, poultry, and eggs
- Other agricultural items are covered in *Price Spreads from Farm to Consumer*

Uses and Users of Meat Price Spread Data

- Second-most downloaded data set for the ERS Market and Trade Economics Division
- Questions from producers, bankers, academics, and others
- Data used in a range of studies:
  - Meat demand
  - Price transmission
  - Market efficiency and industrial organization

Choice Beef and Pork Price Spread Data

- Price an animal at different points in the marketing chain
  - Price the whole animal as it leaves the farm
  - Price the whole carcass as it leaves the packing plant
    - Include a byproduct value correction for the non-meat parts of the animal
  - Buy back all of the animal's meat from the grocery store meat case.

Choice Beef and Pork Price Spread Data

- Based on fixed proportions between farm, wholesale, and retail
  - 2.40 pounds of steer per pound of retail beef
    - 63% dressing percentage
  - 1.87 pounds of hog per pound of retail meat
    - 74% dressing percentage
- All prices are “retail weight equivalent”

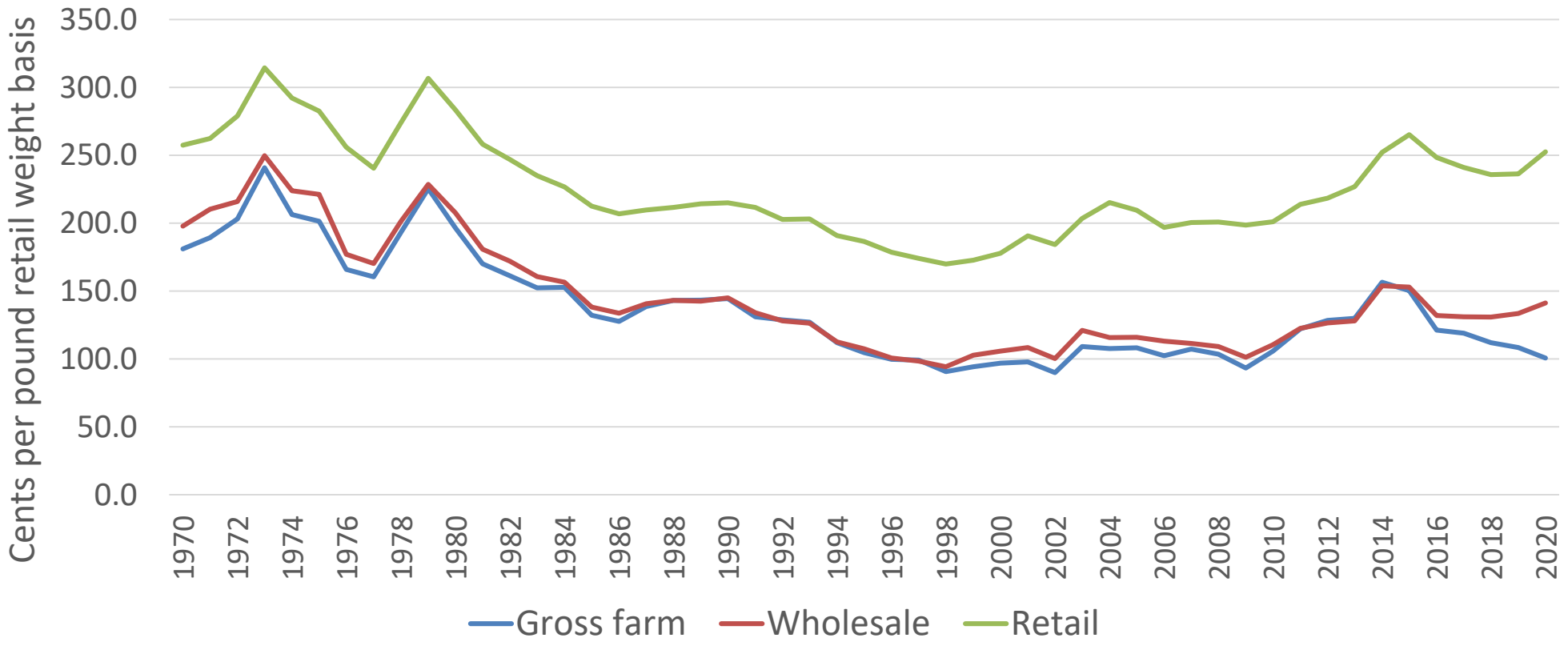
Choice Beef and Pork Price Spread Data

- Farm, wholesale, and byproduct data from USDA Agricultural Marketing Service
  - Negotiated prices used for farm and wholesale values
- Retail prices from the Bureau of Labor Statistics: Average Price Data

USDA

United States Department of Agriculture

Choice Beef Values Deflated by the CPI



- Real values peaked in the 1970s
- Retail values generally outpacing inflation since late 1990s

Data sources: ERS calculations from AMS and BLS data

USDA

United States Department of Agriculture

Pork Values, Deflated by the CPI

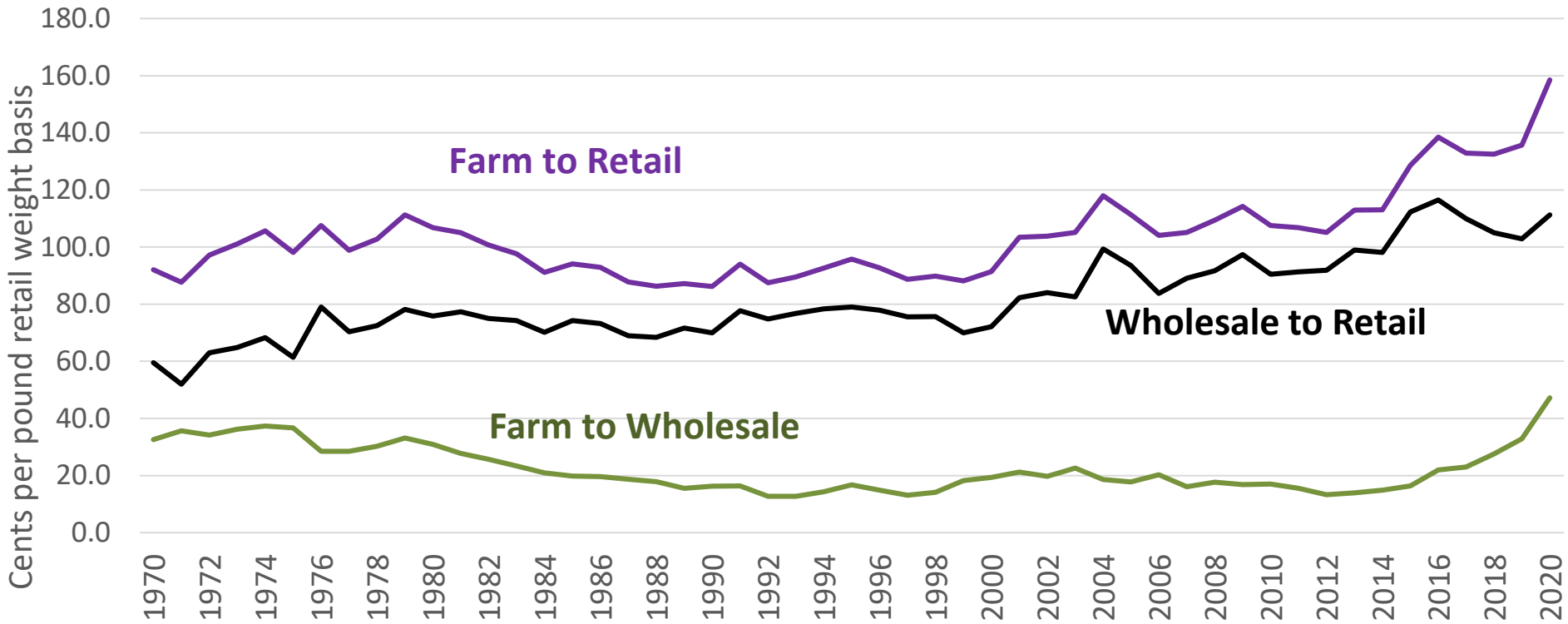
Similar story as Choice beef with less extreme price changes

Data sources: ERS calculations from AMS and BLS data

USDA

United States Department of Agriculture

Choice Beef Spreads, Deflated by the CPI

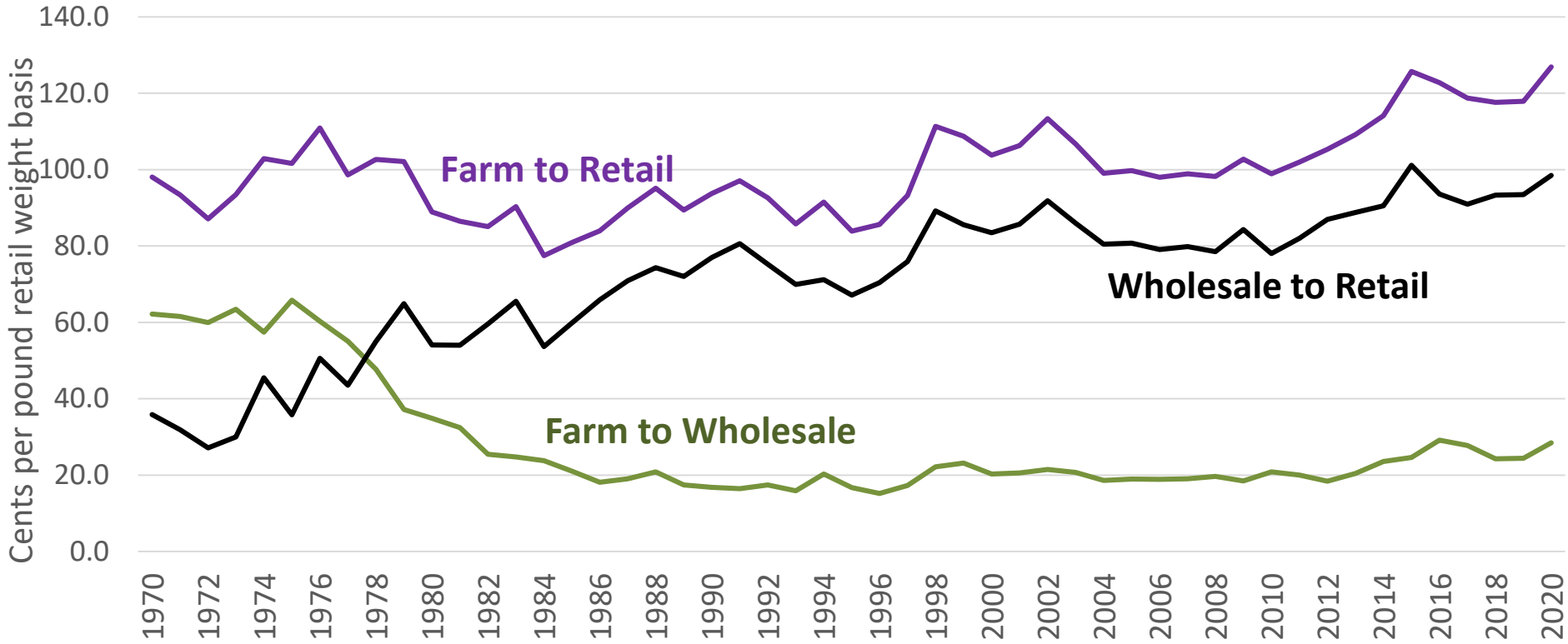


- Farm to wholesale increasing at or lower than the inflation rate until recently
- Wholesale to retail increasing at greater than the inflation rate

Data sources: ERS calculations from AMS and BLS data

USDA
United States Department of Agriculture

Pork Spreads, Deflated by the CPI



- Like beef, wholesale to retail increased more rapidly than inflation
- Real farm to wholesale steady from mid 1980s until 2012

Data sources: ERS calculations from AMS and BLS data

For More Information

- Meat Price Spreads Web Page on ERS Website: https://www.ers.usda.gov/data-products/meat-price-spreads/
- Hahn, William. “Beef and Pork Values and Price Spreads Explained”. LDP-M-118-01 May 2004. https://www.ers.usda.gov/webdocs/publications/37369/49585_ldpm11801.pdf?v=0

Questions?

The USDA Commodity Costs and Returns (CAR) Data Product

Jeffrey Gillespie
Data Users Conference
October 2021

Motivation for CAR Data

Agricultural and Consumer Protection Act of 1973

"The Secretary of Agriculture…shall conduct a cost of production study of the wheat, feed grain, cotton, and dairy commodities under the various production practices and **establish a current national weighted average cost of production**. This study shall be updated annually and shall include all typical variable costs, including interest costs, a return on fixed costs, and a return for management."

Mandated reporting of these data is part of permanent Farm Bill legislation

CAR Project Overview

- National and regional accounts for 12 commodities annually from 1975; also state accounts for milk
- Based on data from commodity surveys as part of the Agricultural Resource Management Survey (ARMS)
- ARMS commodity surveys are conducted every 4-8 years on a rotating basis for each commodity
- Estimates for years between surveys are based on price, acreage, and production changes
- Methods are those recommended by the American Agricultural Economics Association Task Force

ARMS Data for CAR Estimation

Crop Commodities

• Cotton	2019
• Grain sorghum	2019
• Soybeans	2018
• Wheat	2017
• Corn	2016
• Oats	2015
• Rice	2013
• Peanuts	2013
• Barley	2011

Livestock Commodities

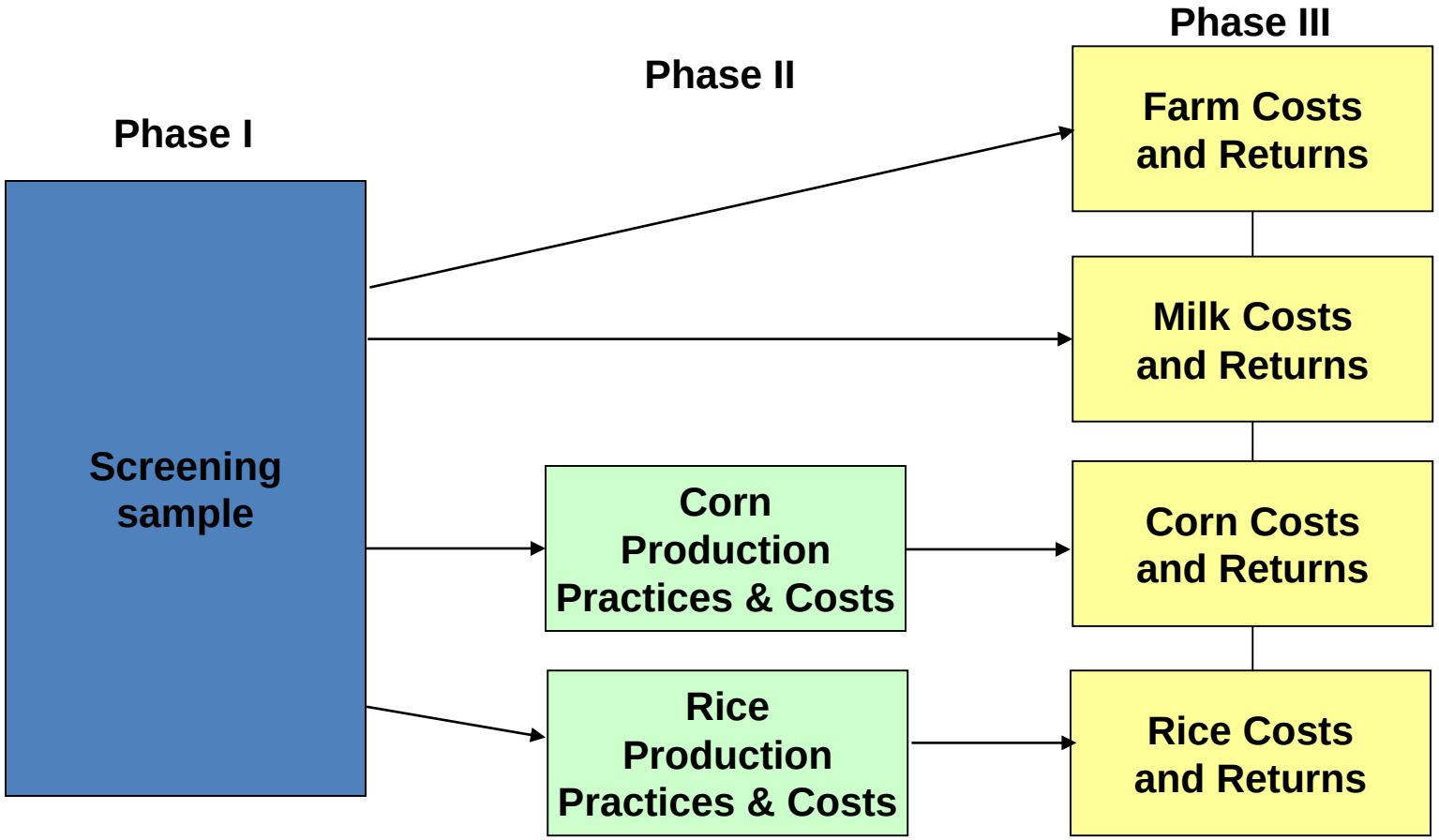
• Cow-calf	2018
• Dairy	2016
• Hogs	2015

Upcoming Data

• Corn	2021
• Rice	2021
• Dairy	2021
• Hogs	2020
• Barley	2019

Mandated Estimates

CAR Data Collection in the 2021 ARMS



Approaches to CAR Estimation

Direct costing

- Purchased input costs are taken directly from the survey
- Examples include purchased seed, fertilizer, chemicals, and custom operations

Valuing input quantities

- Farm supplied or homegrown input quantities from the survey valued using relevant prices
- Examples include homegrown seed and feed, unpaid labor, land, and manure

Approaches to CAR Estimation (continued)

Indirect costing

- Engineering formulas are used with survey data to estimate machinery and equipment costs
- Examples include machinery and irrigation fuel, repairs, and capital

Allocating whole-farm expenses

- Rule to allocate farm business expenses not specific to a particular enterprise: gross margin of commodity relative to whole-farm gross margin
- Examples include general farm overhead, taxes, and insurance

CAR Crop Account Format and Variables

Item	Variable Name
Gross value of production:	
[primary and secondary products]	GROSS
Operating costs:	
Seed	COSTSEED
Fertilizer	COSTFERT
Chemicals	COSTCHEM
Custom operations	COSTCUST
Fuel, lube, and electricity	COSTFLUB
Repairs	COSTREPA
Purchased irrigation water	COSTPWAT
Interest on operating capital	COSTOPCA
Total, operating costs	COSTOPER
Allocated overhead:	
Hired labor	COSTPDL
Opportunity cost of unpaid labor	COSTUPDL
Capital recovery of machinery and equipment	COSTREC
Opportunity cost of land (rental rate)	COSTLAND
Taxes and insurance	COSTTXIN
General farm overhead	COSTOVER
Total, allocated overhead	COSTALLO
Total, costs listed	COSTTOT
Value of production less total costs listed	NETTOT
Value of production less operating costs	NETOPER

Presenting CAR Data

Downloadable Pivot Tables on the ERS Website

Corn production costs and returns per planted acre, excluding Government payments

(dollars per planted acre, except where indicated)

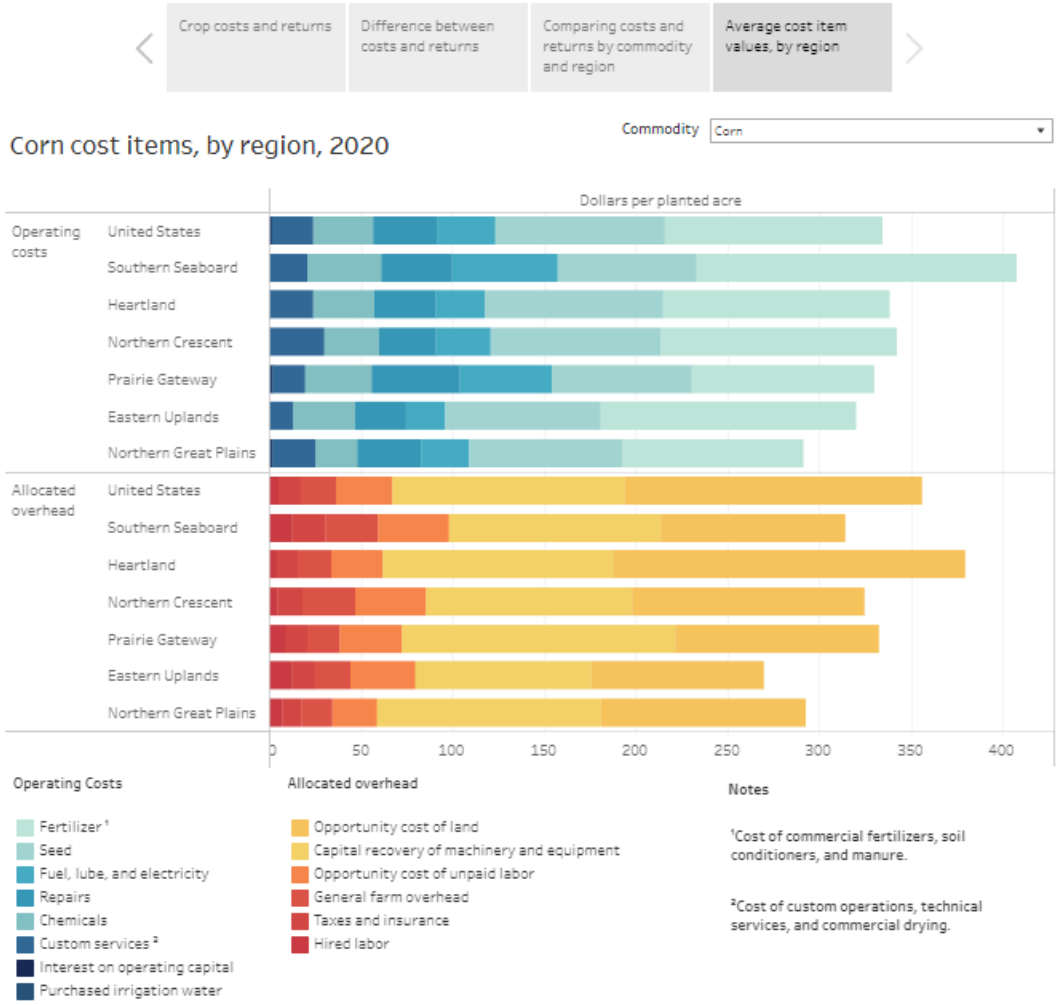
U.S. total | Southern Seaboard | Prairie Gateway | Northern Great Plains

	Base survey of 2016				
	2020	2019	2018	2017	2016
Gross value of production					
Primary product, grain	642.58	662.59	629.28	601.25	602.07
Secondary product, silage	2.14	2.35	2.26	2.03	1.85
Total, gross value of production	644.72	664.94	631.54	603.28	603.92
Operating costs					
Seed	91.83	93.48	96.20	97.07	98.36
Fertilizer [1]	119.06	115.86	109.05	113.46	126.53
Chemicals	32.75	34.01	34.02	34.77	35.65
Custom services [2]	22.95	22.74	22.48	22.05	22.69
Fuel, lube, and electricity	31.43	32.41	30.93	27.21	24.08
Repairs	35.55	35.13	33.90	32.75	32.20
Purchased irrigation water	0.28	0.29	0.27	0.26	0.26
Interest on operating capital	0.70	3.46	3.42	1.72	0.78
Total, operating costs	334.55	337.38	330.27	329.29	340.55
Allocated overhead					

Corn Pivot | Data Sheet (machine readable)

Presenting CAR Data

Interactive Visualization: U.S. Commodity Costs and Returns by Region and by Commodity, Field Crops

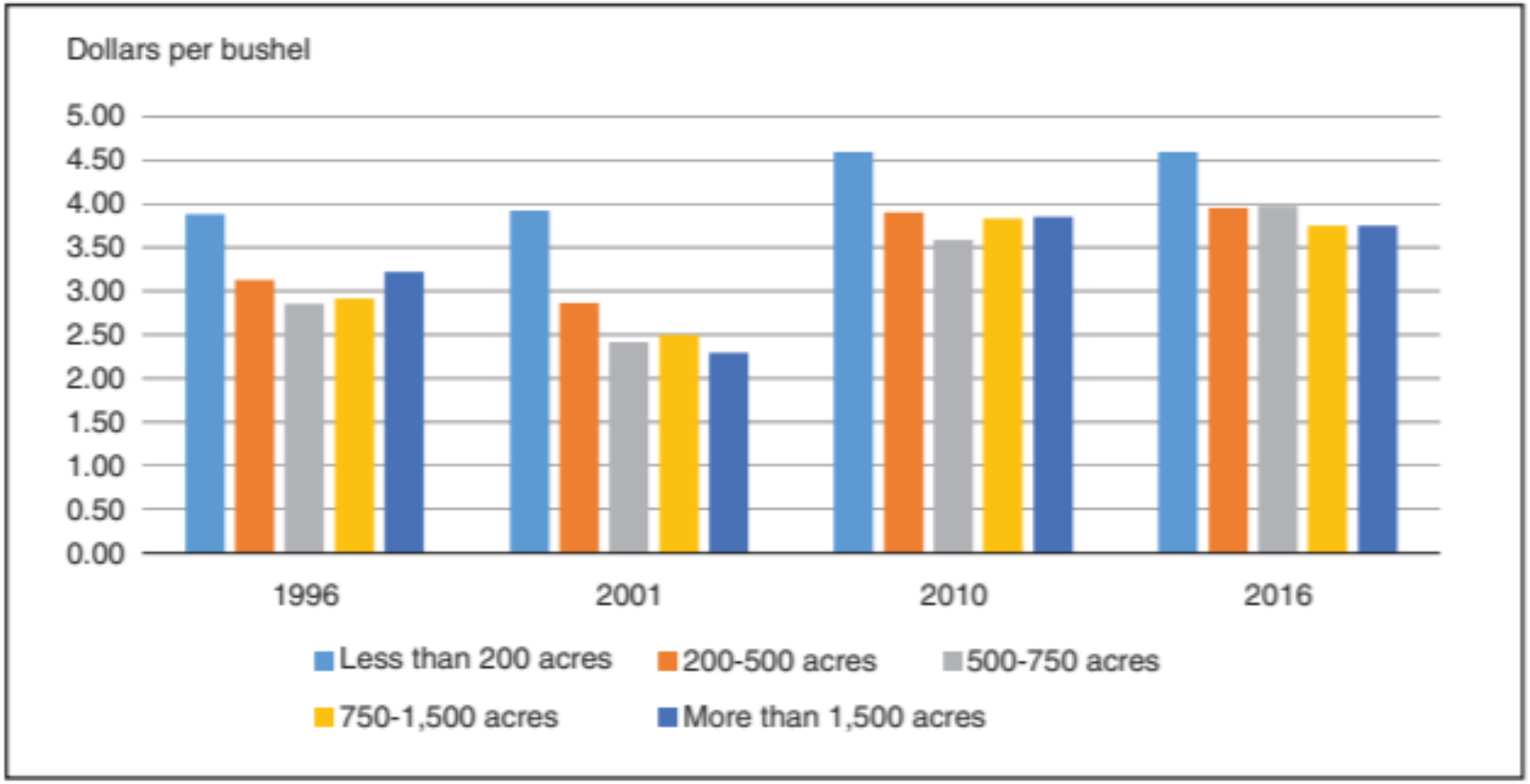


Interactive data visualizations provided on the ERS website

CAR Data Analysis:

Farms with Greater Corn Acreage Have Generally Experienced Lower Production Costs per Bushel

U.S. corn production costs per bushel by operation size and year

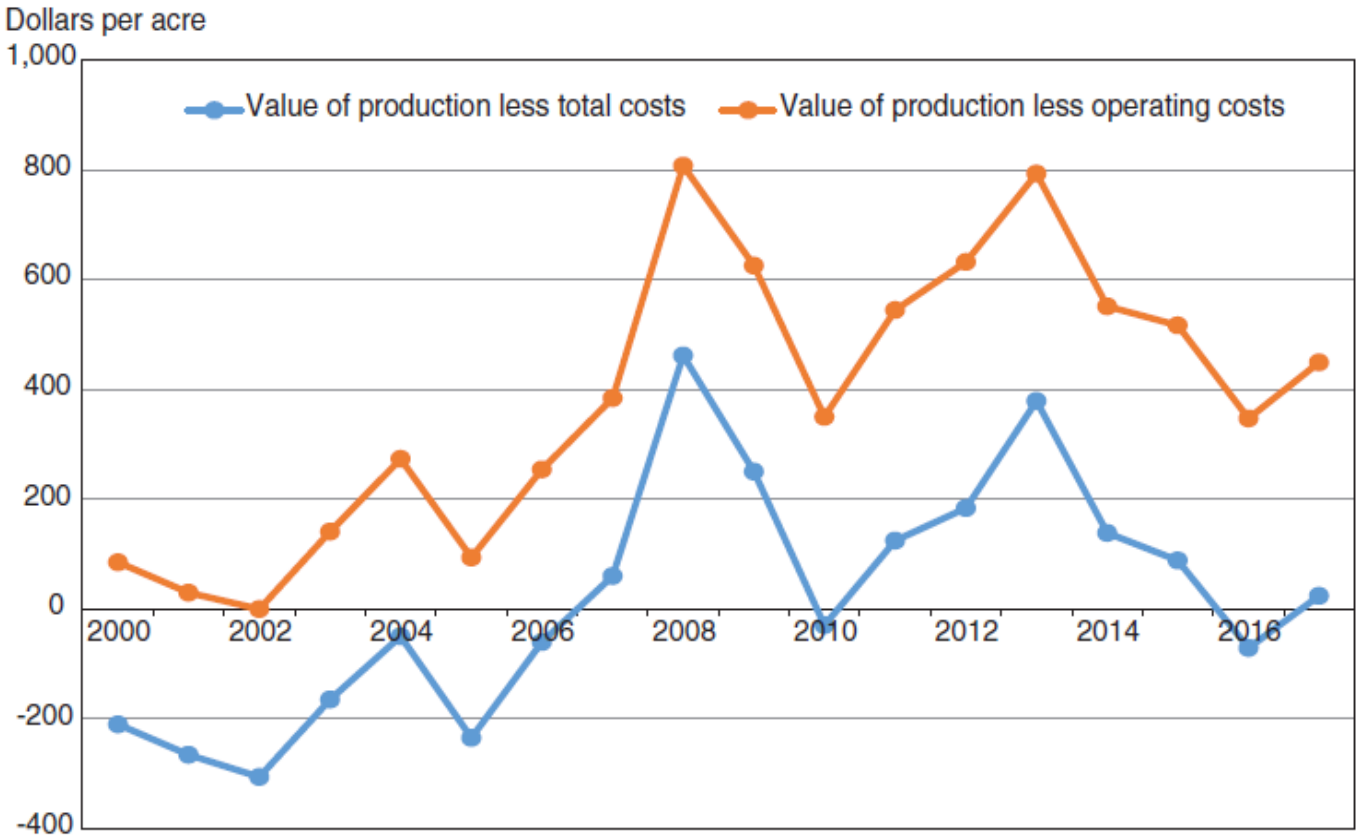


Sources: USDA, Economic Research Service and USDA, National Agricultural Statistics Service, Agricultural Resource Management Survey and USDA, Economic Research Service, *Cost and Returns*.

CAR Data Analysis:

How Have U.S. Rice Producers Fared during Recent Years?

U.S. average returns to rice production, 2000-17



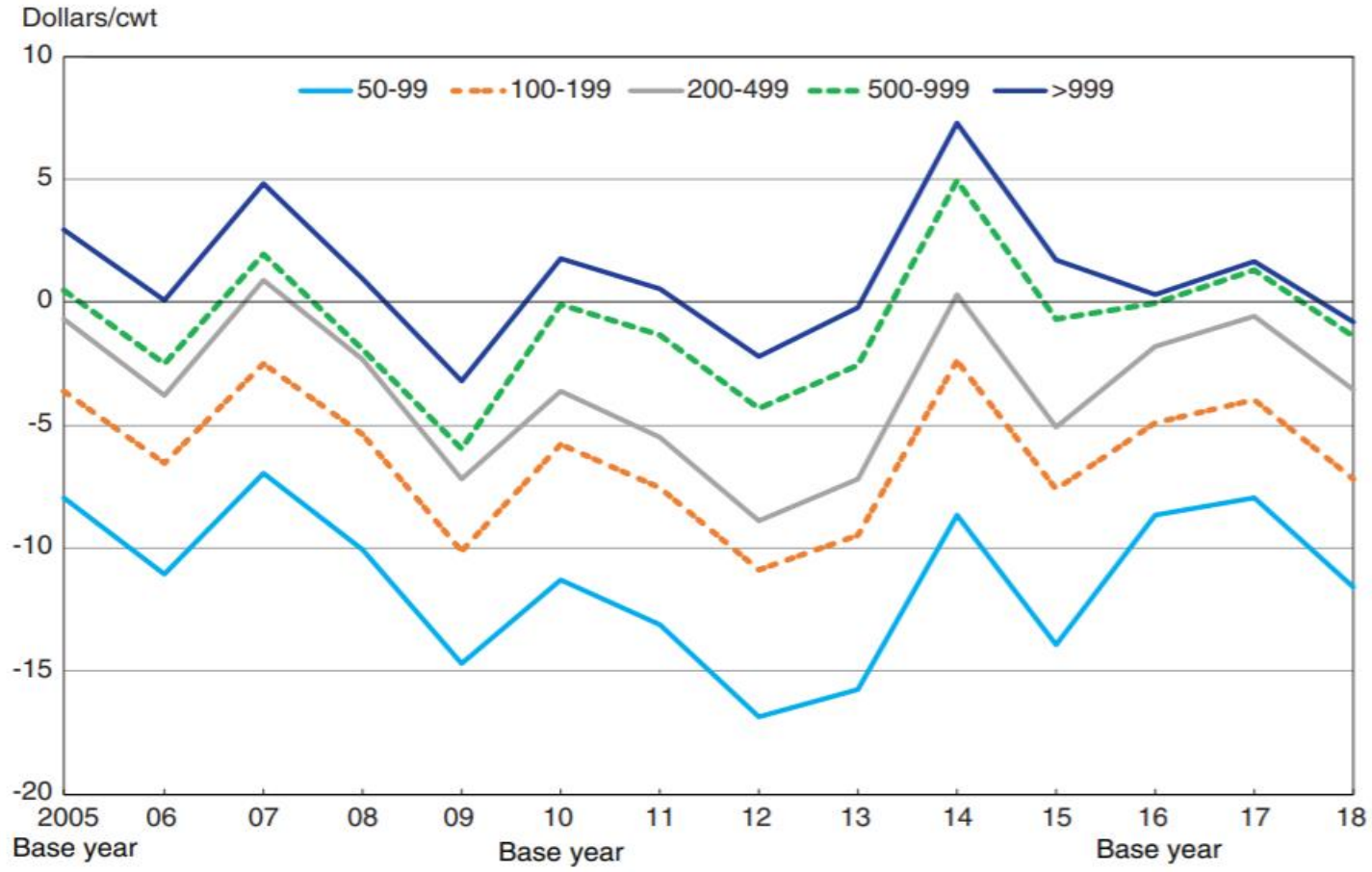
Source: USDA, Economic Research Service, Commodity Costs and Returns.

On average, U.S. rice farmers have covered operating costs in most years

What are some of the factors that might impact costs and returns for a specific farm?

CAR Data Analysis: Dairy

Net returns by herd size, 2005-2018



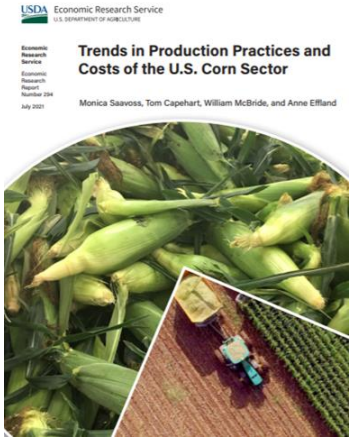
Note: cwt = hundredweight.

Source: USDA, Economic Research Service, Milk Costs and Returns Estimates.

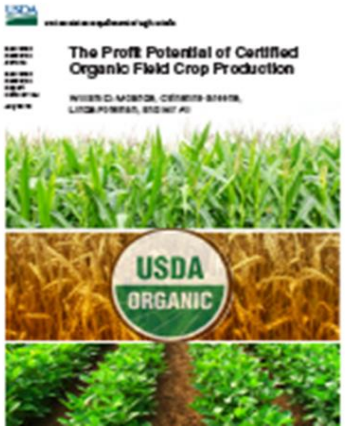
Farms with larger dairy herds have consistently experienced higher net returns in dollars/cwt of milk produced.

CAR Data Support Research in Diverse Areas

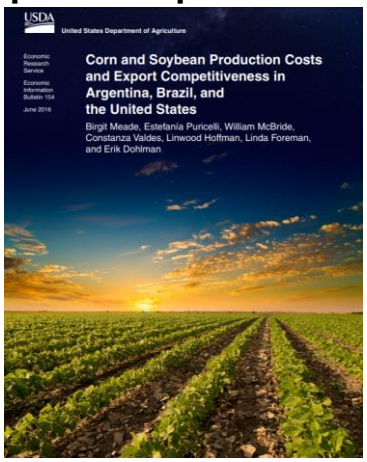
Characteristics and Costs of Corn Farms



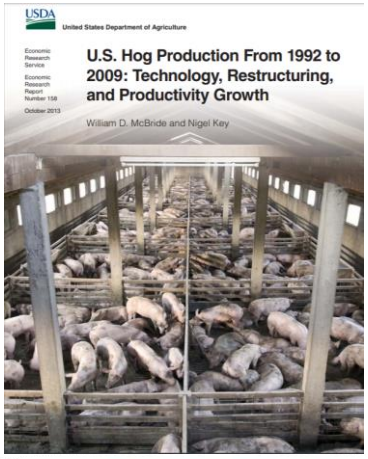
Organic Field Crop Profitability



Production Costs & Export Competitiveness

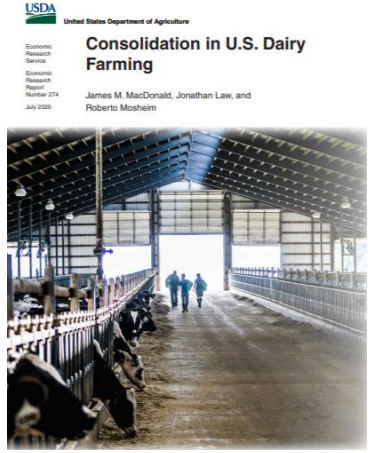


Changing Economics of Hog Production



Changing Costs in Rice Production

Dairy Farm Costs and Consolidation



Interest in the CAR Data Product

- **Users of CAR** include government agencies, policy-maker staff, academic research and extension staff, farmers, input providers, agricultural consultants, press, and others

- **Web statistics** indicate that between October 1, 2020 and September 30, 2021, the ERS Commodity Costs and Returns and Milk Cost of Production webpages were viewed 50,341 times.

Improving the CAR Data Product

We have moved to fewer Excel files, replacing them with:

- Pivot tables with machine-readable data, allowing for pivoting between U.S. and regions for all years
- Pivot tables recently added for milk size and state accounts

Data visualizations:

- Currently include data visualizations for crop costs of production
- This month, added data visualizations for hogs, milk, and cow-calf costs of production

Information about ARMS and CAR Estimation

- **ARMS data product:**
  www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices.aspx
- **Commodity CAR data product:**
  www.ers.usda.gov/data-products/commodity-costs-and-returns.aspx
- **E-mail:**
  jeffrey.gillespie@usda.gov

USDA

United States Department of Agriculture

Linking nutrition with food scanner data

Andrea Carlson, PhD

USDA Fall Data User's Meeting

October 13, 2021.

The findings and conclusions in this presentation are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy. *This research was supported by the U.S. Department of Agriculture's Economic Research Service and Center for Nutrition, Policy and Promotion.* *Findings should not be attributed to IRI.*

Purchase to Plate Team

ERS:

Andrea Carlson*
Christopher Lowe
Elina Page
Xiao Dong
Mark Denbaly

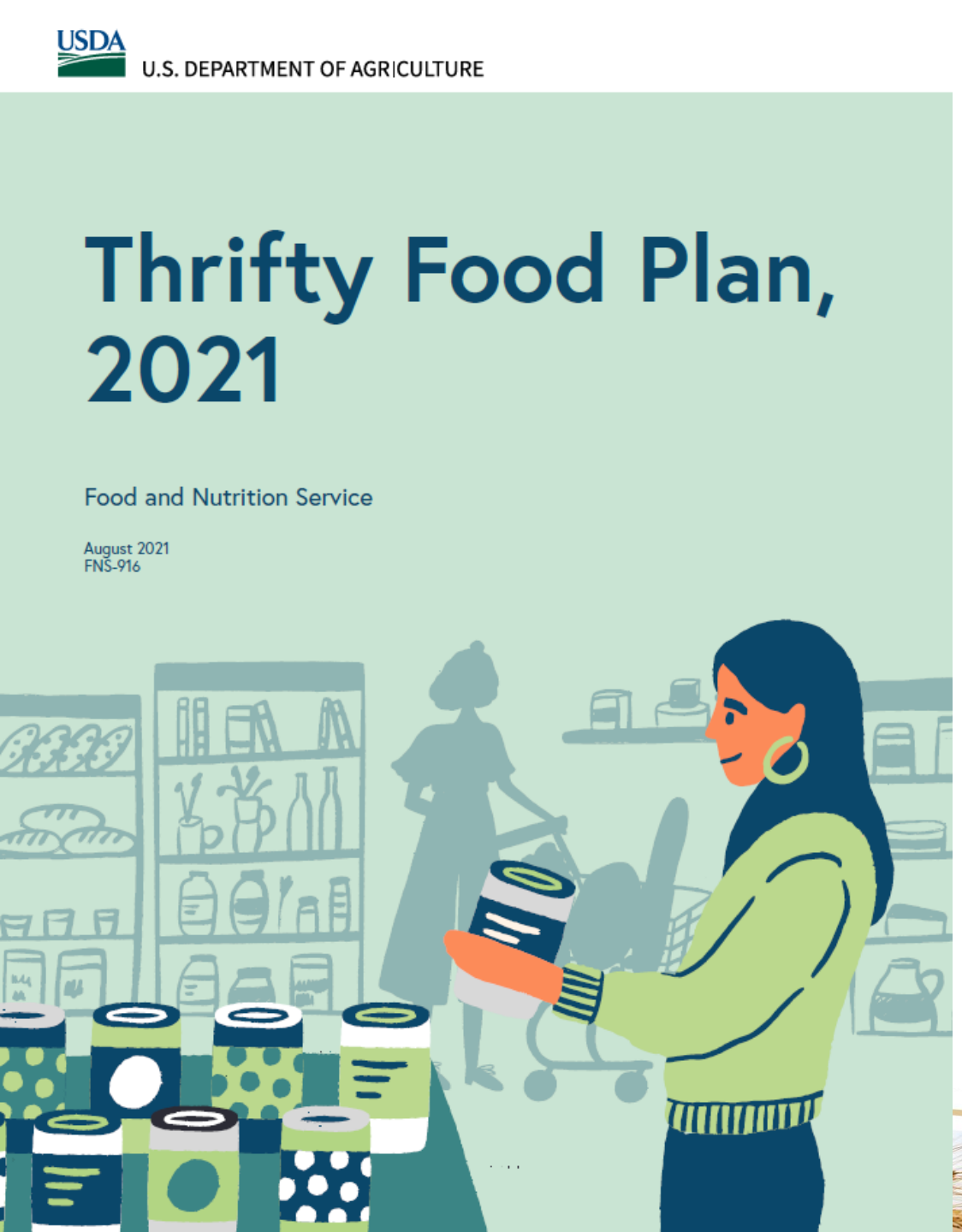
Center for Nutrition Policy and Promotion (CNPP):

Kristin Koegel
Kevin Kuczynski
Mark Lino
TusaRebecca Pannucci

Westat:

Thea Palmer Zimmerman*
Amber Brown
Catlin Carter
Carina E. Tornow

*Co-Principal Investigators

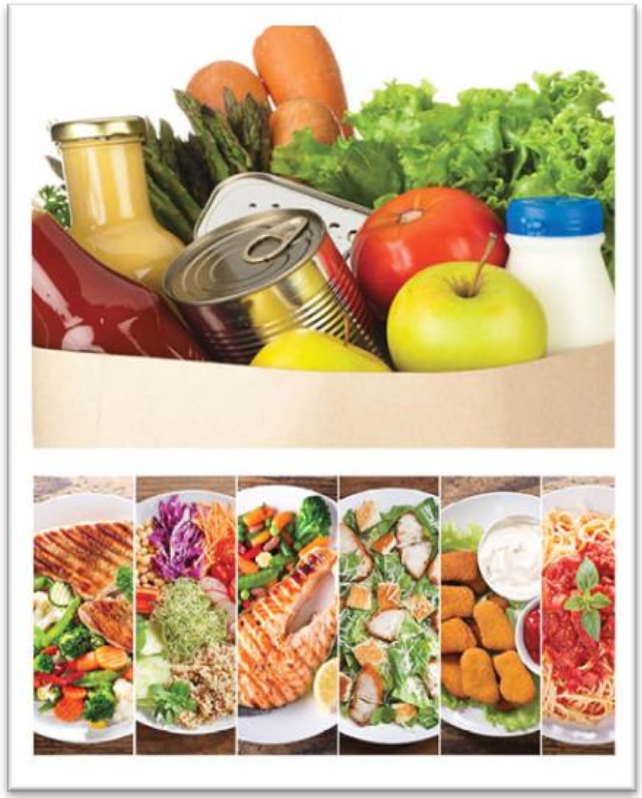


Agriculture Improvement Act of 2018

Required update using current:

- Food prices
- Food composition
- Consumption patterns
- Dietary guidance

Purchase to Plate Suite



- Enhance research capacity related to the economics of food and nutrition
- Support USDA projects such as
  - Agriculture Improvement Act of 2018 mandated update of the Thrifty Food Plan market baskets
  - Update other USDA Food Plan market baskets
  - Related research supporting USDA goals

Data Sets for the Purchase to Plate Suite

- Food Scanner data 

- USDA Food and Nutrient Database for Dietary Studies

Food (at home) Scanner Data

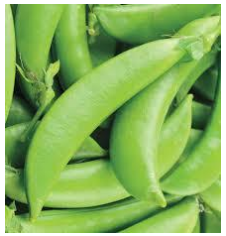
- Retail point-of-sale (POS) data
  - Purchase transaction records collected from store POS systems
- Household scanner data
  - Household-scanned purchases
  - Linked with household demographics
- Product information
- Store information

Food and Nutrient Database for Dietary Studies (FNDDS)

- Nutrient values for foods reported eaten by Americans
- A set of "recipes" for nutrient calculation
  - "ingredients" in recipes are not necessarily purchasable in stores
  - toasted white bread
- Updates every two years:
  - New foods reported
  - Changes in data collection methods
  - Revisions to underlying nutrition databases

Scanner Data (n=350,000)



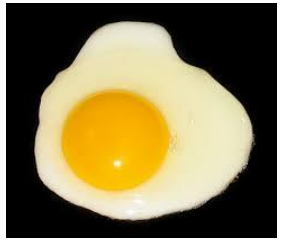




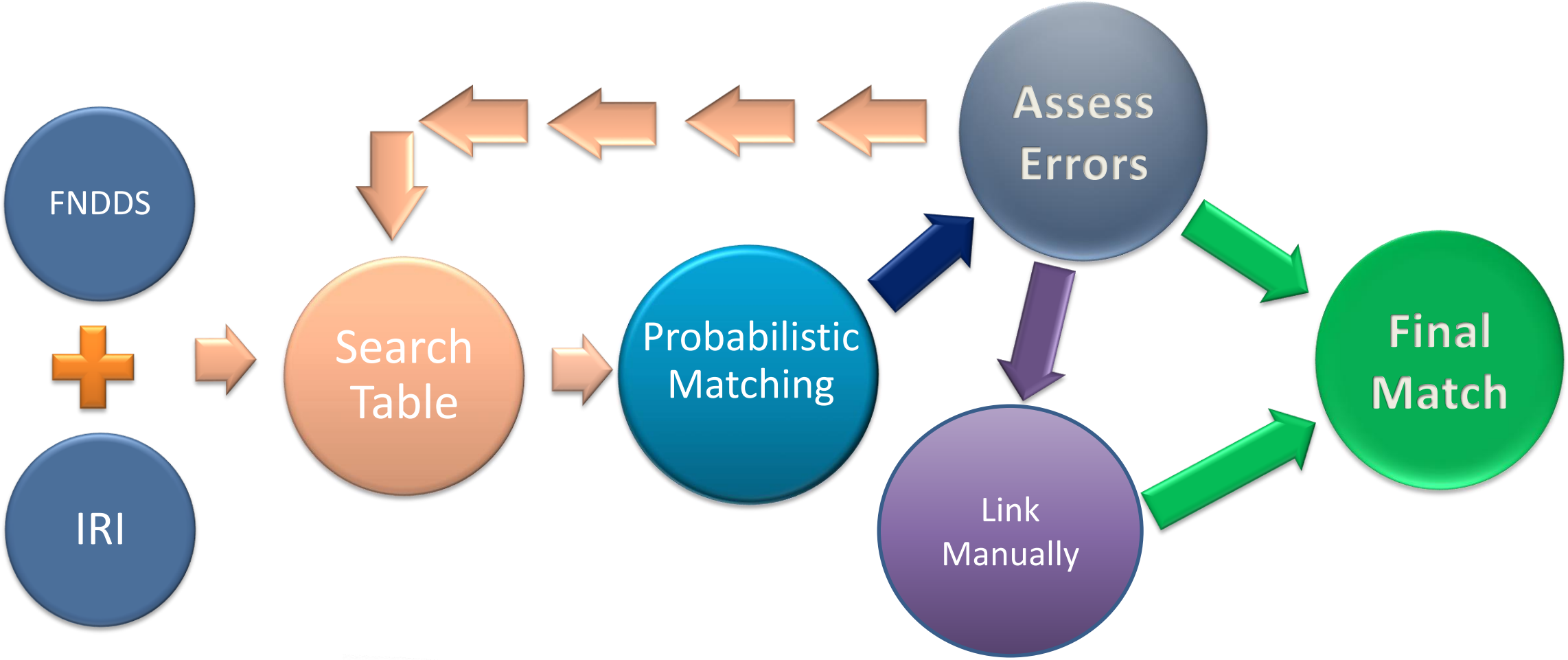
FNDDS (n=10,000)







Methods

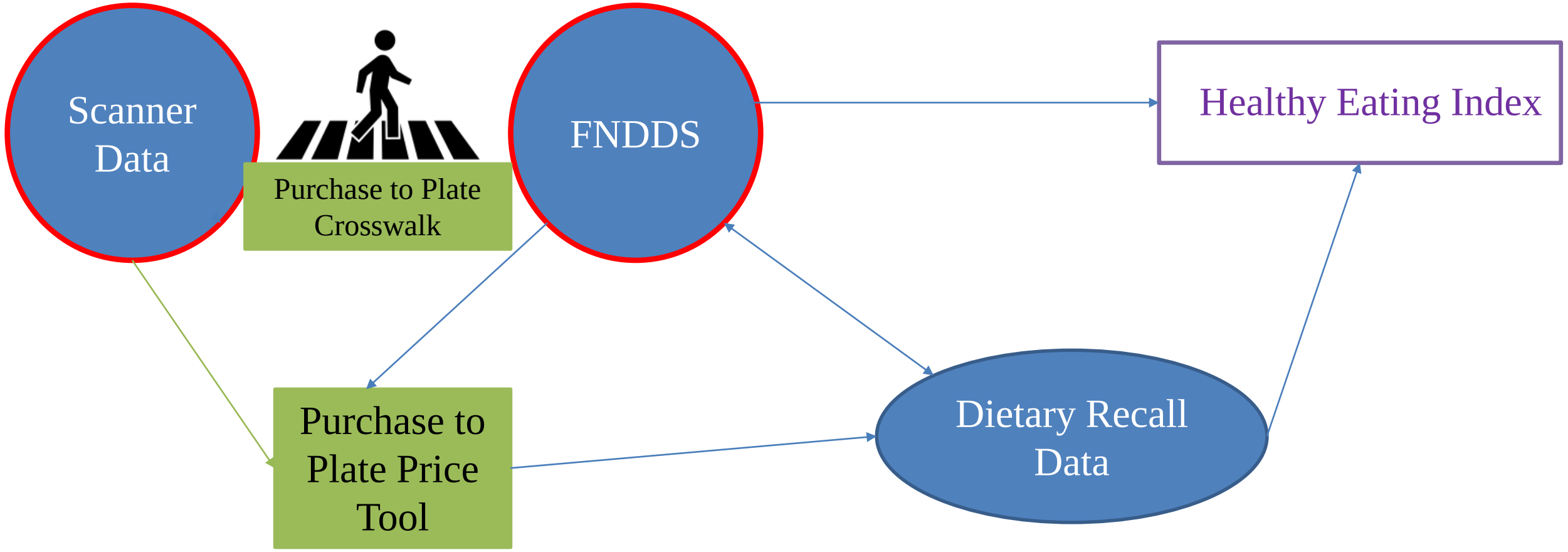

FNDDS
IRI
Search Table
Probabilistic Matching
Assess Errors
Link Manually
Final Match

Yield Factors are UPC-based

350,000 yield factors from:

- FNDDS
- Other government sources
- Agriculture Handbook 102
- Market Checks

Purchase to Plate Suite



What can be further linked

- Using FIPS or county codes, link scanner data to:
  - ERS Food Environment Atlas
  - CDC data on community health
  - Agricultural statistics
  - What ever else you can think of…
- Using bar-codes, link scanner data to:
  - USDA Branded Foods Product Database

Current Applications

USDA Food Plans

- Agriculture Improvement Act of 2018:
  - Thrifty Food Plan
- Other food plans:
  - Low-Cost,
  - Moderate-Cost
  - Liberal Food Plans

Research

- Cost of low-, mid- and high- quality diets
- Shifts in U.S. food preferences
- Climate change induced food cost changes
- Relationship between store type and diet quality
- NIFA funded grant
  - *From Scarcity to Prosperity: Nutrition and Food Spending Goals and Constraints for Low-Income Americans*

Access

Scanner data:

- Proprietary Data
- Projects of interest to USDA including funded by USDA

https://www.ers.usda.gov/topics/food-markets-prices/food-prices-expenditures-costs/using-scanner-data/

Public Data:

- FNDDS
- FPED/FPID
- NHANES/WWEIA

Coming soon:

- PP-NAP public
- PPC public

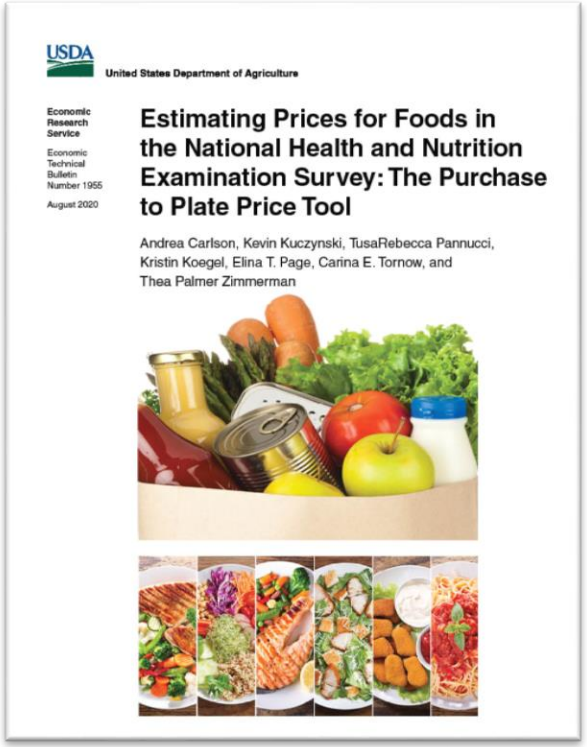
For More Information

https://www.ers.usda.gov/publications/pub-details/?pubid=92570

Andrea.Carlson@usda.gov

www.ers.usda.gov

https://www.ers.usda.gov/publications/pub-details/?pubid=99294



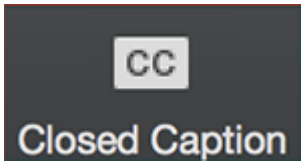
2021
USDA Fall Data Users' Meeting

October 13 & 14, 2021

Joe Parsons
Chair, Agricultural Statistics Board

Housekeeping

- Closed captioning available through the Closed Caption button in Zoom.



- All sessions yesterday were recorded and are available on our website: https://www.nass.usda.gov/Education_and_Outreach/Meeting/index.php
- Today's sessions will also be recorded.
- Slides and transcript of Q&A with any additional questions we don't have time to answer will be available on our website after the meeting.

Open Forum

Q&A – Questions will be answered live by our panelists

Chat – Technical Issues

Email - Marisa.Reuber@usda.gov or Vincent.Davis@usda.gov

Day 1 Breakout Sessions

All times Eastern	**Session A**	**Session B**
1:00 p.m.	AgTransport Platform *Agricultural Marketing Service*	Foreign Production, Trade, and Import/Export Data *World Agricultural Outlook Board, Foreign Agricultural Service, and U.S. Census Bureau*
2:05 p.m.	Milk Production Program *National Agricultural Statistics Service*	Showcasing ERS Data and New Initiatives *Economic Research Service*

Day 2 Breakout Sessions

All times Eastern	**Session A**	**Session B**
1:30 p.m.	Data and Programs Assisting Our Nation's Producers During the 2021 Western Drought *World Agricultural Outlook Board*	Market News *Agricultural Marketing Service*
2:20 p.m.	NASS Modernization *National Agricultural Statistics Service*	Building Country Capacity with the Global Agricultural & Disaster Assessment System *Foreign Agricultural Service*

Panelists

- Mike Lynch, Agricultural Marketing Service
- Spiro Stefanou, Economic Research Service
- Patrick Packnett, Foreign Agricultural Service
- Mike Walter, Farm Service Agency
- Mark Jekanowski, World Agricultural Outlook Board
- Joseph DeCampo, U.S. Census Bureau
- Dan Kerestes, National Agricultural Statistics Service

Day 2 Breakout Sessions

All times Eastern	**Session A**	**Session B**
1:30 p.m.	Data and Programs Assisting Our Nation's Producers During the 2021 Western Drought *World Agricultural Outlook Board*	Market News *Agricultural Marketing Service*
2:20 p.m.	NASS Modernization *National Agricultural Statistics Service*	Building Country Capacity with the Global Agricultural & Disaster Assessment System *Foreign Agricultural Service*

Links to join can be found in

- Your registration or reminder email
- Emailed Booklet
- Chat window

U.S. Drought Outlooks

Brad Pugh
Climate Prediction Center/NCEP/NWS/NOAA

USDA Data Users Meeting
October 14, 2021

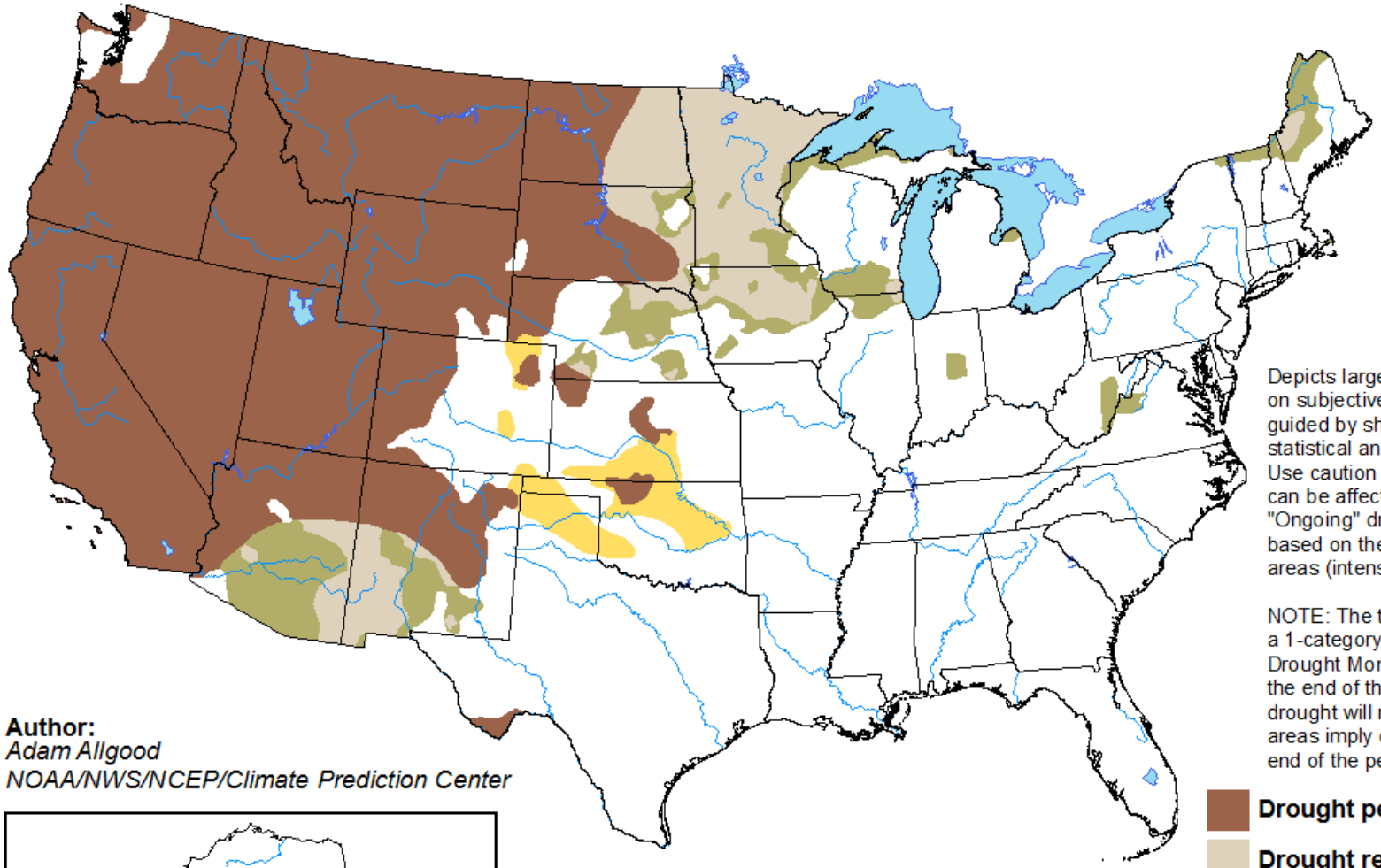
U.S. Drought Outlook History

- Seasonal Drought Outlook began in August 1999 (shortly after the U.S. Drought Monitor became operational)
- Seasonal Drought Outlook released each month (3rd Thursday)
- Starting in July 2013, a Monthly Drought Outlook was released (end of each month)
- Intent is to present a simple national picture of where droughts will improve, persist, or develop

U.S. Monthly Drought Outlook

Drought Tendency During the Valid Period

Valid for September 2021
Released August 31, 2021



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

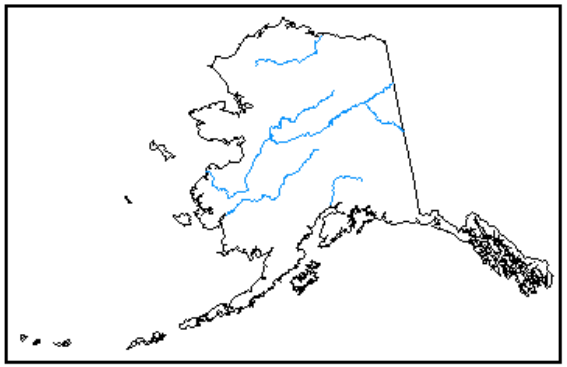
Drought persists

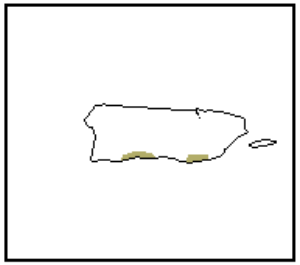
Drought remains but improves

Drought removal likely

Drought development likely

Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center



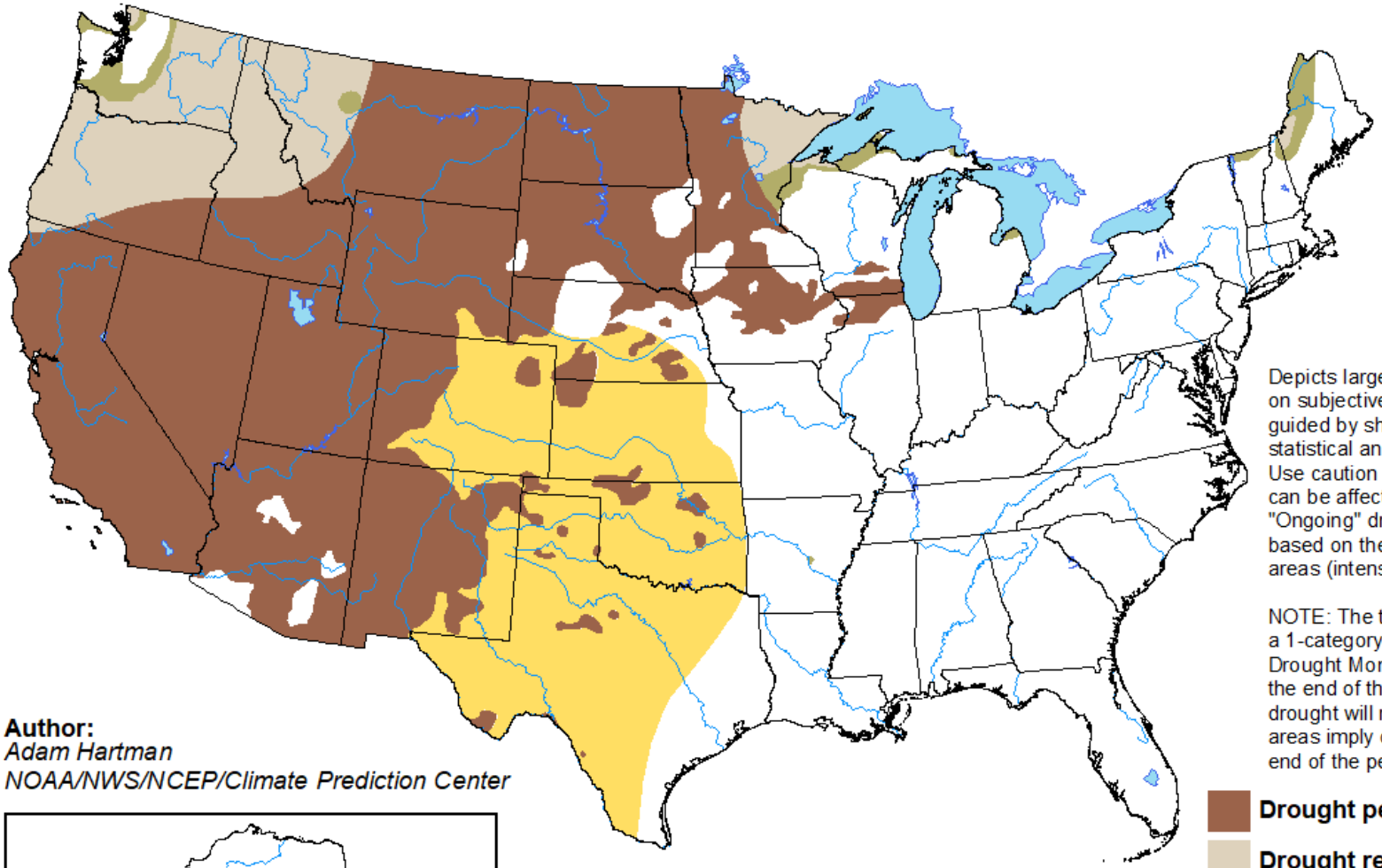


http://go.usa.gov/3eZGd

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for September 16 - December 31, 2021
Released September 16



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

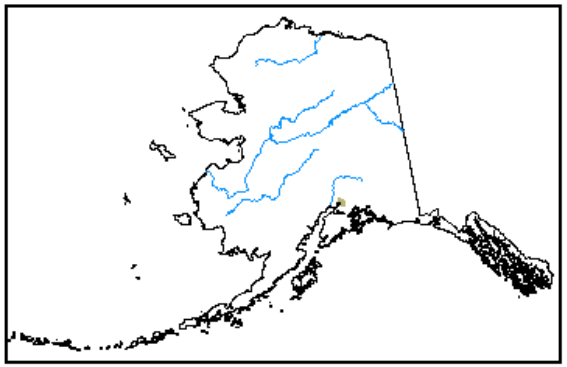
Drought persists

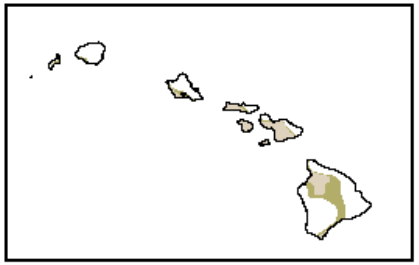
Drought remains but improves

Drought removal likely

Drought development likely

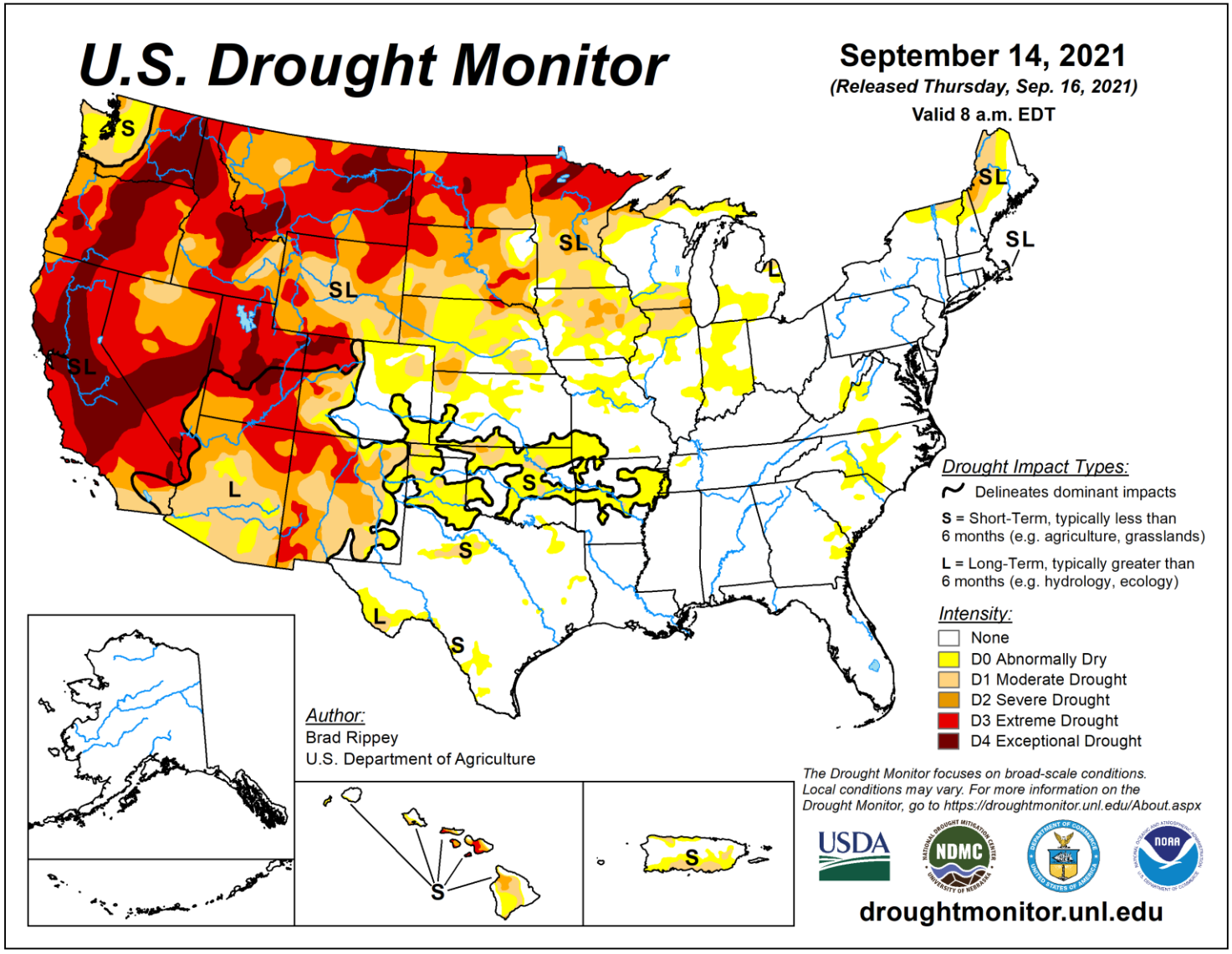
Author:
Adam Hartman
NOAA/NWS/NCEP/Climate Prediction Center



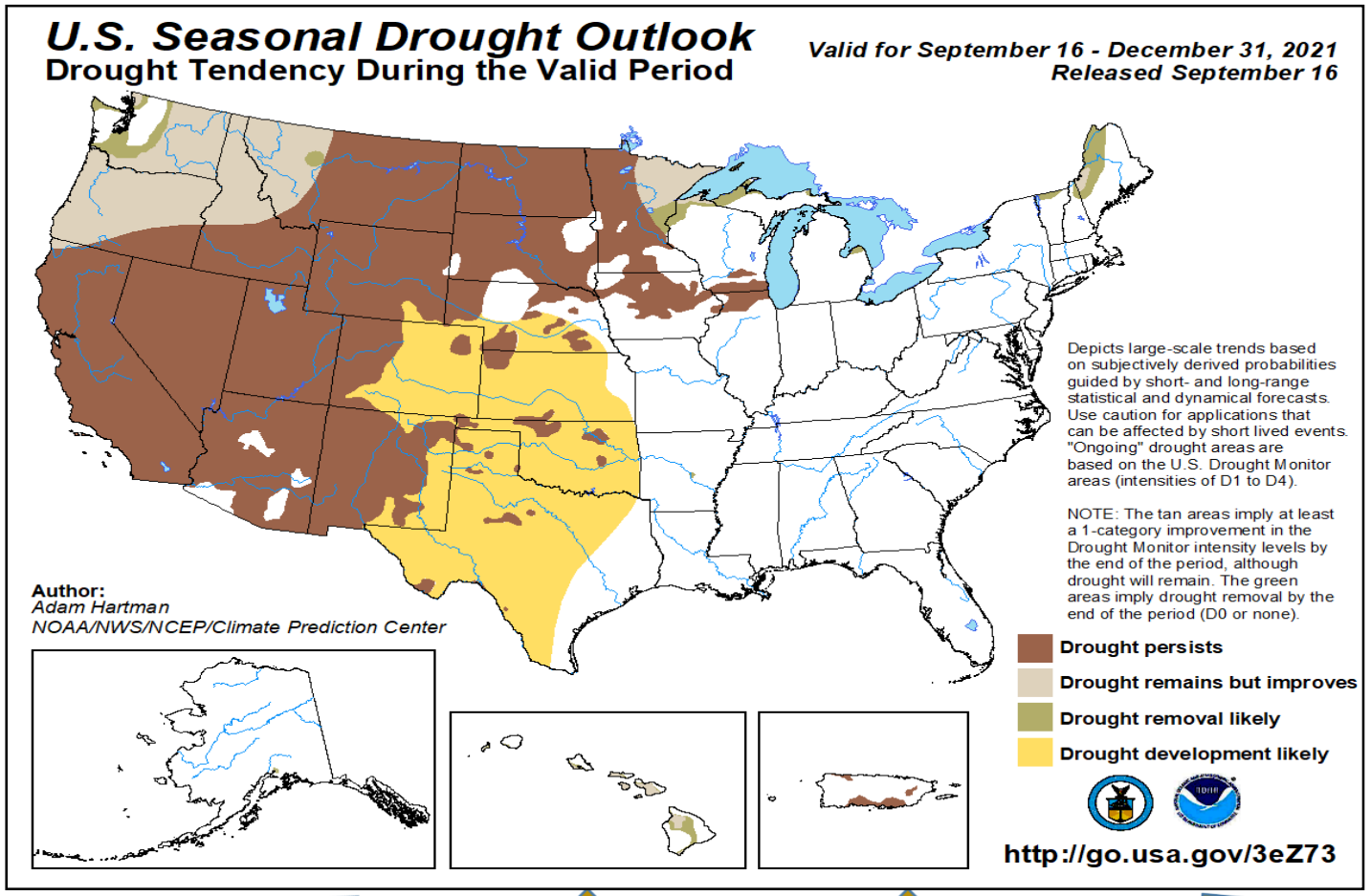


http://go.usa.gov/3eZ73

Drought Outlook Production: Start with Current DM Conditions



Drought Forecasting: Many Different Tools



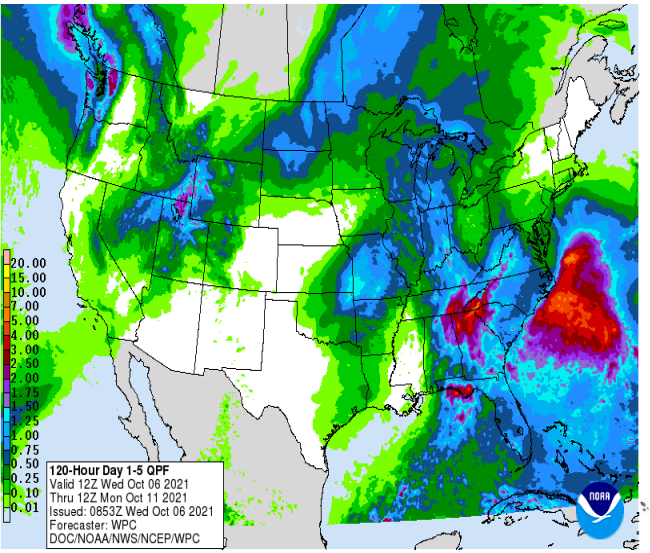
Start with latest U.S. Drought Monitor D1+ areas

Short-Term Forecasts: (less than 1-Month)

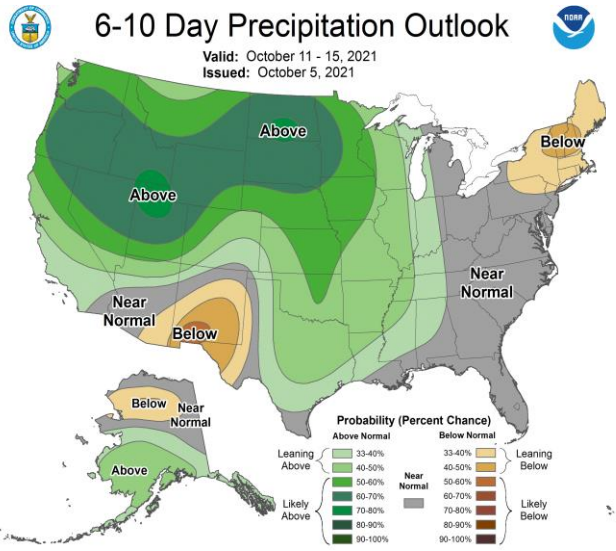
Long-Range Forecasts: (1- to 3-Months)

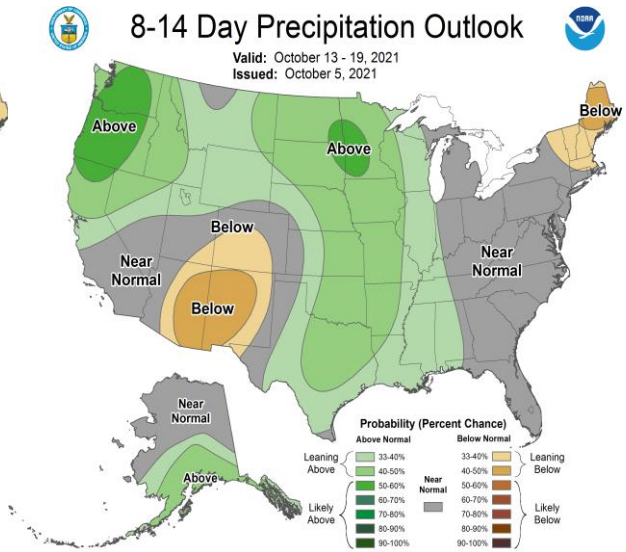
Climatology (Wet or Dry)

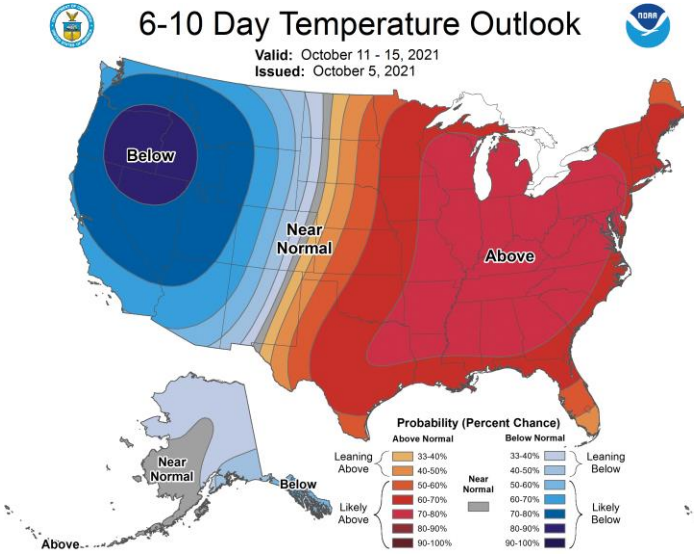
Primary Drought Outlook Inputs – Short Term

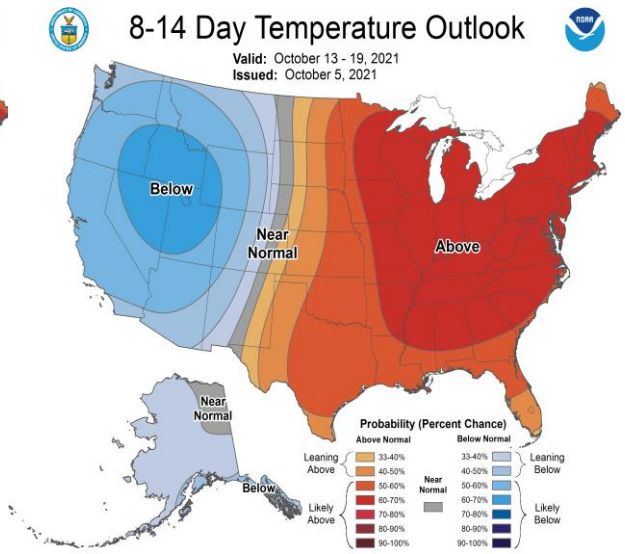


WPC 5-day Precipitation

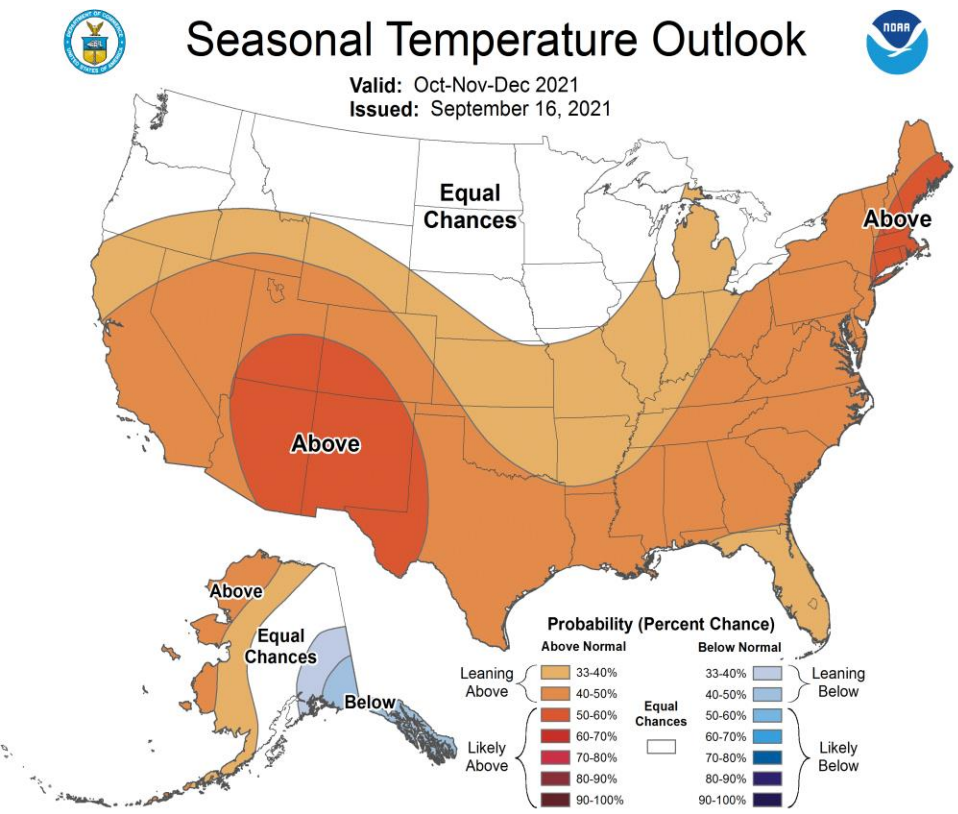


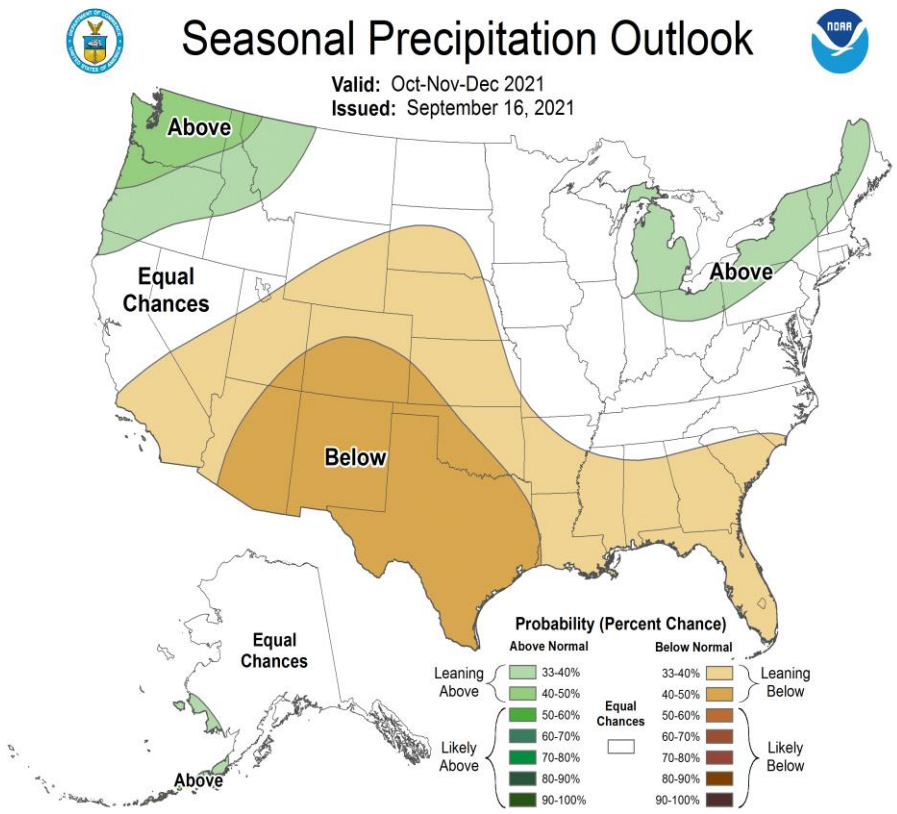






Primary Drought Outlook Inputs – Long Term

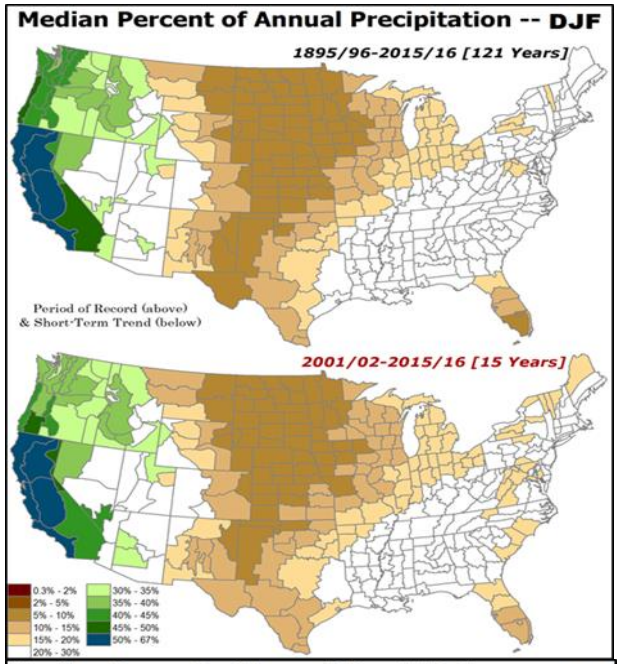




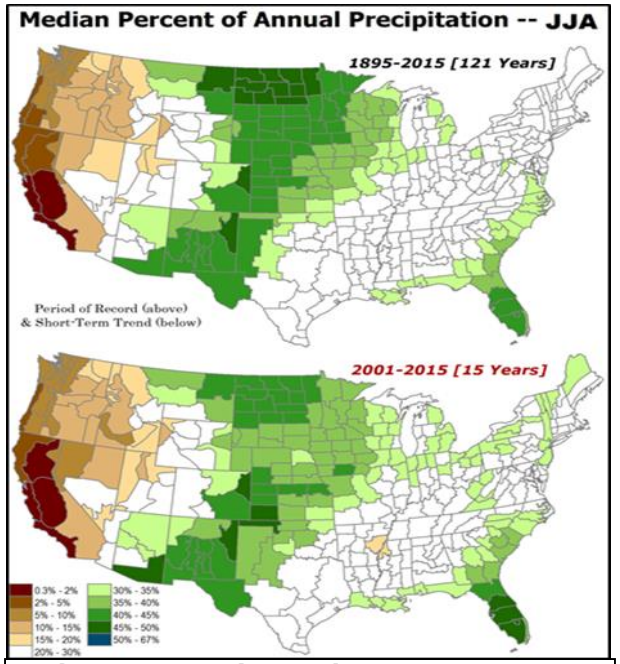
- Dynamical Models (North American Multi-Model Ensemble & International Multi-Model Ensemble)
- ENSO Composites
- Decadal Trends

Primary Drought Outlook Input: Climatology

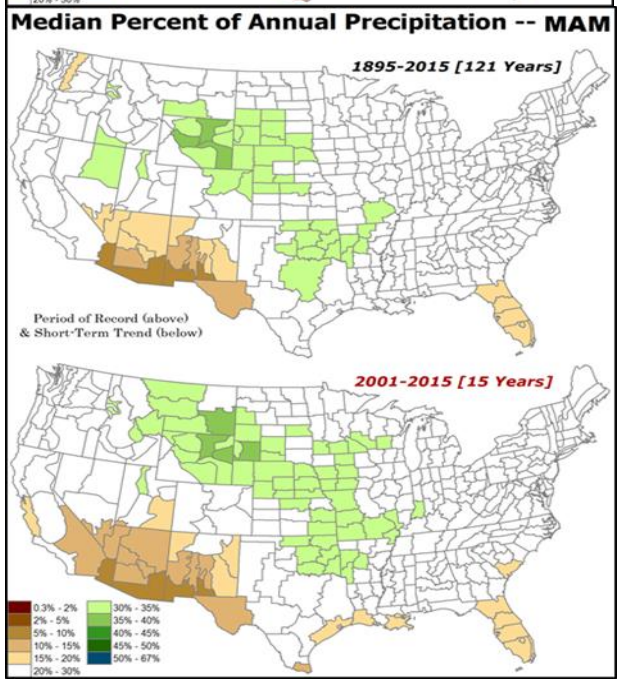
Winter
DJF



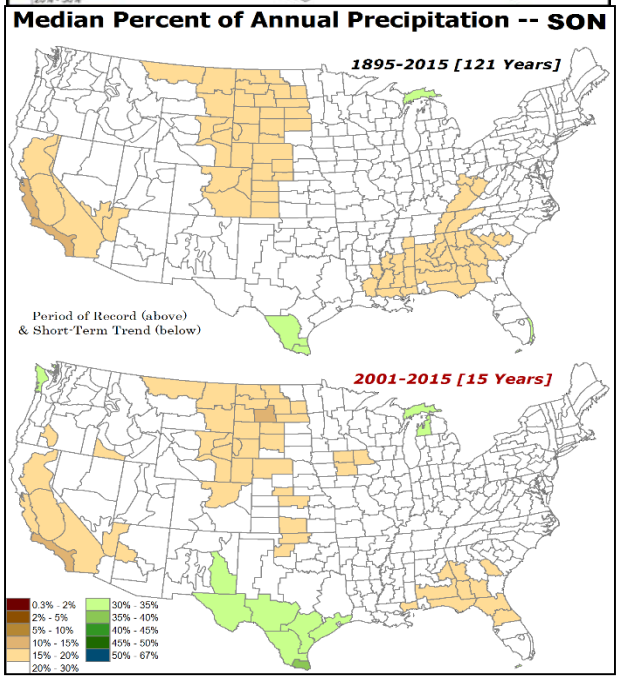
Summer
JJA



Spring
MAM



Fall
SON

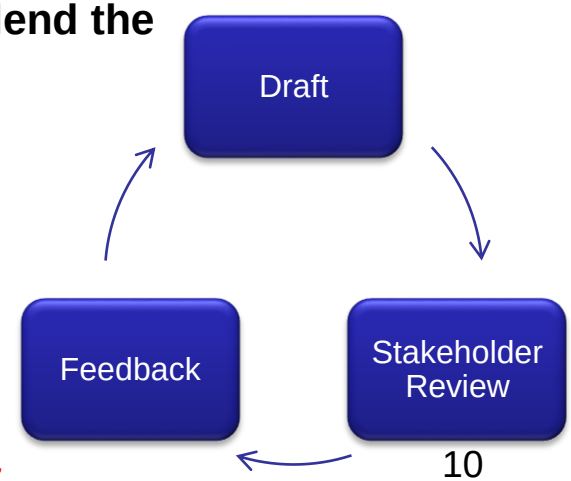


Drought Outlook Production

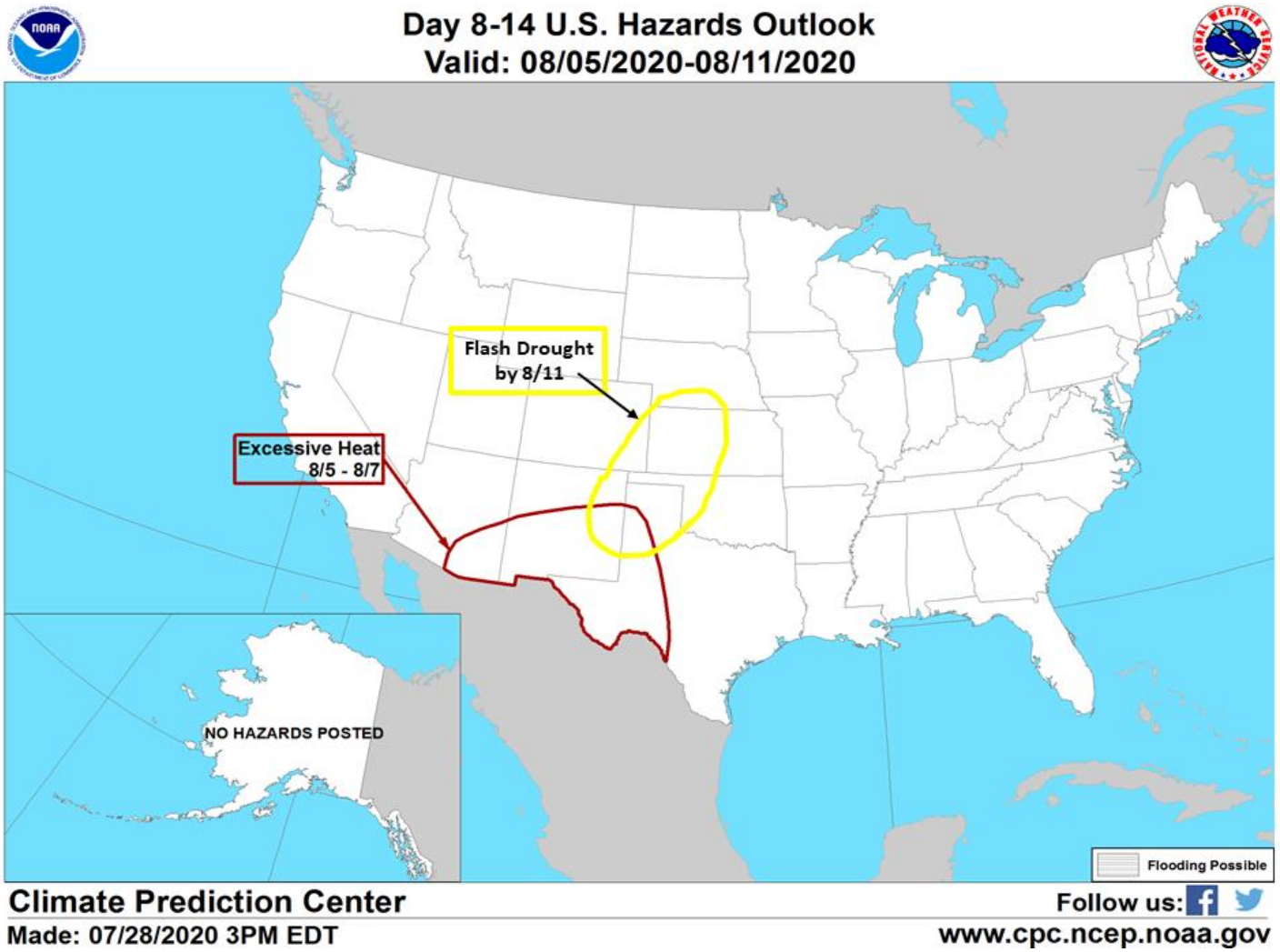
Seasonal Drought Outlook (SDO): Produced in conjunction with the 1- & 3-month [LLFs] temperature and precipitation outlooks (released on third Thursday of month);

Monthly Drought Outlook (MDO): Produced in conjunction with the updated 1-month [LLFs] temperature & precipitation outlooks (released on the last day of the month);

- ✓ **Most recent Drought Monitor is starting point for the Drought Outlooks.**
- ✓ **Drought Outlook forecaster consults with extended range (Week 2), Week 3-4, and Long-Lead (monthly and seasonal) forecasters and guidance to ensure continuity and consistency between the products. This is currently done *subjectively* by the forecaster, and the process might be improved by making new objective tools that blend the extended-range and long-lead tools (GIS overlays).**
- ✓ **Forecaster sends draft forecast to stakeholders for feedback (Sanity Checks, Monthly Drought Briefing). Typically, several stakeholders will request changes to the forecast over the 2-3 day process.**
- ✓ ***Observations (model forecasts, ENSO composites, and climatology) are foundation for a more accurate Drought Outlook***



Flash Drought on CPC's Week-2 Hazards



goal to implement for next growing season

Motivation for Week-2 Hazards: Flash Drought

- Apply tools and methodology used for development forecasts in the MDO to the Week-2 hazards to identify areas of flash drought, when conditions warrant
- Take advantage of skillful temperature forecasts
- Improve communication of flash drought risk later in the month
- CPC's major role in Decision Support Services (DSS): Week-2 hazards (Daily briefing, HQ briefing, and Email to Regions when necessary)
- Feedback from stakeholders

Inputs to Flash Drought Tool

- Initial conditions: D0 (abnormal dryness) in the current U.S. Drought Monitor and soil moisture below the 30th percentile

- Week-1: ***NDFD positive temperature anomalies*** and 7-day Weather Prediction Center (WPC) negative precipitation anomalies

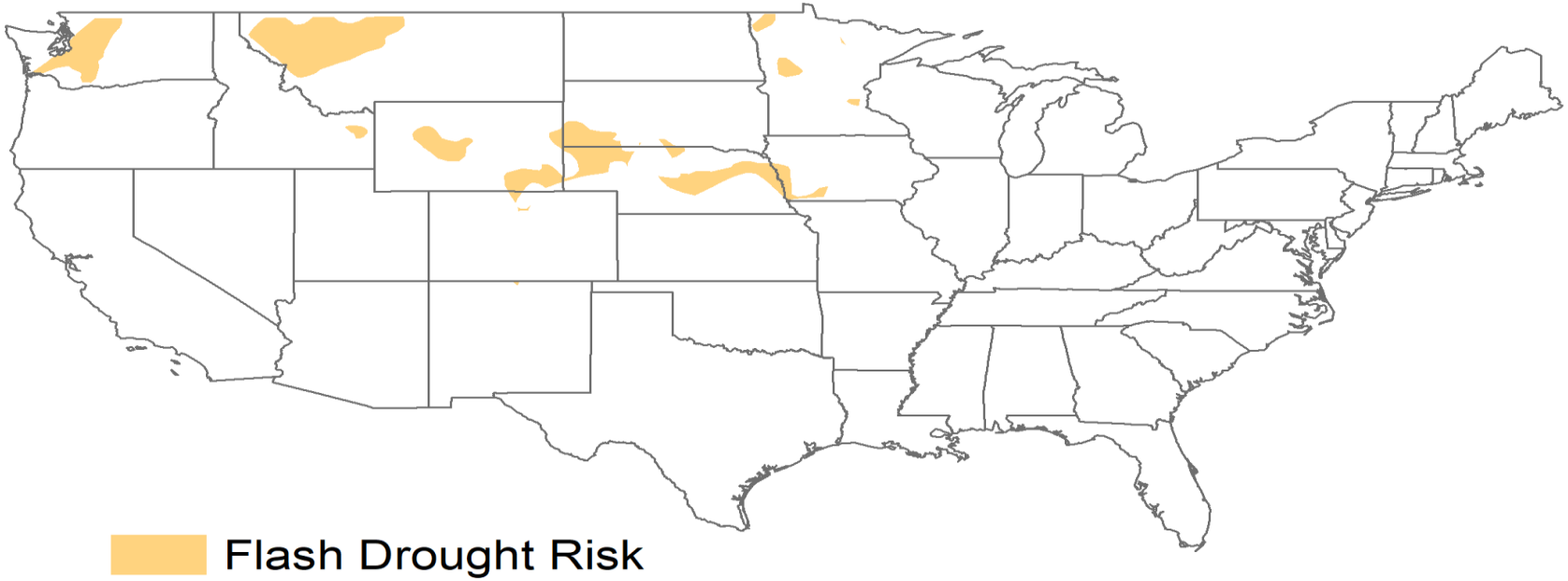
- Week-2: ***CPC's 8-14 day temperature (elevated probabilities of above)*** and precipitation (elevated probabilities of below) outlooks

Flash Drought Tool Guidance

Experimental

Flash Drought Risk

Released: July 1, 2021
Valid: July 9 - 15, 2021



THANK YOU!

Any Questions, contact:

Brad.Pugh@noaa.gov

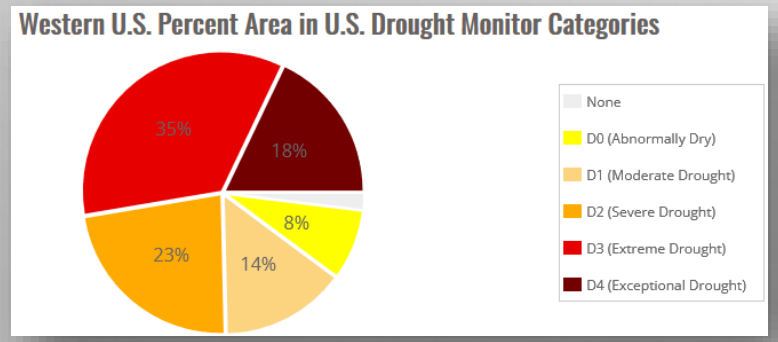
Western Drought Update

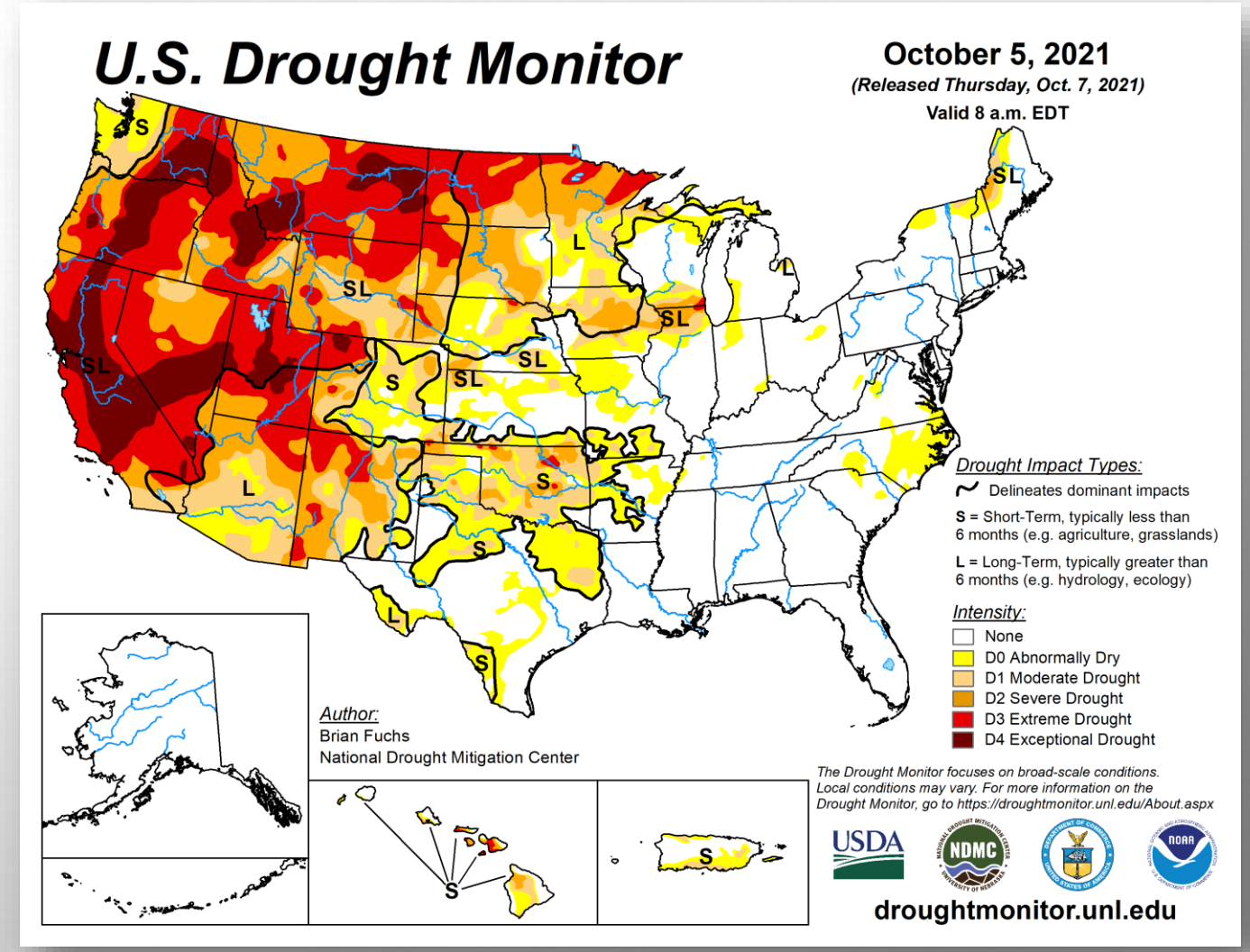
USDA Fall Data Users' Meeting
Climate Information for Informed Decision Making
Day 2 – Session A
October 14, 2021

David B. Simeral
Associate Research Scientist, Climatology
U.S. Drought Monitor Author
Desert Research Institute | Western Regional Climate Center
Reno, Nevada

CURRENT DROUGHT CONDITIONS

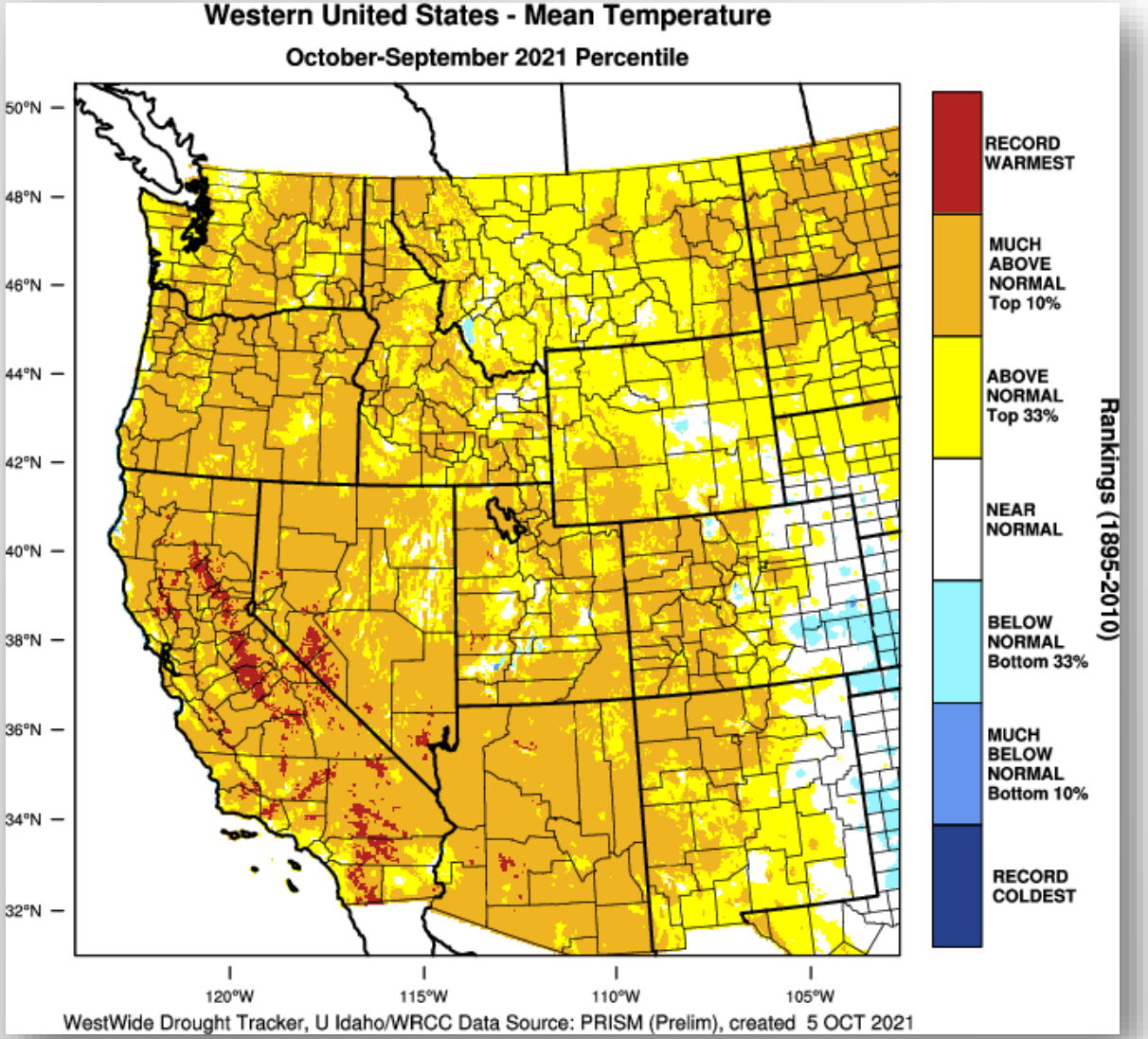
- **Continental U.S.** – 47% in drought with 23% in D3-D4.
- **Western U.S.** – 90% in drought (D1-D4) with 53% in D3-D4.
  - The 7/27/21 map marked the highest percent area in drought for the Western U.S. since the U.S. Drought Monitor began in 2000.
  - 7/20/21 map had the highest percent area in D3-D4 drought for the Western U.S.
- **Impacts** – agricultural, ecosystem, energy, water restrictions, low streamflows/reservoirs, elevated fire danger/wildfires, recreation.
- **Improvements** - significant improvement in drought-related conditions in the Four Corners states during the summer of 2021. Record to near record-breaking monsoon precipitation in area of Arizona & New Mexico.

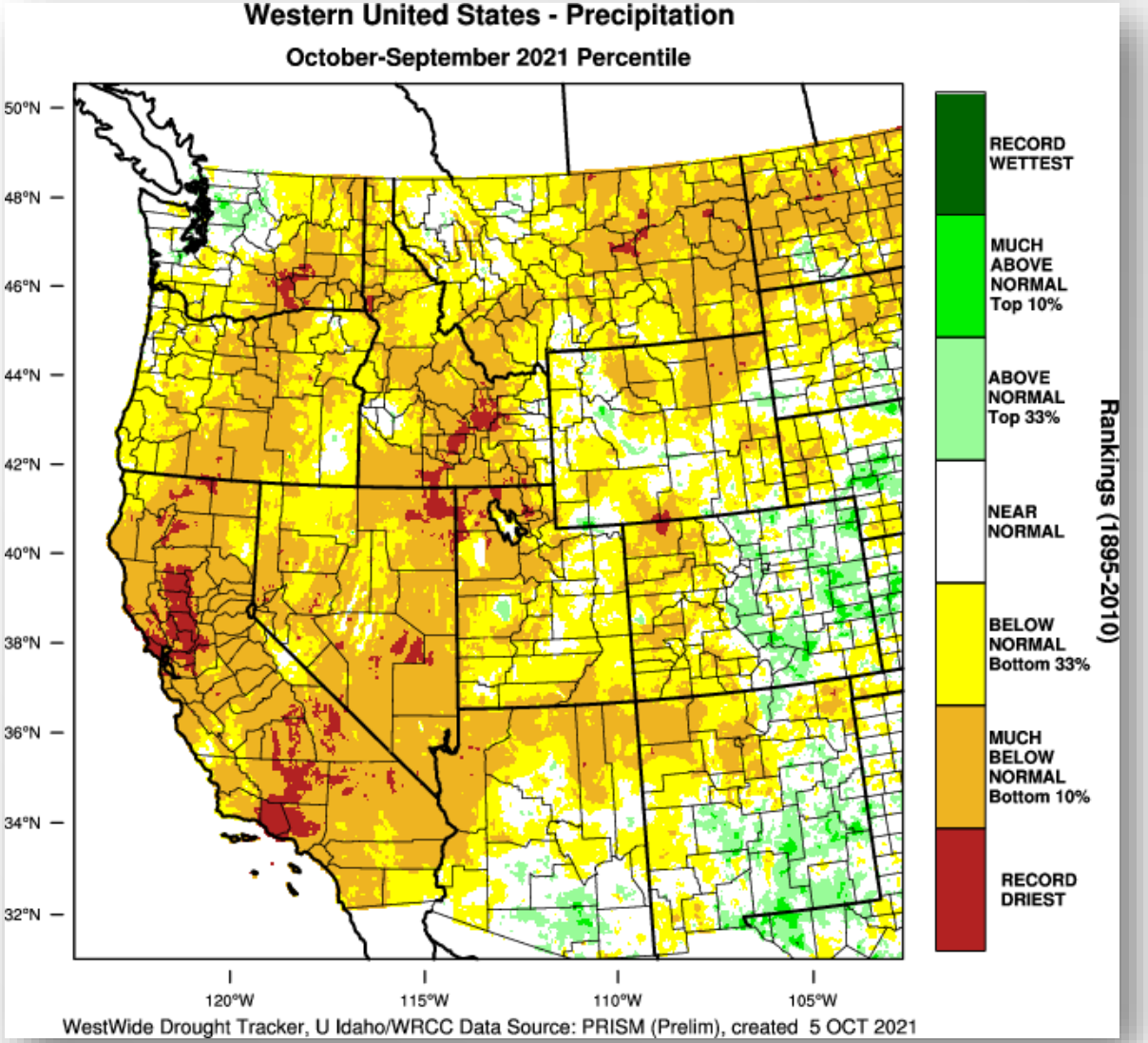




Data source: https://droughtmonitor.unl.edu/

TEMPERATURE & PRECIPITATION
PAST 12 MONTHS

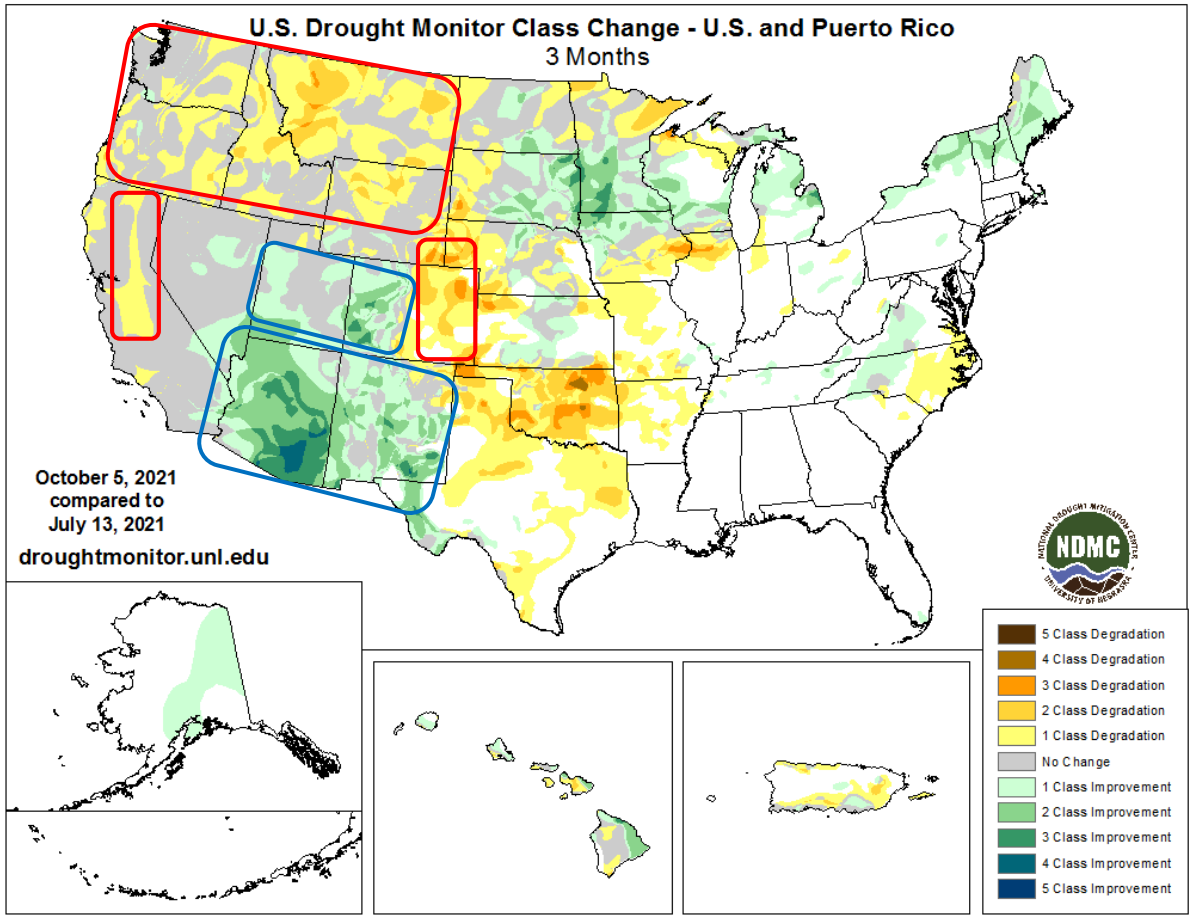




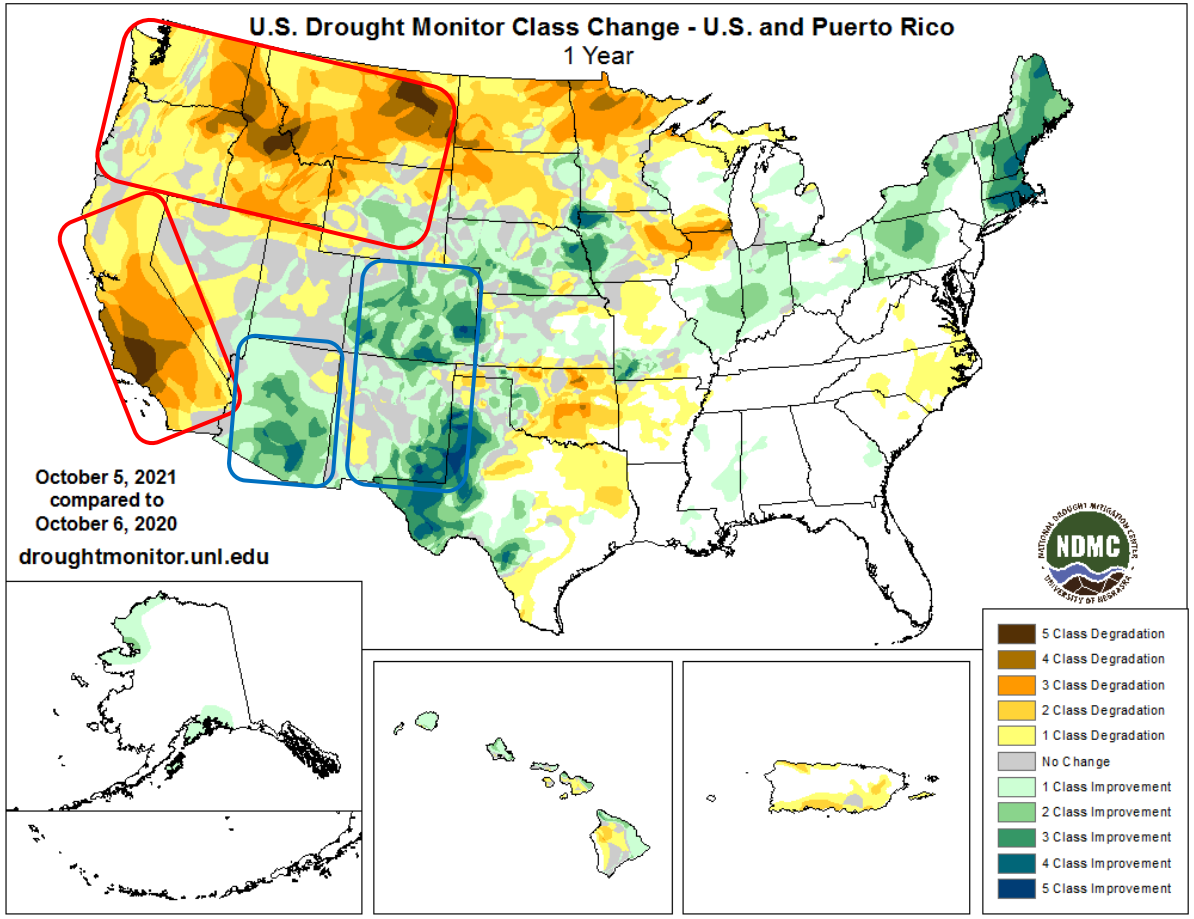
Data source: https://wrcc.dri.edu/wwdt/

DROUGHT CHANGE MAPS

Past 12 Weeks



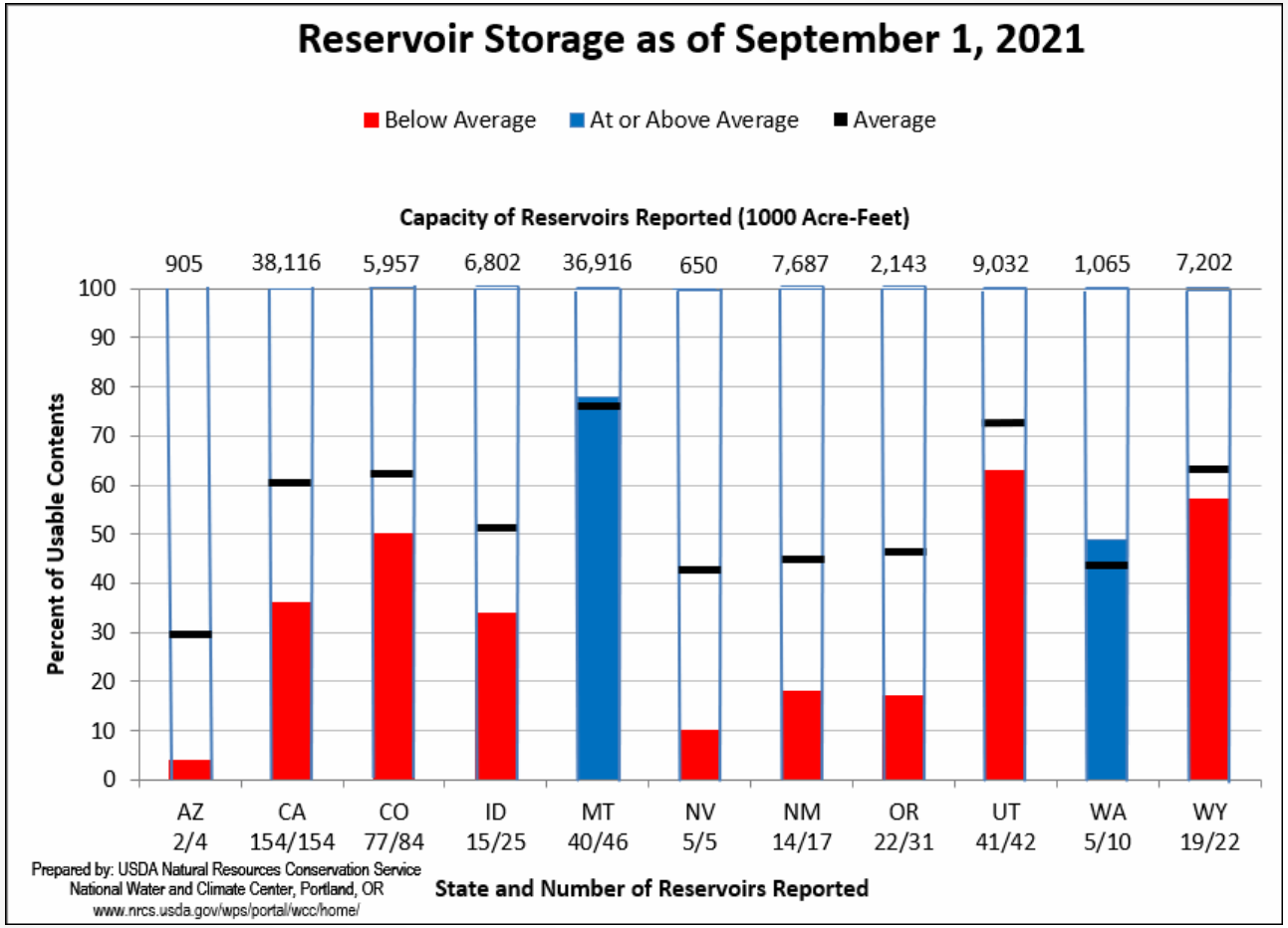
Past 12 Months



Data source: https://droughtmonitor.unl.edu/Maps/ChangeMaps.aspx

RESERVOIR STORAGE

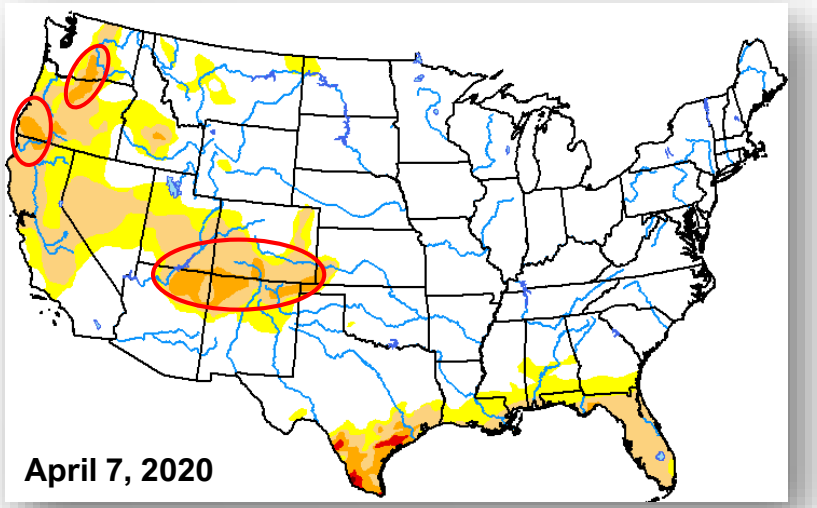
- **Statewide** - reservoir storage is below normal across most of the West.
- **Colorado River Basin** - two largest reservoirs in the West are at historic or near-historic low levels.
  - **Lake Mead** - 35% full (record low level; serves ~20 million people) -
  - **Lake Powell** – 30% full (~30 feet above critical threshold to protect power generation)
  - **Colorado River Basin Total System** – 38% full (48% same time last year)
  - **Tier 1 Shortage** - ~30% reduction delivered by the Central Arizona Project (CAP) with agricultural water users in Maricopa, Pinal, & Pima counties targeted for substantial cuts.
- **California** - two largest reservoirs are well below historic averages.
  - **Lake Shasta** - 39% of historical average (23% full)
  - **Lake Oroville** – 36% of historical average (22% full)
- **New Mexico** - Elephant Butte (Rio Grande Basin) is currently 6% full.

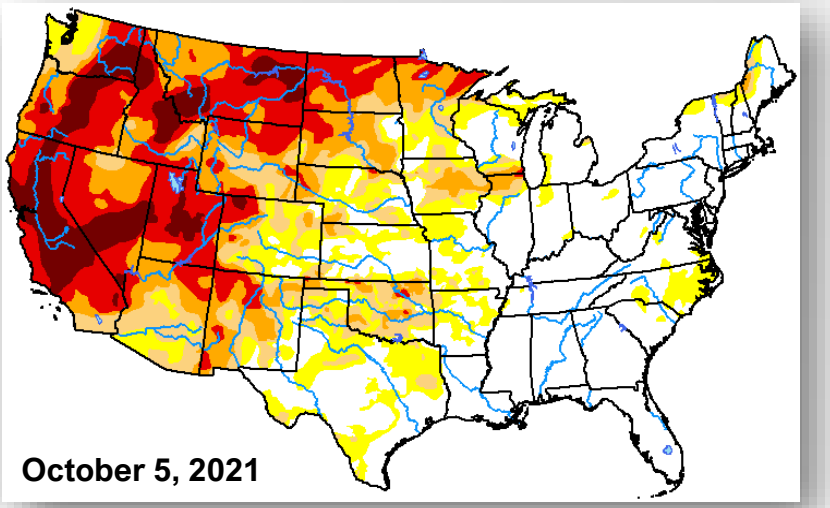


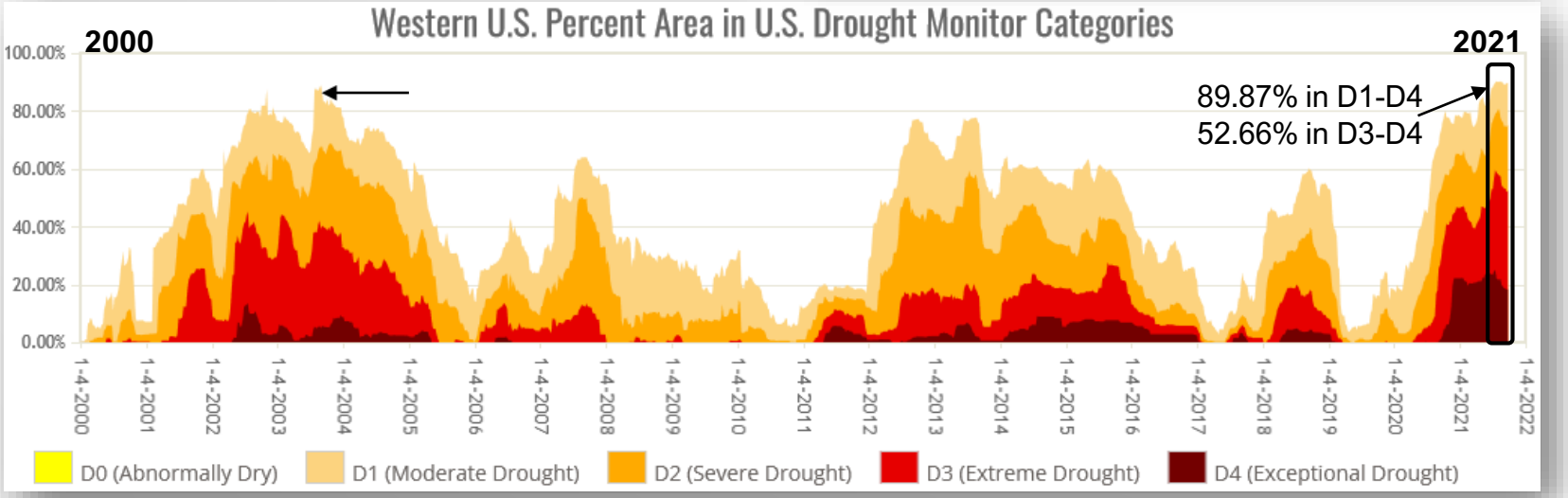
Data sources:
https://www.wcc.nrcs.usda.gov/wsf/wsf-reservoir.html
https://cdec.water.ca.gov/cgi-progs/products/rescond.pdf
https://www.usbr.gov/lc/region/g4000/weekly.pdf

DROUGHT DEVELOPMENT

- **Western U.S.** - much of the West drought-free coming into spring 2020.
- **Southwest** – lingering long-term drought moving into 2020. Drought conditions worsened in the summer 2020. Contributing factors:
  - Poor monsoon season (driest Jun-Sept period on record in the Four Corners states).
  - Record heat during summer 2020 & high rates of evaporative demand.
  - Snow drought & early melt out.
- **California & Great Basin** - expansion and intensification during spring/summer 2021. Contributing factors:
  - Snow drought (back-to-back years), early melt out, & poor runoff.
  - Anomalously warm temperatures & high evaporative demand.
- **Pacific Northwest** - intensified during the spring/early summer 2021. Contributing factors:
  - Record heat & high rates of evaporative demand.
  - Below-normal spring precipitation.
  - Early snowpack melt out.



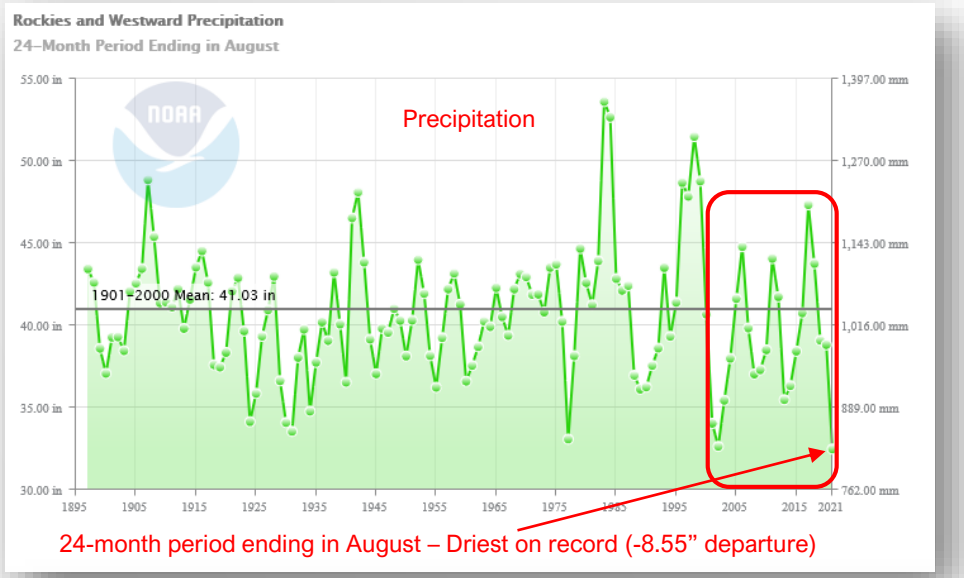


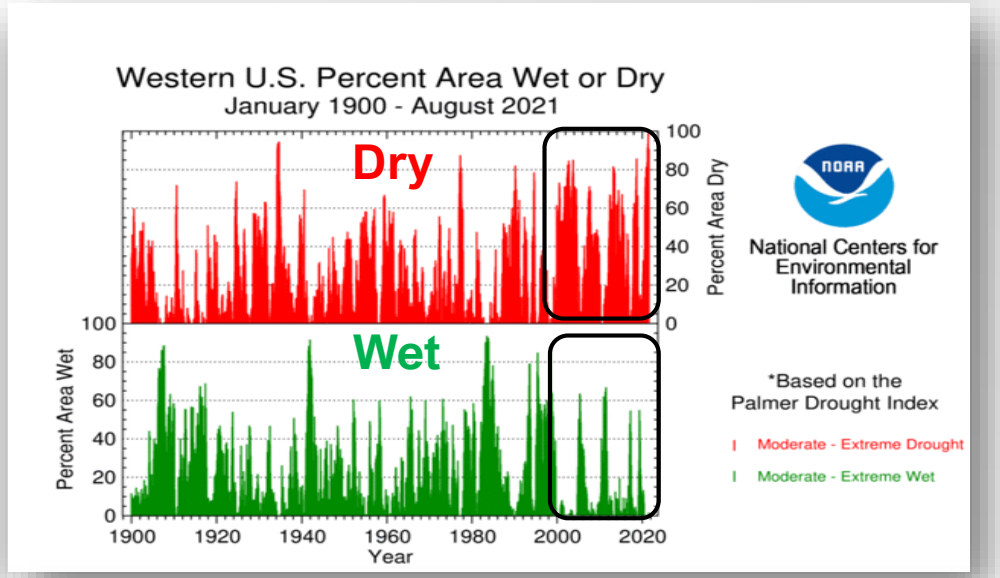


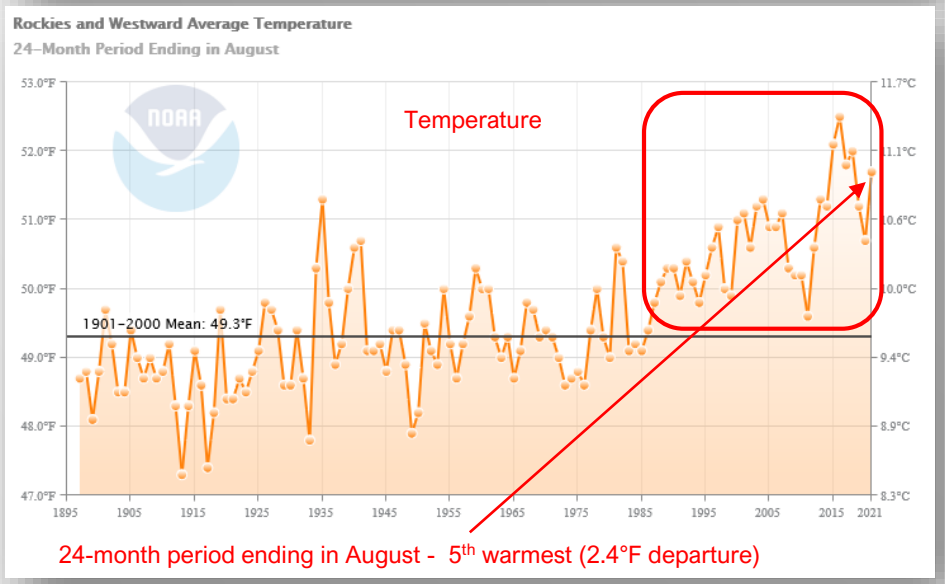
Data source: https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx

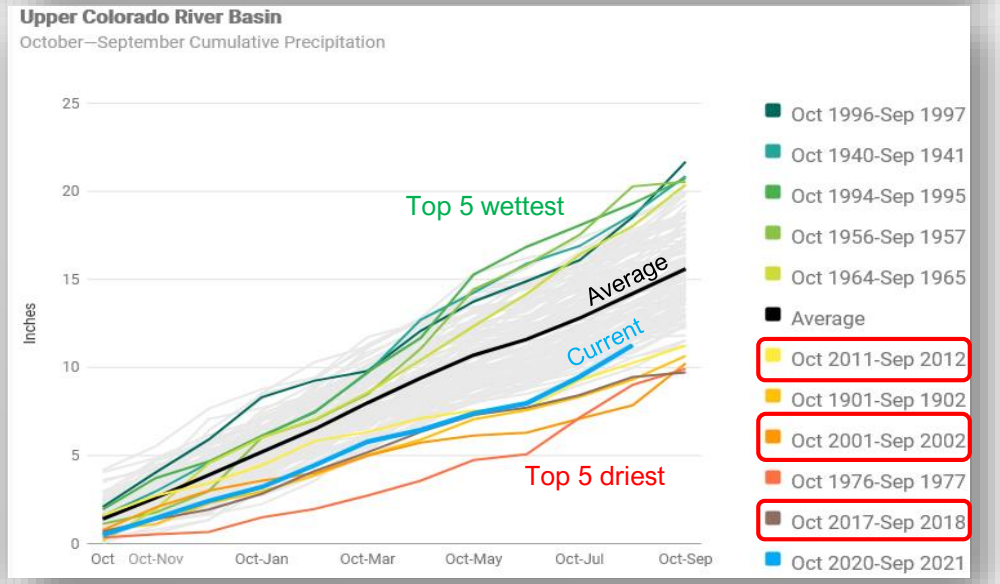
DROUGHT IN THE WEST - BIG PICTURE

- **Drought** - current situation sits within the backdrop of approximately two decades of drought in areas of the West.
- **Palmer Drought Index** - the percent area of the West in moderate to extreme drought set a 122-record in 2021.
- **Average temperature** - consistently above normal since the mid-1990's.
- **Precipitation** - below normal precipitation during the 2000's with intermittent wet years.
- **Snowpack** – earlier spring melt & reduced snowpack (snow drought).







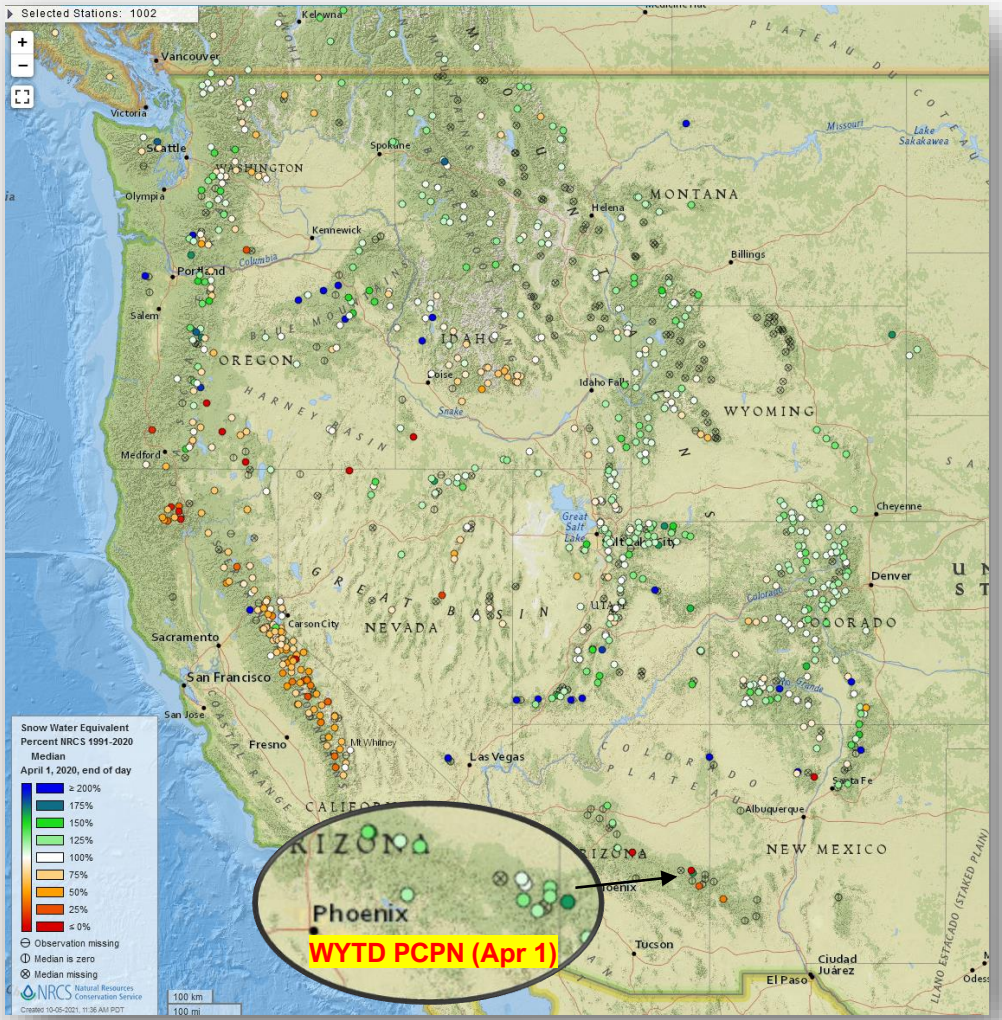


Data Sources:
https://www.ncdc.noaa.gov/cag/regional/time-series
https://www.ncdc.noaa.gov/sotc/drought/202108
https://www.ncdc.noaa.gov/cag/regional/haywood

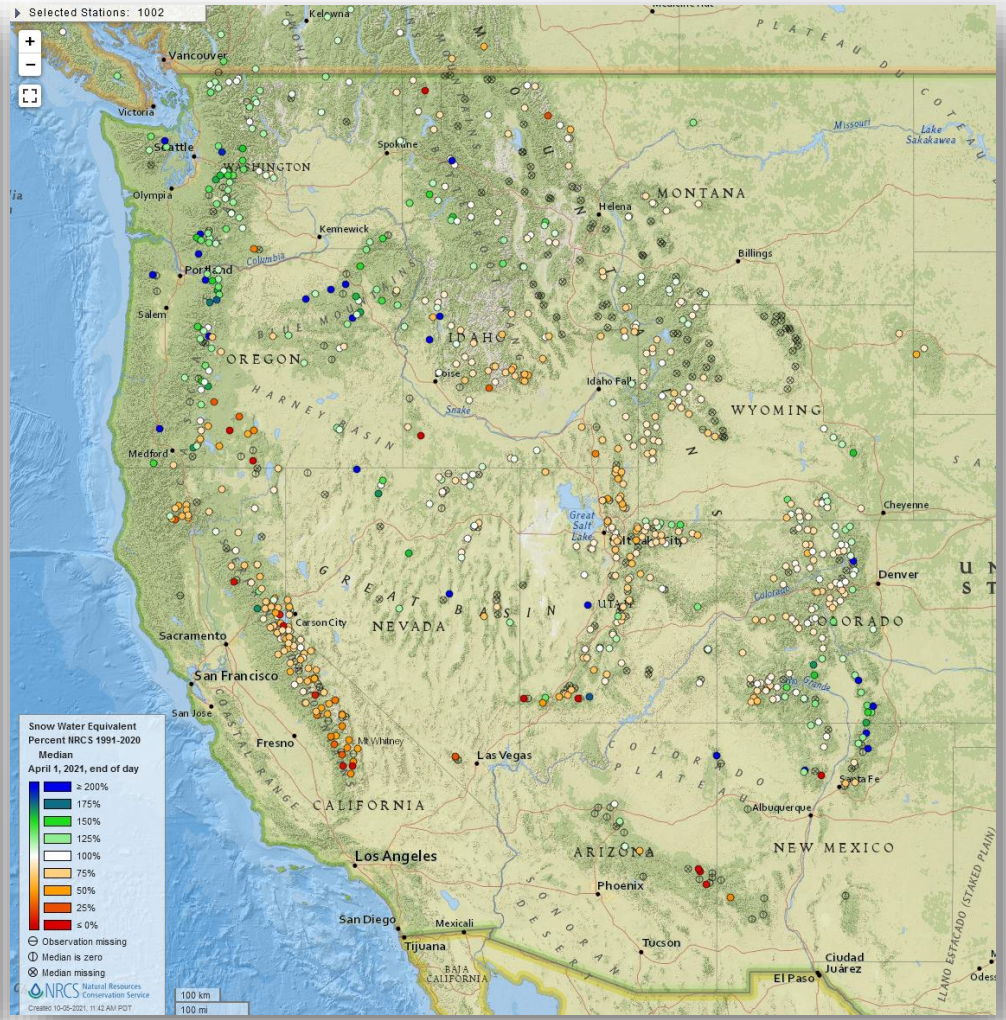
SNOWPACK & SNOW DROUGHT

- **Defined** – below average snowpack at a point in time—typically April 1.
- **Warm snow drought** – lack of snow accumulation despite near-normal precipitation, caused by warm temperatures & precipitation falling as rain rather than snow or unusually early snowmelt.
- **Dry snow drought** – below-normal cold season precipitation.

April 1, 2020 – SWE (ENSO Status: Neutral)



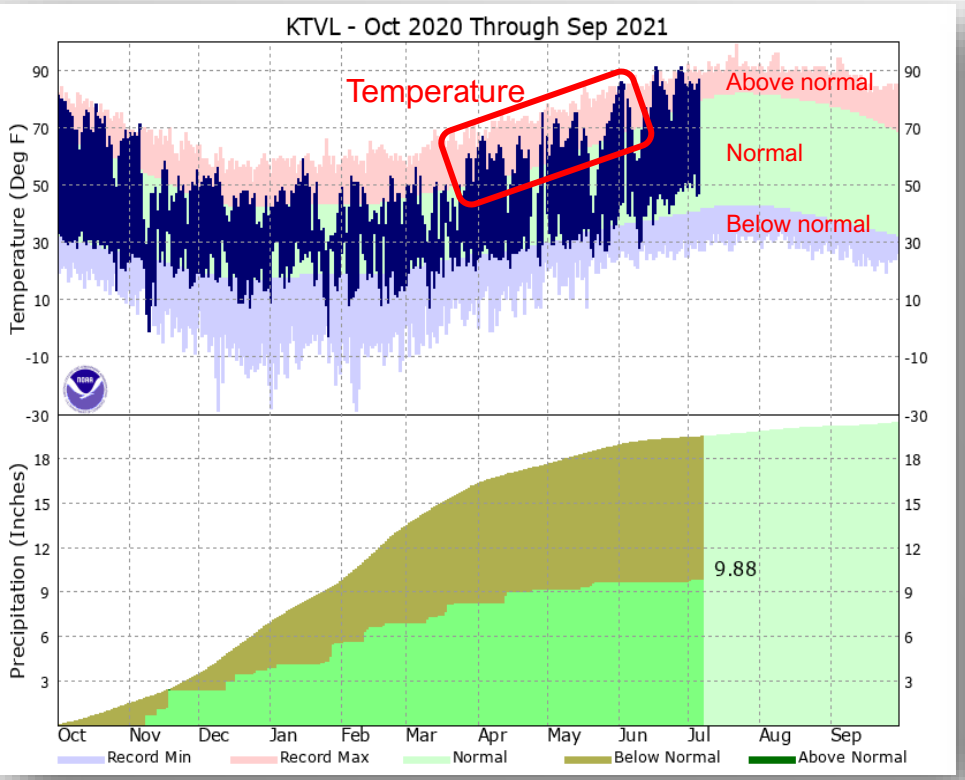
April 1, 2021 – SWE (ENSO Status: La Niña)



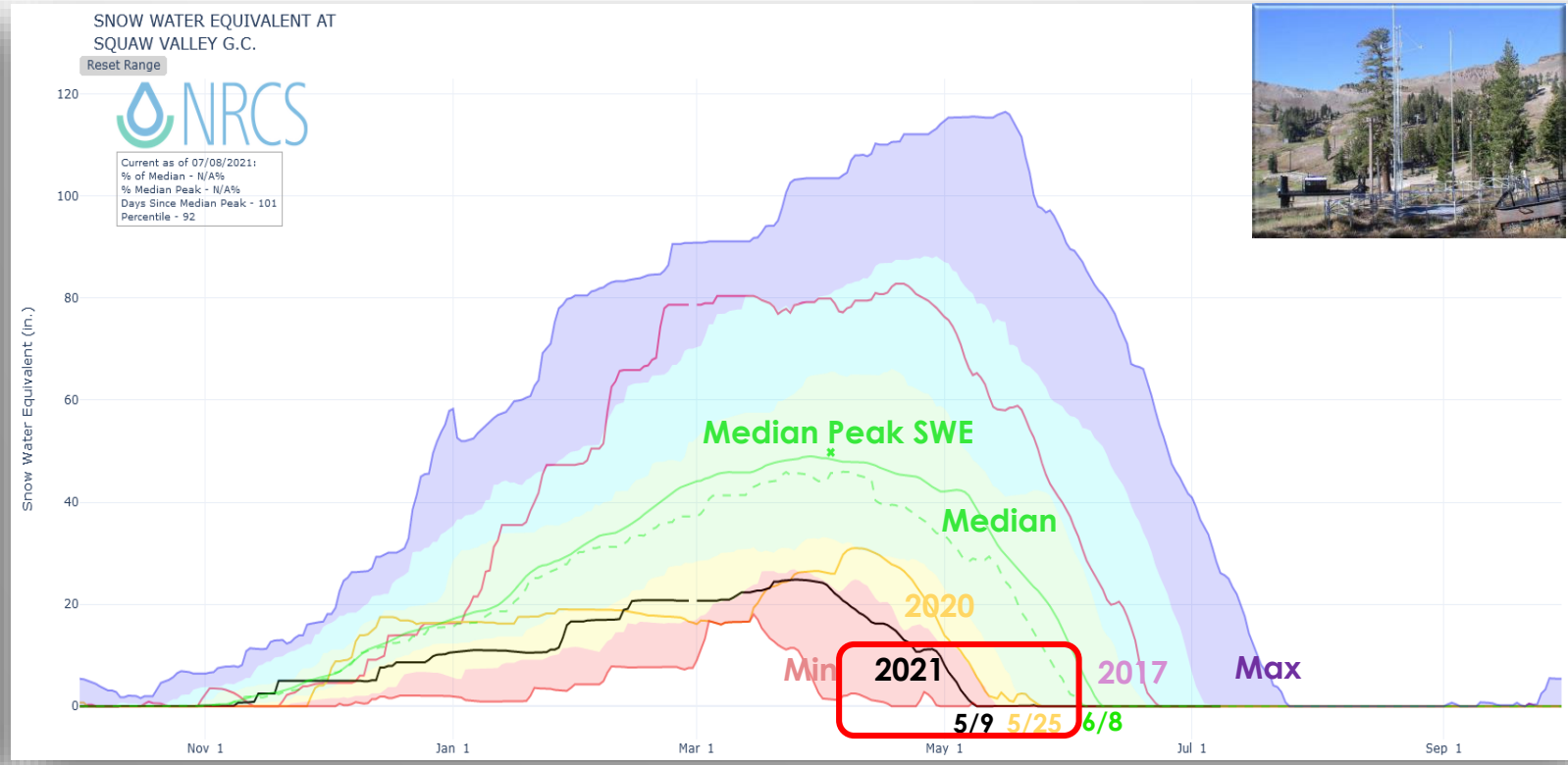
Data Sources:
https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/predefinedMaps/
https://www.drought.gov/topics/snow-drought

SNOWPACK- EARLY MELT
SIERRA NEVADA RANGE

South Lake Tahoe AP, California (6,314 ft)

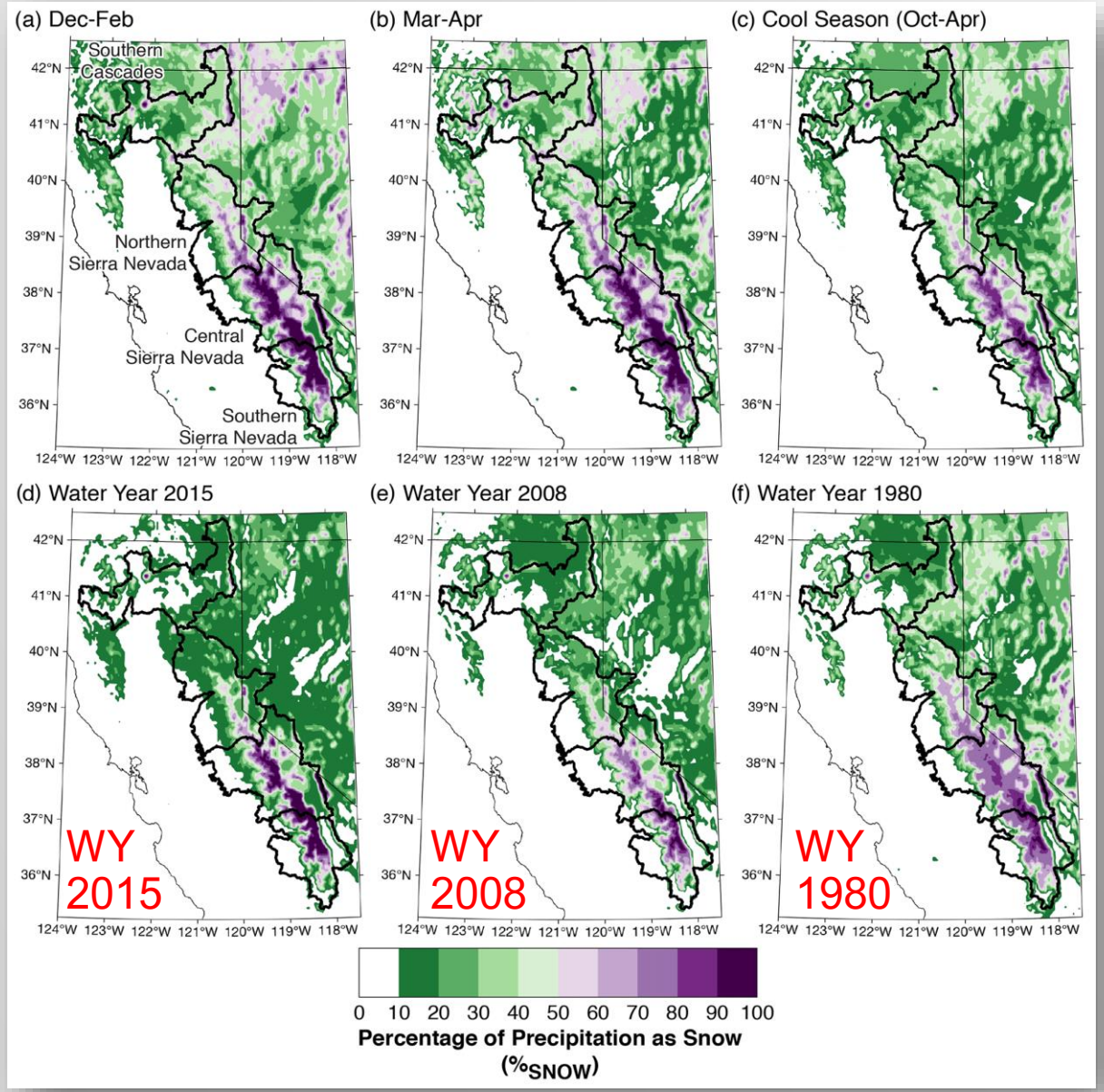


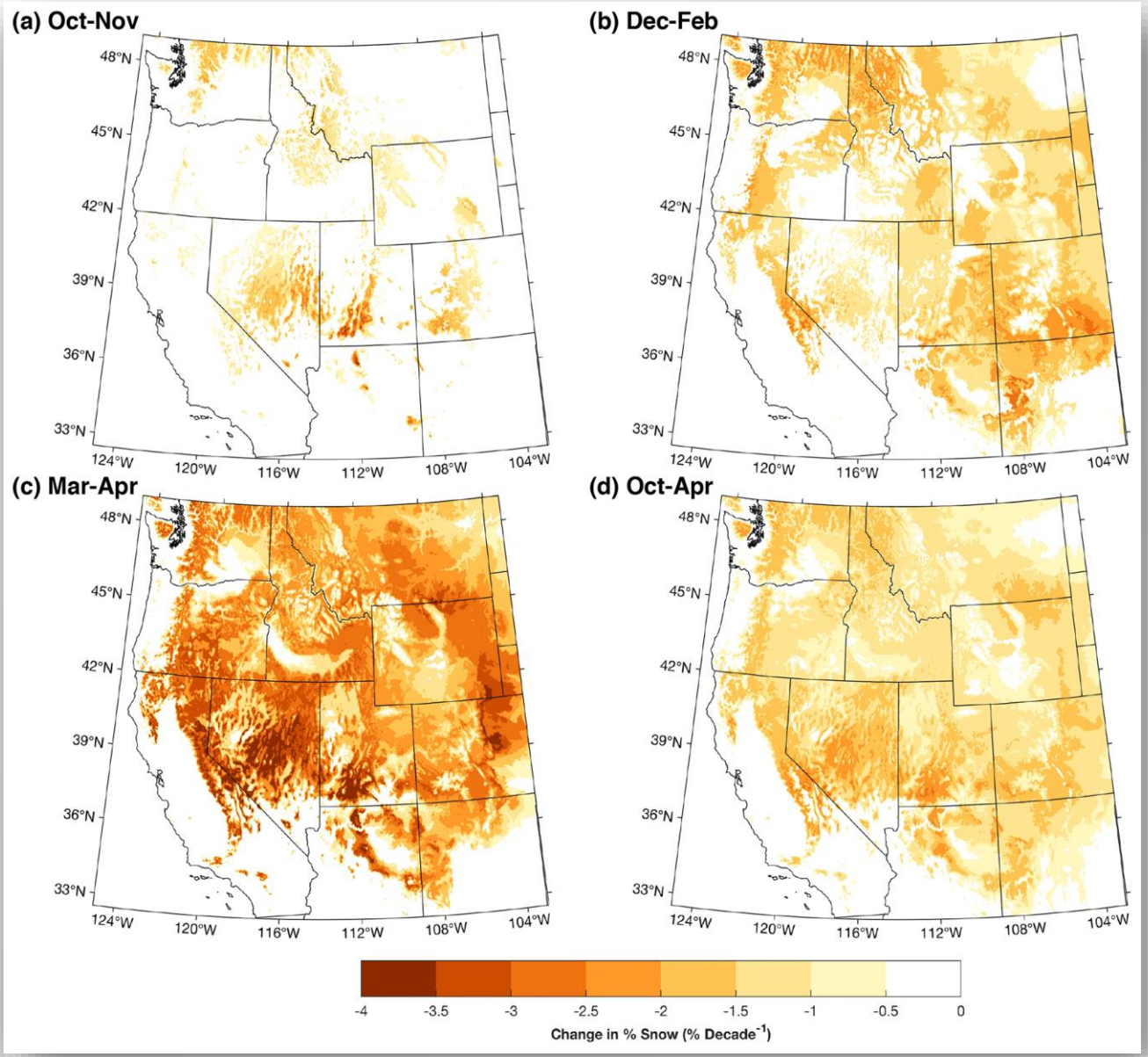
Squaw Valley, California SNOTEL (8,013 ft)



Data Source: https://www.wcc.nrcs.usda.gov/snow/snow_map.html
Data Source: https://www.weather.gov/rev/

SNOW DROUGHT



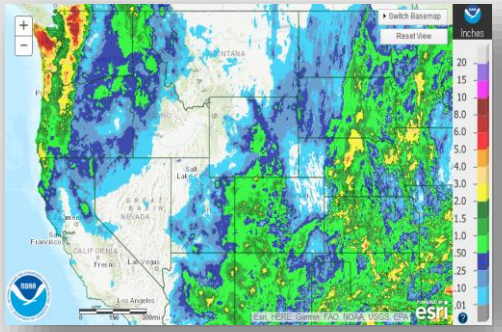


Data Source: Lynn, E., Cuthbertson, A., He, M., Vasquez, J. P., Anderson, M. L., Coombe, P., Abatzoglou, J. T., and Hatchett, B. J.: Technical note: Precipitation-phase partitioning at landscape scales to regional scales, Hydrol. Earth Syst. Sci., 24, 5317–5328, https://doi.org/10.5194/hess-24-5317-2020, 2020.

DROUGHT MONITORING CHALLENGES
CURRENT DROUGHT

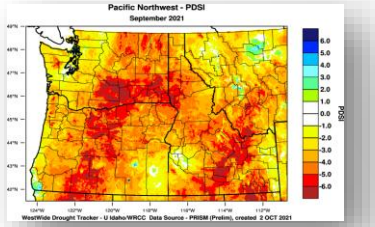
- **Snow drought**
- **Rapid drought expansion and intensification** during Spring 2021.
  - Early snowpack melt out.
  - Models underpredicting spring runoff.
  - Understanding of how dry the soils were moving through the winter/spring months.
  - Impact of the antecedent conditions (record-breaking heat in the summer of 2020) moving into the 2020-21 cool season.
- **Short-term vs long-term drought** and the impact of the 2021 monsoon season precipitation.
- **First-ever** Colorado River System water shortage declaration.

Drought Monitoring Data Sources

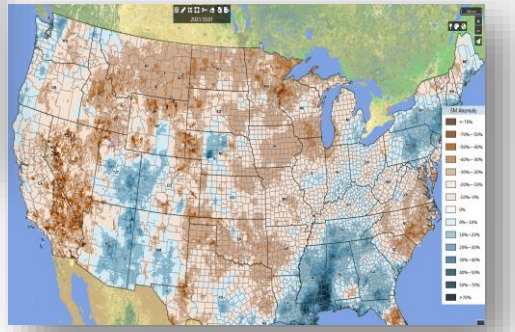


https://water.weather.gov/precip

https://wrcc.dri.edu/anom/

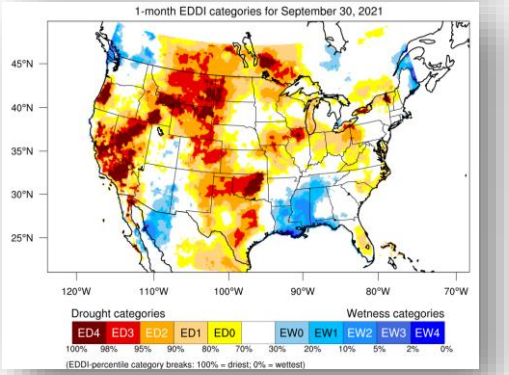


https://wrcc.dri.edu/wwdt/

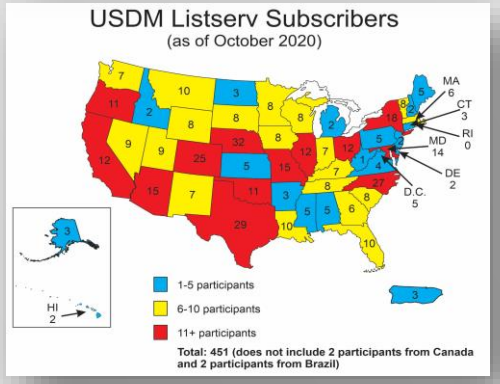


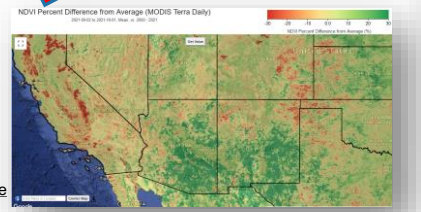
https://nassgeo.csiss.gmu.edu/CropCASMA/

https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/predefinedMaps/

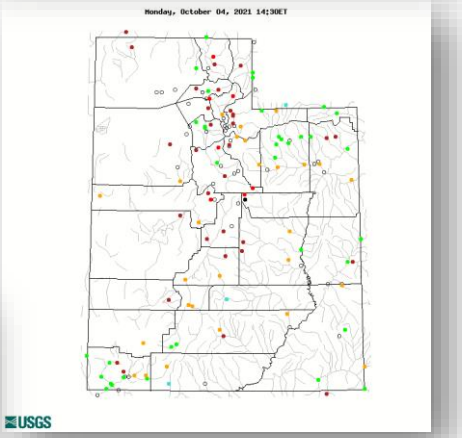


https://psl.noaa.gov/eddi/#current_conditions

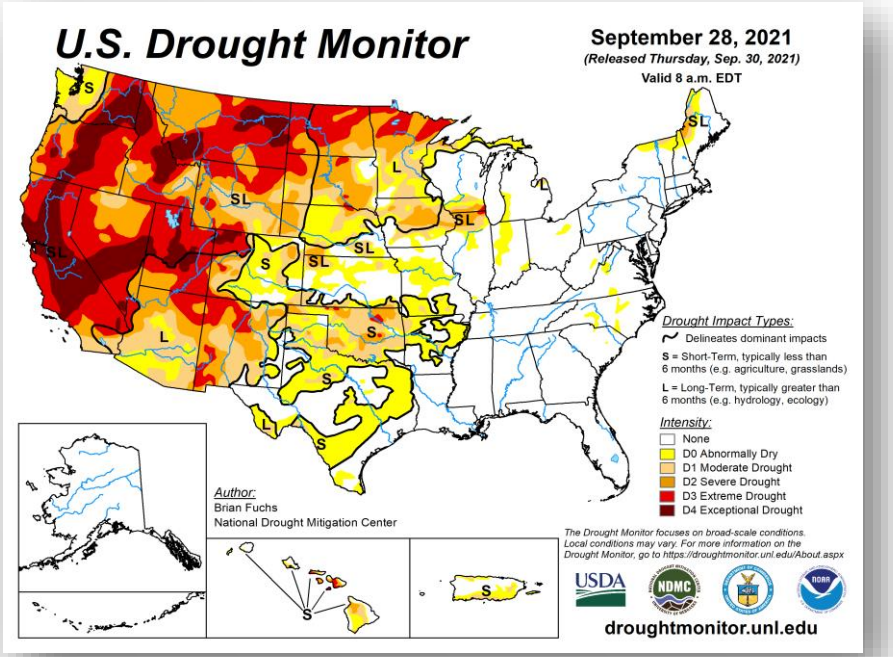




https://app.climateengine.org/climateEngine



https://waterwatch.usgs.gov/



Indices: SPI/PDSI

Soil Moisture & Evaporative Demand

Precipitation Snowpack

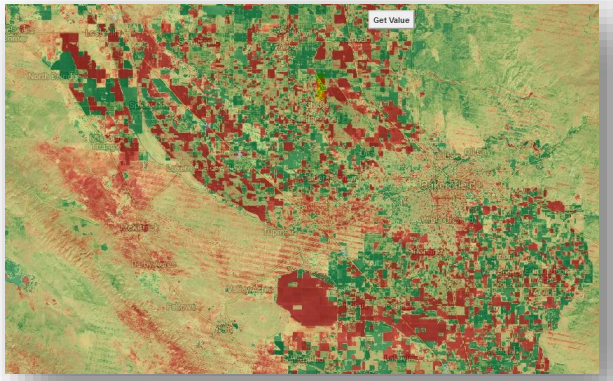
Streamflow Reservoirs

Expert Local Input

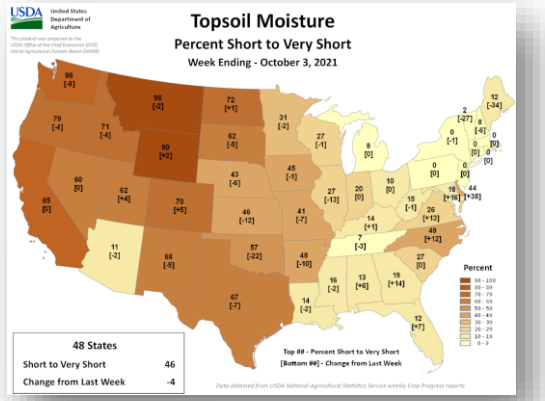
Remote Sensing

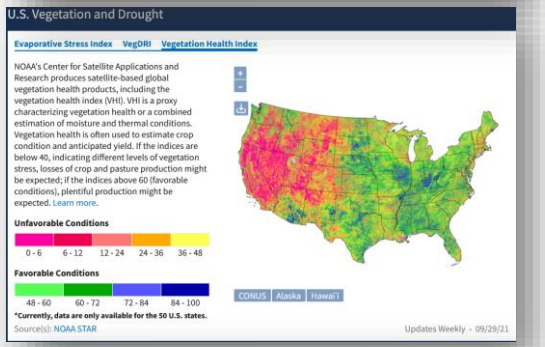
Red fir mortality Northwest of Lake Isabella, Sequoia National Forest.

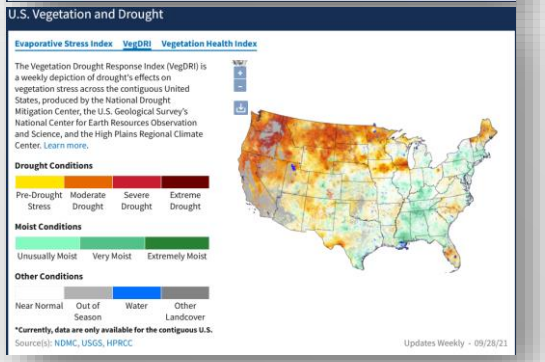
DATA SOURCES WESTERN U.S.



- **Snowpack** – *NRCS SNOTEL, NOAA NOHRSC National Snow Analysis, *California Snow Surveys
- **Temperature** – *WRCC WestWide Drought Tracker, NWS WFO, NOAA NCEI NClimGrid, NCEI Climatological Rankings, Climate Engine (gridMET, PRISM)
- **Precipitation** – *WRCC WestWide Drought Tracker, Climate Engine (gridMET, PRISM), NWS AHPS, state mesonet, CoCoRaHS
- **Evaporative Demand** – *NOAA EDDI
- **Remote Sensing** – USFS Pacific Southwest Region Aerial Detection Surveys, *NDMC QuickDRI, *NDMC VegDRI, *Climate Engine NDVI (Landsat, MODIS), Evaporative Stress Index, Vegetation Health Index







- **Hydrologic** – *NRCS Reservoir Levels, USBR Reservoir levels, *California Department of Water Resources, *Salt River Project (AZ), *USGS Streamflows, *NWS River Forecast Centers products, *NRCS Surface Water Supply Index
- **Soil Moisture** – NOAA NLDAS, NASA Crop-CASMA, NASA SPORT, *NRCS SCAN, state mesonet
- **Impacts** – USDA Agricultural Weather Highlights, *USDA Weekly Weather & Crop Bulletin, USDA NASS Crop Progress & Conditions, NDMC DIR, NDMC CMOR, CoCoRaHS Conditions Monitoring
- **Drought Coordination** – State-level drought coordination teams, NOAA NIDIS Regional DEWS

An asterisk (*) denotes West-specific data product or seasonally-weighted data source.

Data Source: https://www.drought.gov/


Thank You!
Dave.Simeral@dri.edu

The Western Megadrought:

Information and Programs for Future Decision Making

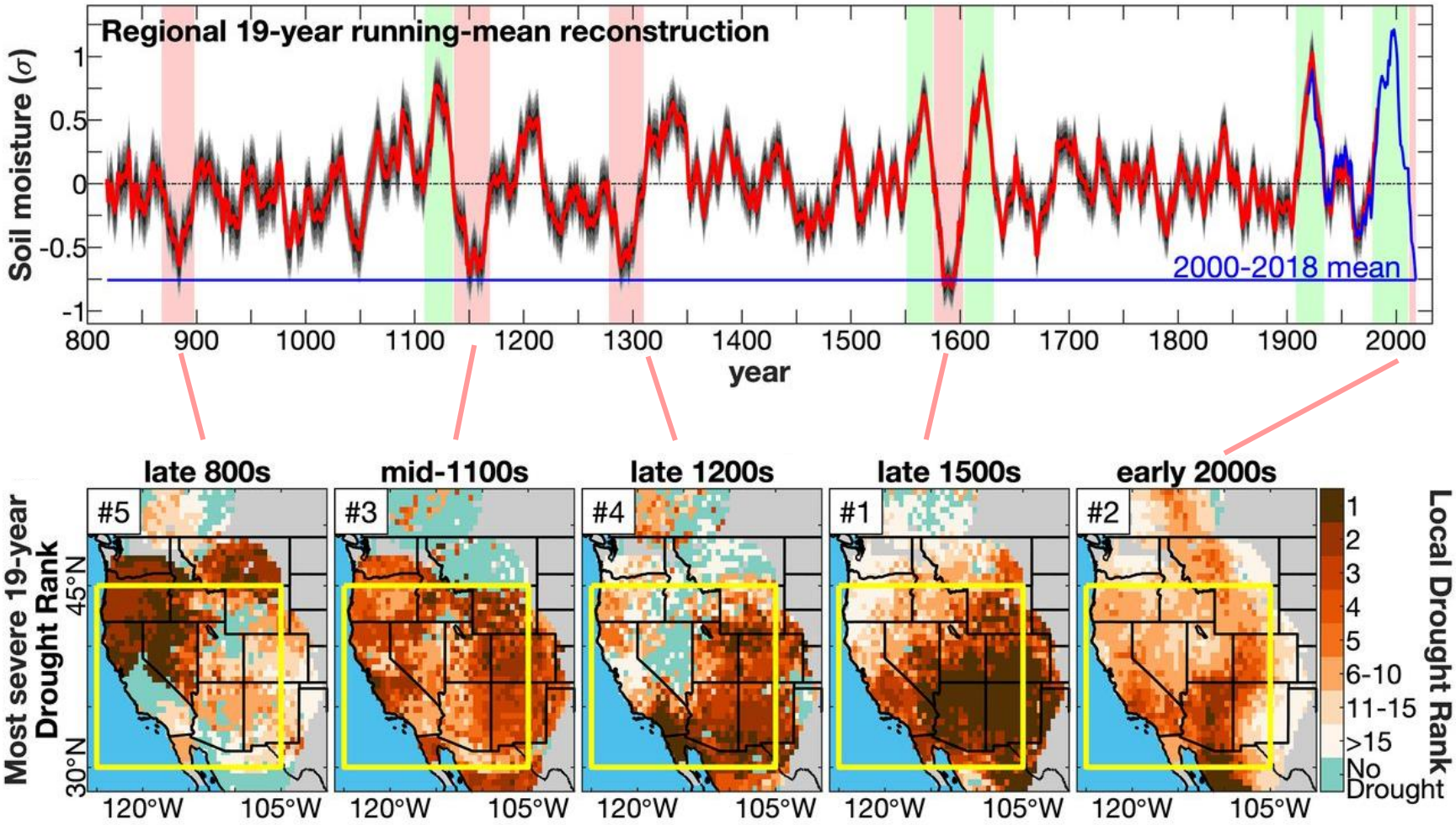
Mark D. Brusberg
Chief Meteorologist
USDA Office of the Chief Economist / World Agricultural Outlook Board

Presented to the

USDA Fall Data Users Meeting

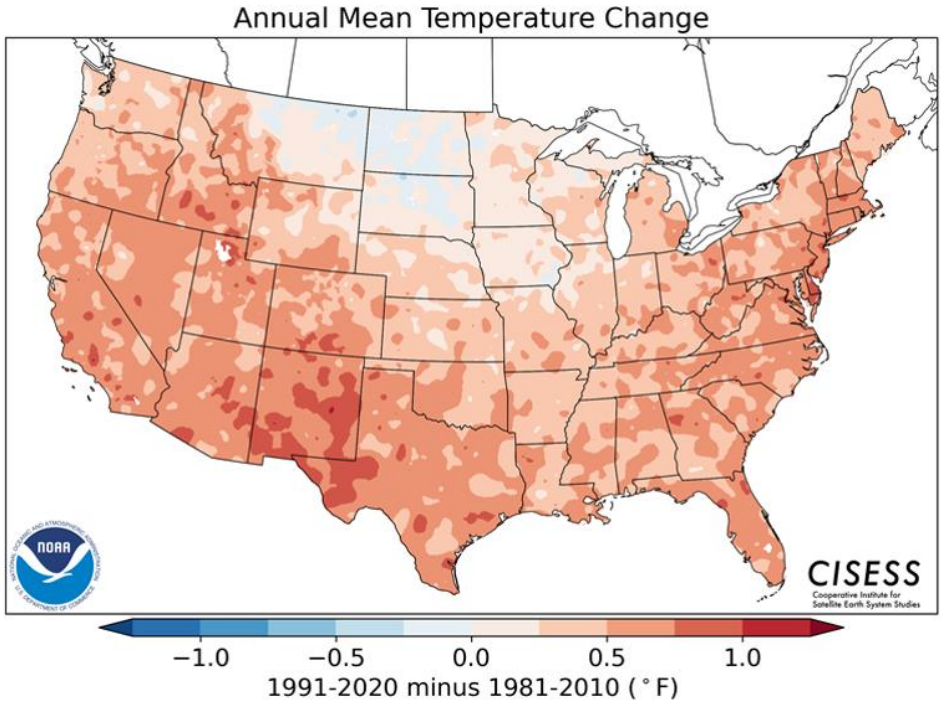
October 14, 2021

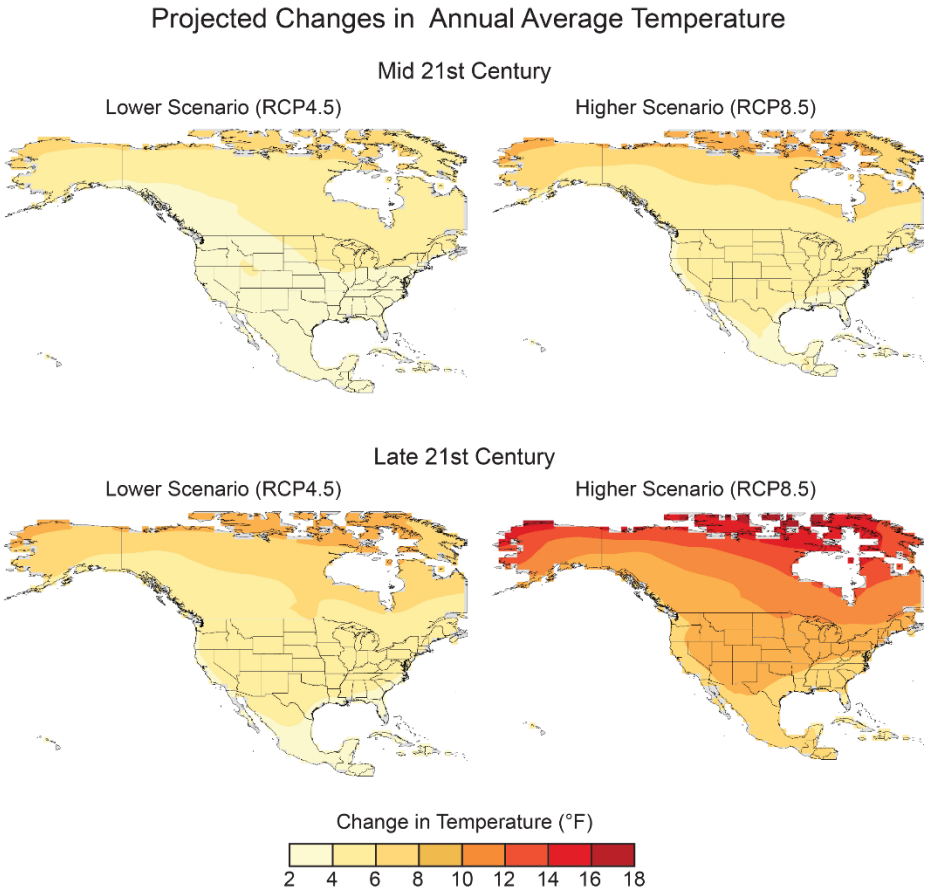
1) Natural Cycles (Decadal Droughts in the West)



From Williams, et. al. Science 17 Apr 2020: Vol. 368, Issue 6488, pp. 314-318

2) Warming of the Western Climate

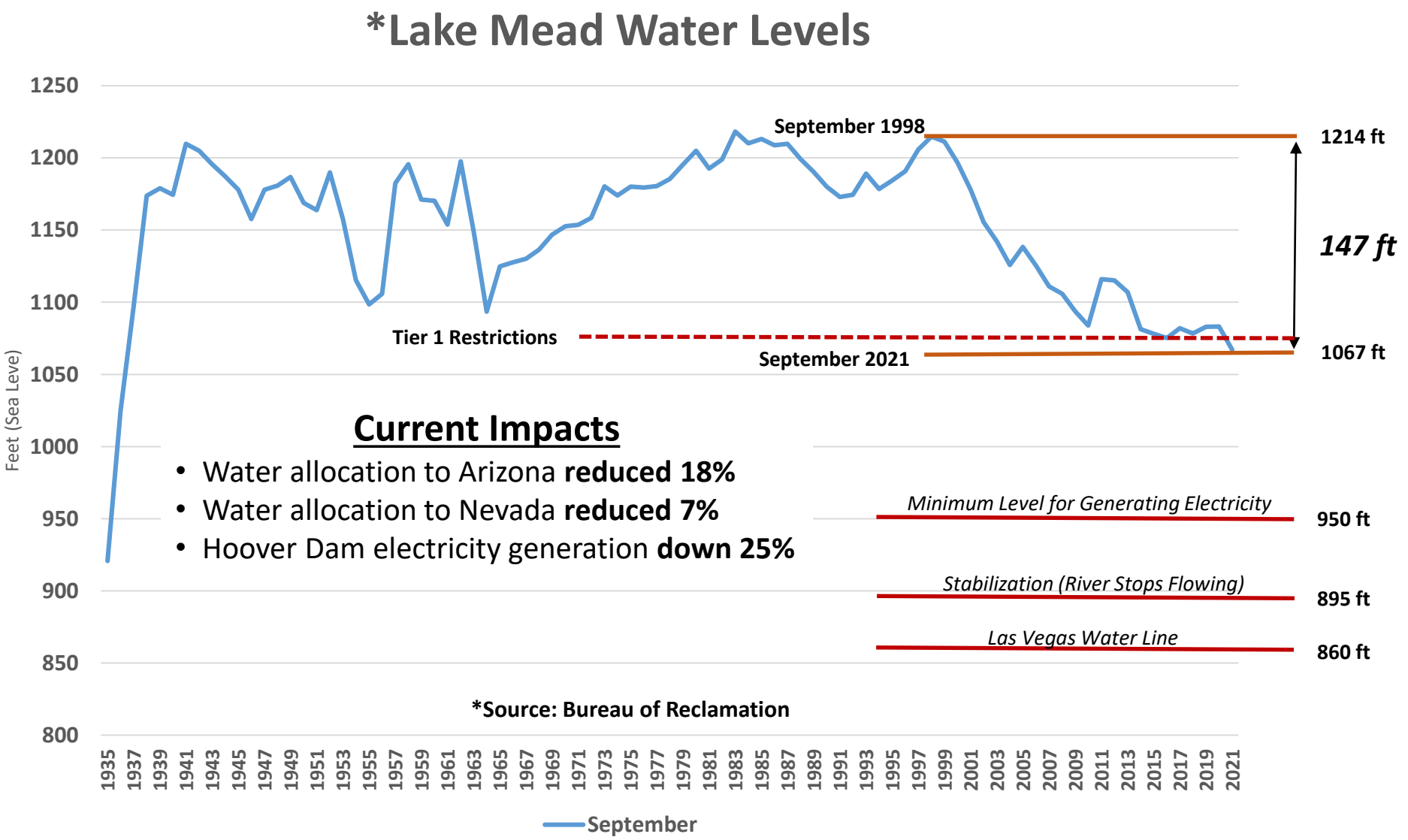




https://www.ncei.noaa.gov/news/noaa-delivers-new-us-climate-normals

Source: Fourth National Climate Assessment (NCA4), Volume I (https://science2017.globalchange.gov/)

3) Increased Competition for Western Water Supplies



Current Impacts

- Water allocation to Arizona **reduced 18%**
- Water allocation to Nevada **reduced 7%**
- Hoover Dam electricity generation **down 25%**

Balancing the Future Needs of All Users

(Photo: Klamath News Dept. and Monica YellowOwl)

(Photo: George Plaven / Capital Press File)

USDA Allocates Up to $10 Million to Partner with California and Oregon to Assist Producers Impacted by Drought in Klamath River Basin

Press Release
Release No. 0072.21

Contact: USDA Press
Email: press@usda.gov

WASHINGTON, April 14, 2021 — The U.S. Department of Agriculture (USDA) today announced the availability of up to $10 million in assistance from USDA's Wildfire and Hurricane Indemnity Program Plus to assist agricultural producers impacted by the worsening drought conditions in the Klamath River Basin. Earlier today, the Bureau of Reclamation released the Klamath Project 2021 Temporary Operations Plan, which was developed in response to consecutive years of drought conditions in the Klamath Basin, including the lowest historical inflows on record into Upper Klamath Lake this year. As noted in the Bureau of Reclamation's release today, water from Upper Klamath Lake will become available to charge Klamath Project canals and allow for limited irrigation no earlier than May 15. Remaining project deliveries will begin no earlier than June 1, according to the Bureau.

"As ongoing drought conditions in the West continue to worsen, USDA is committed to providing help and assistance to producers, Tribes, and communities in the Klamath River Basin impacted by historically low water allocations," said Gloria Montano Greene, Deputy Under Secretary for Farm Production and Conservation.

USDA has statutory authority under the Wildfire and Hurricane Indemnity Program Plus (WHIP+) to also enter into block grants with states to provide payments to producers to offset losses from hurricanes, wildfires, and other qualifying natural disasters such as drought that occurred in 2018 and 2019. The

https://www.usda.gov/media/press-releases/2021/04/14/usda-allocates-10-million-partner-california-and-oregon-assist

New Mandates for Building Resilience

ith Business Leaders and CEOs on Addressing the Debt Limit

Administration Priorities COVID Plan

BRIEFING ROOM

Readout of the Third National Climate Task Force Meeting

APRIL 21, 2021 • STATEMENTS AND RELEASES

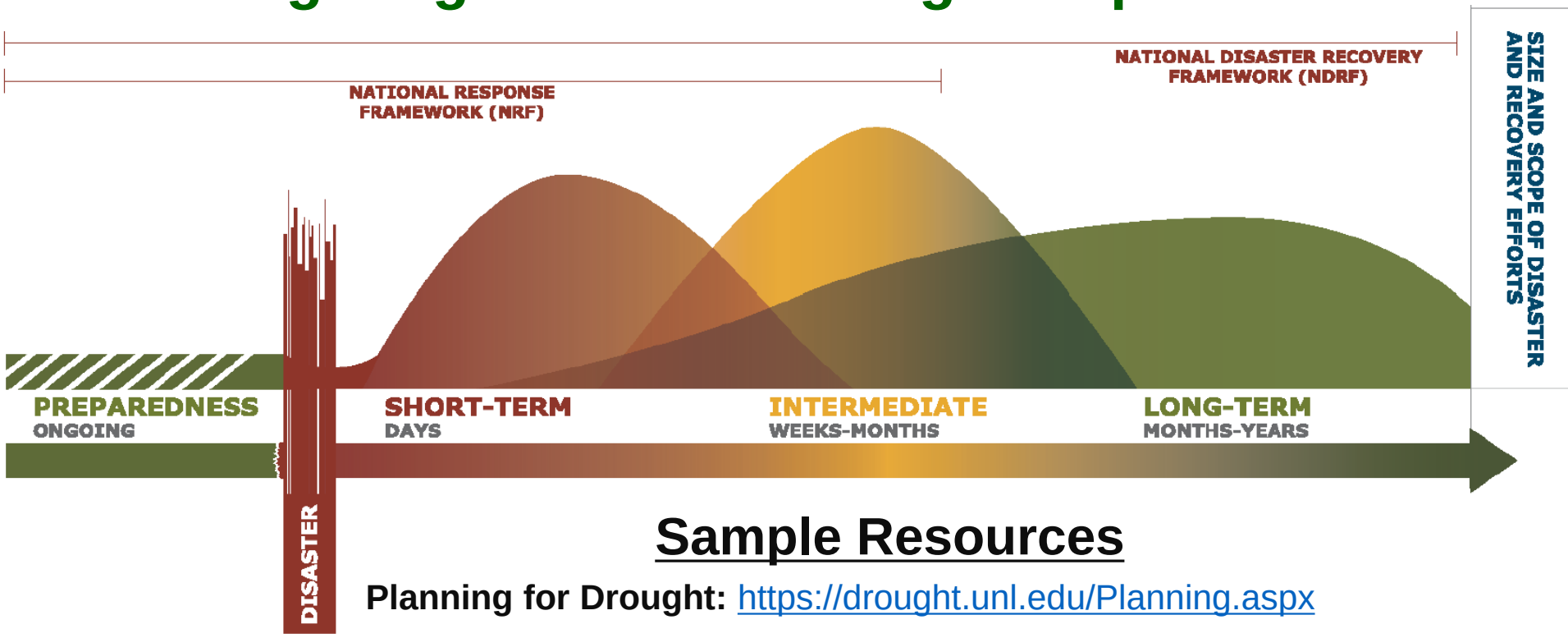
Task Force Briefed on Drought in the West, Forms Interagency Working Group to Provide Relief, Announces more than $700 Million in New Conservation Funding to Invest in Climate Resilience and Carbon Removal

"In response, National Climate Advisor McCarthy, as Chair of the National Climate Task Force, requested that the Secretary of Agriculture Tom Vilsack and the Secretary of the Interior Deb Haaland form an Interagency Working Group to address the needs of drought impacted communities. ***The Working Group also will explore opportunities to improve our nation's resilience to droughts and other severe climate impacts that are upending Americans' lives and economic livelihoods****."*

https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/21/readout-of-the-third-national-climate-task-force-meeting/

https://twitter.com/secvilsack/status/1435647503538421763

Mitigating Disaster Through Preparedness



Planning for Future Droughts

Sample Resources

Planning for Drought: https://drought.unl.edu/Planning.aspx

Managing Risk: https://drought.unl.edu/ranchplan/Overview.aspx

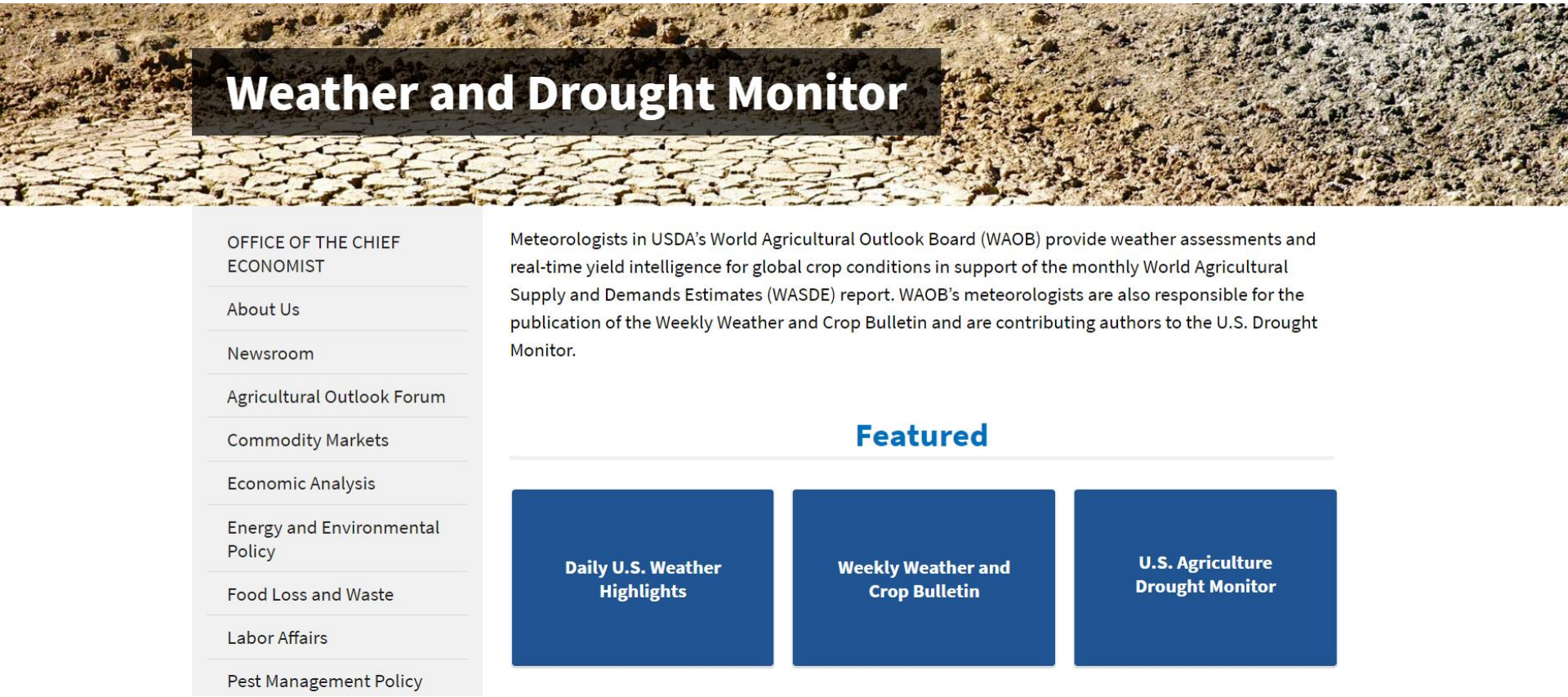
Reducing Risk:
https://drought.unl.edu/archive/Documents/NDMC/Planning/risk.pdf

USDA Conservation Programs:
https://www.fsa.usda.gov/programs-and-services/conservation-programs/

Chart from Disaster Recovery Framework & Recovery Support Function Guide (FEMA; April 2015)

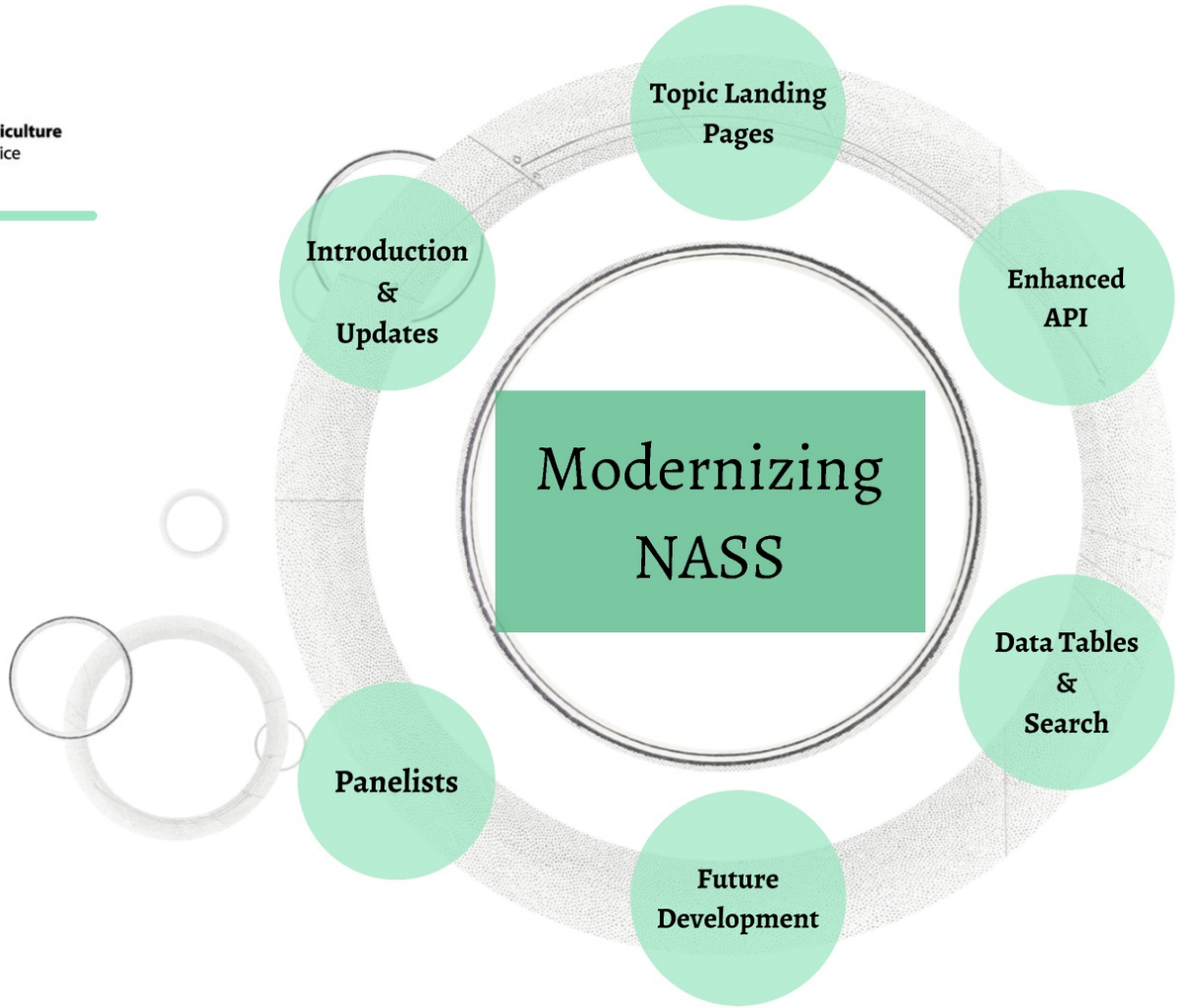
Thanks!

mark.brusberg@usda.gov



https://www.usda.gov/oce/weather-drought-monitor

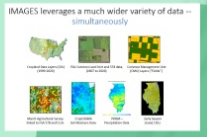
United States Department of Agriculture
National Agricultural Statistics Service



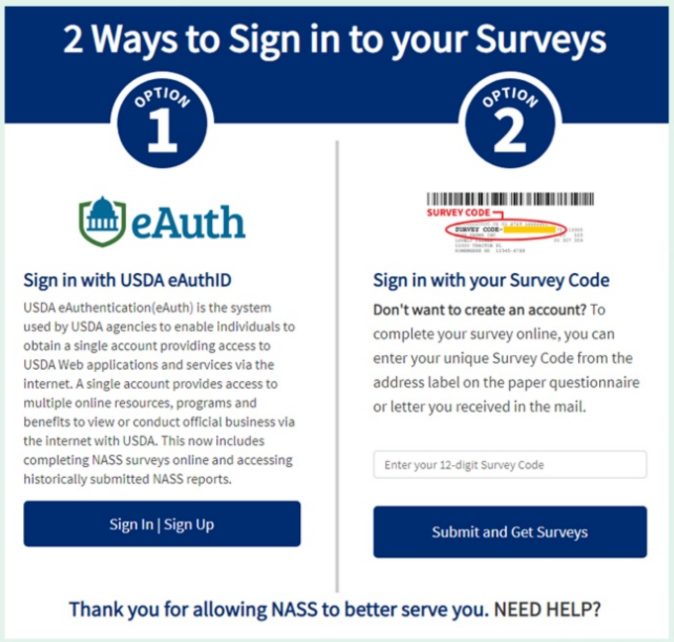
Vision

NASS is recognized as a modern, innovative, customer-focused organization that readily adopts cutting edge technologies and engages its world-class workforce to produce the most trusted, useful statistics on all aspects of U.S. agriculture.

Respondent Portal

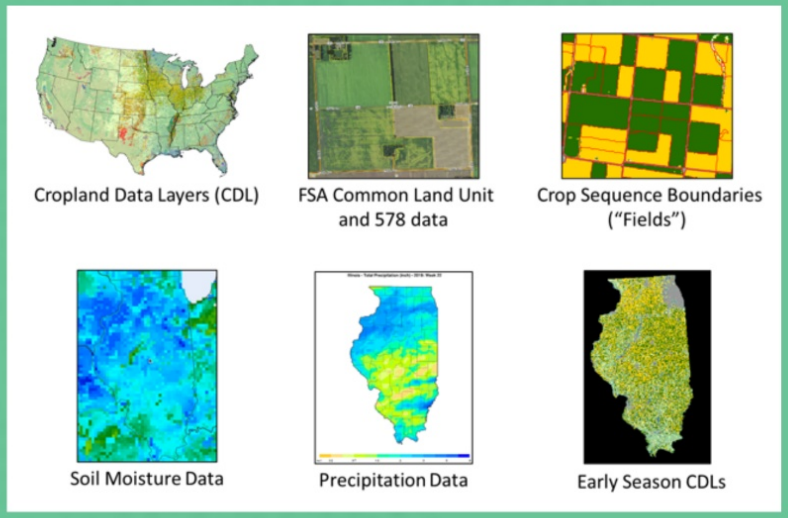


IMAGES



Strategic Initiative #1: Data Collection Dashboard

- New and Improved – Respondent Portal
- Allowing for a customized experience
- Weather data
- Access to previously reported data
- Sign-in options allowing seamless transition between NASS and Farmers.gov

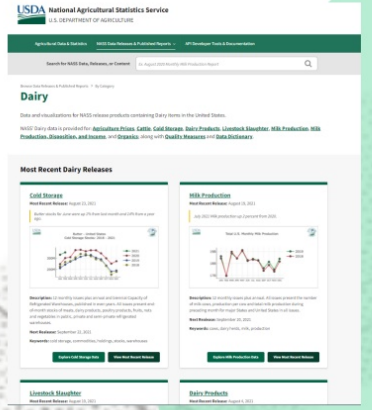


IMAGES leverages a much wider variety of data – **simultaneously**

IMAGES:

Integrated Modeling and Geospatial Estimation System

- Enhance NASS estimates
  - Increase coverage of NASS list frame for surveys and censuses
  - Leverage all available data
  - Improve timeliness and quality of estimates



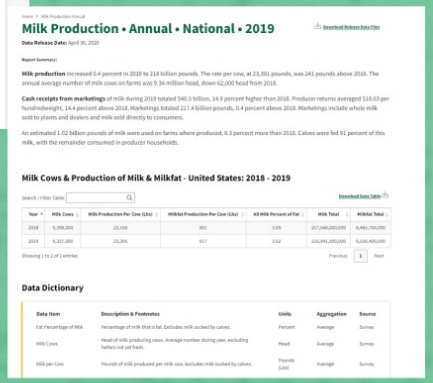
Topic Landing Pages

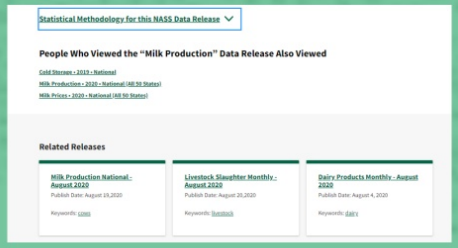
- Topic landing pages will provide an overview of available data
- Integrate with other web content
- Provide highlights
- Quality Measure Data
- Related and popular data

Dairy Landing Page

Dairy Landing Page Data

- Milk Production
- Dairy Products
- Cold Storage
- Agriculture Prices
- Cattle
- Livestock Slaughter
- Organics





Dairy Landing Page

ata

Milk Production

Most Recent Release: August 19, 2021

> *July 2021 Milk production up 2 percent from 2020.*

Description: 12 monthly issues plus annual. All issues present the number of milk cows, production per cow and total milk production during preceding month for major States and United States in all issues.

Next Realease: September 20, 2021

Keywords: cows, dairy herds, milk, production

Home > Milk Production Annual

Milk Production • Annual • I

Data Release Date: April 30, 2020

Report Summary:

Milk production increased 0.4 percent in 2019 to 218 billion po
annual average number of milk cows on farms was 9.34 million

Cash receipts from marketings of milk during 2019 totaled $4(
hundredweight, 14.4 percent above 2018. Marketings totaled 21
sold to plants and dealers and milk sold directly to consumers.

present the number
ıction during
ı all issues.

Home > Milk Production Annual

Milk Production • Annual • National • 2019

Download Release Data Files

Data Release Date: April 30, 2020

Report Summary:

Milk production increased 0.4 percent in 2019 to 218 billion pounds. The rate per cow, at 23,391 pounds, was 241 pounds above 2018. The annual average number of milk cows on farms was 9.34 million head, down 62,000 head from 2018.

Cash receipts from marketings of milk during 2019 totaled $40.5 billion, 14.9 percent higher than 2018. Producer returns averaged $18.63 per hundredweight, 14.4 percent above 2018. Marketings totaled 217.4 billion pounds, 0.4 percent above 2018. Marketings include whole milk sold to plants and dealers and milk sold directly to consumers.

An estimated 1.02 billion pounds of milk were used on farms where produced, 0.3 percent more than 2018. Calves were fed 91 percent of this milk, with the remainder consumed in producer households.

Milk Cows & Production of Milk & Milkfat - United States: 2018 - 2019

Search / Filter Table:

Download Data Table

Year	Milk Cows	Milk Production Per Cow (Lbs)	Milkfat Production Per Cow (Lbs)	All Milk Percent of Fat	Milk Total	Milkfat Total
2018	9,398,000	23,150	901	3.89	217,568,000,000	8,465,700,000
2019	9,337,000	23,395	917	3.92	218,441,000,000	8,558,400,000

Showing 1 to 2 of 2 entries

Previous 1 Next

Data Dictionary

Data Item	Description & Footnotes	Units	Aggregation	Source
Fat Percentage of Milk	Percentage of milk that is fat. Excludes milk sucked by calves.	Percent	Average	Survey
Milk Cows	Head of milk producing cows. Average number during year, excluding heifers not yet fresh.	Head	Average	Survey
Milk per Cow	Pounds of milk produced per milk cow. Excludes milk sucked by calves.	Pounds (Lbs)	Average	Survey

Milk Cows & Production of Milk and Milkfat – States and United States: 2018

Search / Filter Table:

Download Data Table

State	Milk Cows	Milk Per Cow	Milkfat Per Cow	All Milk Percent of Fat	Total Milk Production	Total Milkfat Production
ALABAMA	5,000	14,600	566	3.88	73,000,000	2,800,000
ALASKA	300	9,333	367	3.93	2,800,000	100,000
ARIZONA	208,000	23,909	875	3.66	4,973,000,000	182,000,000
ARKANSAS	6,000	12,333	467	3.79	74,000,000	2,800,000
CALIFORNIA	1,734,000	23,301	909	3.9	40,404,000,000	1,575,800,000
COLORADO	176,000	25,892	968	3.74	4,557,000,000	170,400,000
CONNECTICUT	19,000	22,474	890	3.96	427,000,000	16,900,000
DELAWARE	4,800	19,063	732	3.84	91,500,000	3,500,000
FLORIDA	120,000	19,833	730	3.68	2,380,000,000	87,600,000
GEORGIA	83,000	21,277	774	3.64	1,766,000,000	64,300,000

Showing 1 to 10 of 50 entries

Previous 1 2 3 4 5 Next

Statistical Methodology for this NASS Data Release

People Who Viewed the "Milk Production" Data Release Also Viewed

Cold Storage • 2019 • National

Milk Production • 2020 • National (All 50 States)

Milk Prices • 2020 • National (All 50 States)

Related Releases

Milk Production National - August 2020

Publish Date: August 19,2020

Keywords: cows

Livestock Slaughter Monthly - August 2020

Publish Date: August 20,2020

Keywords: livestock

Dairy Products Monthly - August 2020

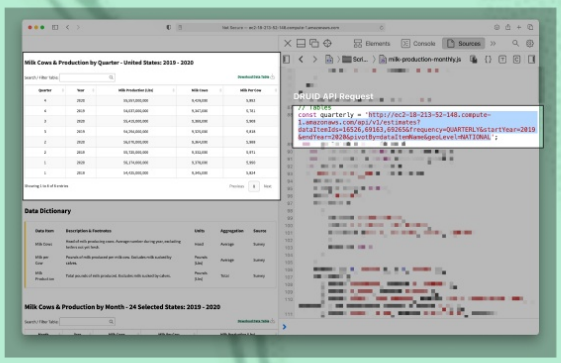
Publish Date: August 4, 2020

Keywords: dairy

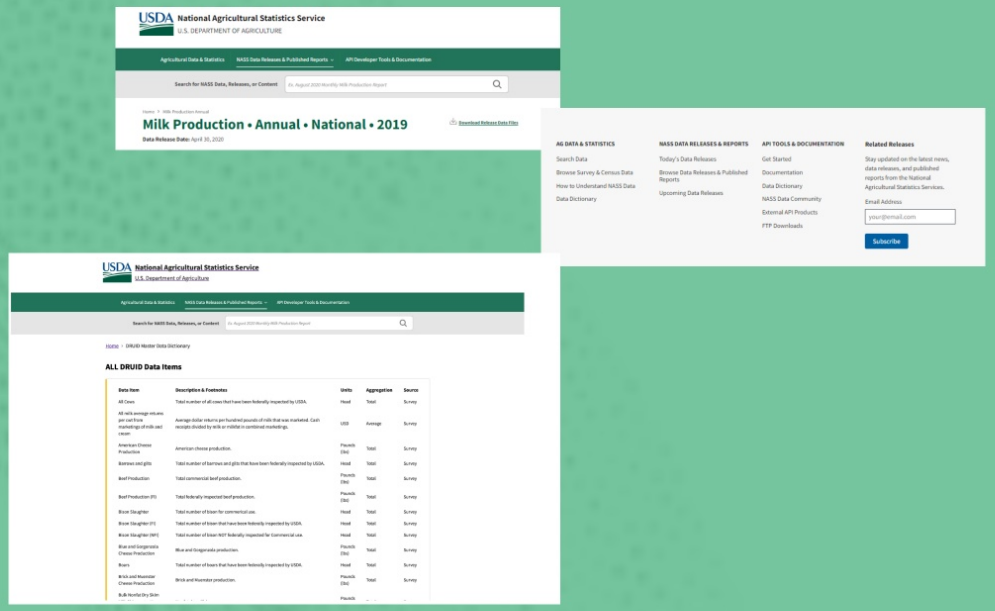
Enhanced API

- Improved Documentation
- Data Dictionary
- User Community

API



- Drives Topic Landing pages
- More user friendly
- Better documentation
- Existing API will remain functional for the short term.



Enhanced API


USDA National Agricultural Statistics Service
U.S. DEPARTMENT OF AGRICULTURE
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Data Release Date: April 30, 2020

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Browse Survey & Census Data

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Data Dictionary

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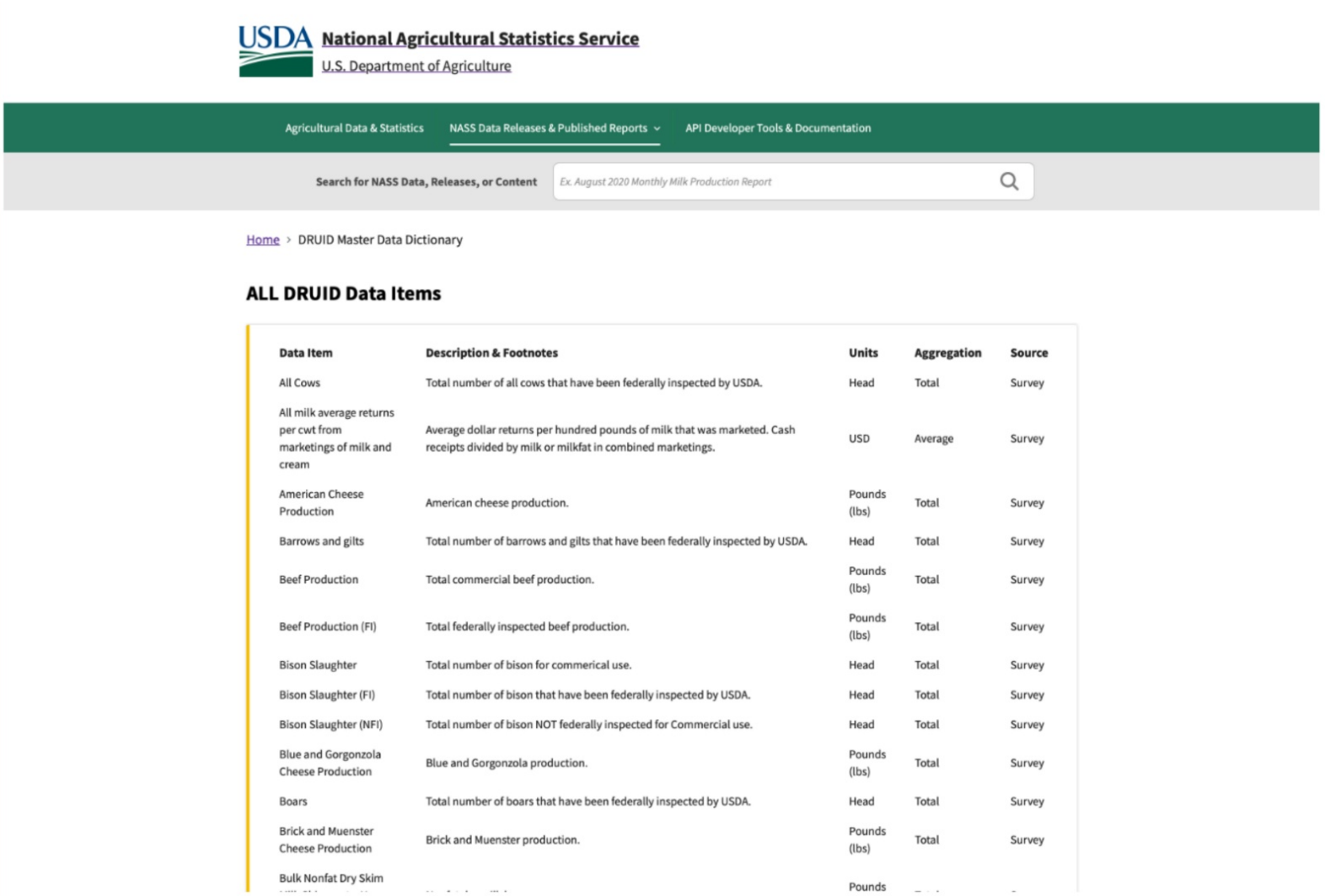


Data Item	Description & Footnotes	Units	Aggregation	Source
All Cows	Total number of all cows that have been federally inspected by USDA.	Head	Total	Survey
All milk average returns per cwt from marketings of milk and cream	Average dollar returns per hundred pounds of milk that was marketed. Cash receipts divided by milk or milkfat in combined marketings.	USD	Average	Survey
American Cheese Production	American cheese production.	Pounds (lbs)	Total	Survey
Barrows and gilts	Total number of barrows and gilts that have been federally inspected by USDA.	Head	Total	Survey
Beef Production	Total commercial beef production.	Pounds (lbs)	Total	Survey
Beef Production (FI)	Total federally inspected beef production.	Pounds (lbs)	Total	Survey
Bison Slaughter	Total number of bison for commerical use.	Head	Total	Survey
Bison Slaughter (FI)	Total number of bison that have been federally inspected by USDA.	Head	Total	Survey
Bison Slaughter (NFI)	Total number of bison NOT federally inspected for Commercial use.	Head	Total	Survey
Blue and Gorgonzola Cheese Production	Blue and Gorgonzola production.	Pounds (lbs)	Total	Survey
Boars	Total number of boars that have been federally inspected by USDA.	Head	Total	Survey
Brick and Muenster Cheese Production	Brick and Muenster production.	Pounds (lbs)	Total	Survey
Bulk Nonfat Dry Skim		Pounds		

Data Tables & Search

- Data presented in a "tidy format"
- Simplified visualizations
- Easy exports

Value of Milk Production - States and United States: 2019

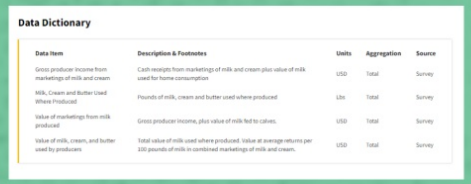
Search / Filter Table:

Download Data Table

State	Used for milk, cream, and butter by producers, milk utilized	Value of milk, cream, and butter used by producers	Returns per pound of milkfat (dollars)	Cash receipts from marketings
ALABAMA	300,000	56,000	11,030,000	11,160,000
ARIZONA	1,000,000	173,000	851,324,000	853,651,000
ARKANSAS	300,000	56,000	12,081,000	12,395,000
CALIFORNIA	4,000,000	724,000	7,341,431,000	7,346,140,000
COLORADO	1,000,000	188,000	899,788,000	903,716,000
CONNECTICUT	500,000	96,000	81,696,000	82,176,000
DELAWARE	100,000	18,000	13,322,000	13,487,000
FLORIDA	1,000,000	219,000	512,898,000	513,774,000
GEORGIA	1,000,000	200,000	352,800,000	354,200,000
IDAHO	1,000,000	183,000	2,894,434,000	2,900,472,000

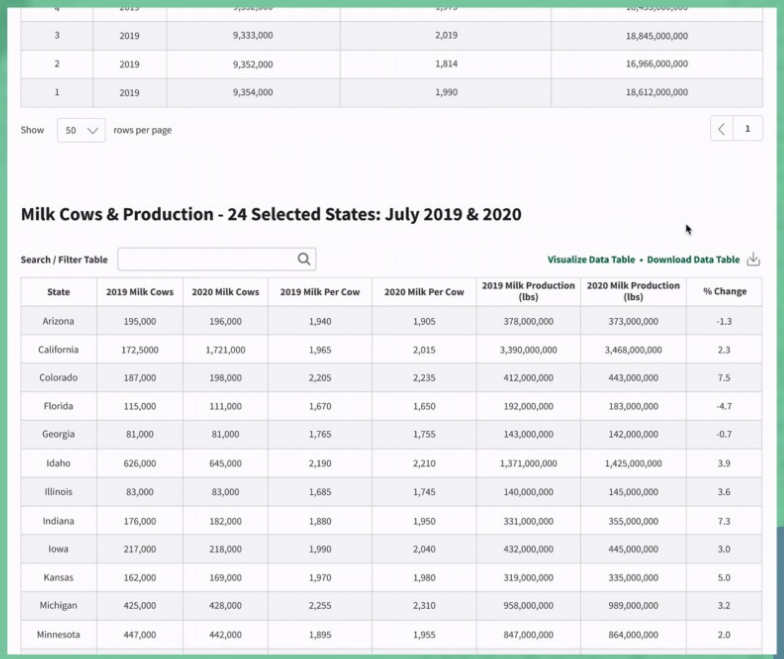
Showing 1 to 10 of 49 entries

Previous 1 2 3 4 5 Next



Data Dictionary

Data Item	Description & Footnotes	Units	Aggregation	Source
Gross producer income from marketings of milk and cream	Cash receipts from marketings of milk and cream plus value of milk used for home consumption	USD	Total	Survey
Milk, Cream and Butter Used Where Produced	Pounds of milk, cream and butter used where produced.	Lbs	Total	Survey
Value of marketings from milk produced	Gross producer income, plus value of milk fed to calves.	USD	Total	Survey
Value of milk, cream, and butter used by producers	Total value of milk used where produced. Value at average returns per 100 pounds of milk in combined marketings of milk and cream.	USD	Total	Survey



3	2019	9,333,000	2,019	18,845,000,000
2	2019	9,352,000	1,814	16,966,000,000
1	2019	9,354,000	1,990	18,612,000,000

Show 50 rows per page

1

Milk Cows & Production - 24 Selected States: July 2019 & 2020

Search / Filter Table

Visualize Data Table • Download Data Table

State	2019 Milk Cows	2020 Milk Cows	2019 Milk Per Cow	2020 Milk Per Cow	2019 Milk Production (lbs)	2020 Milk Production (lbs)	% Change
Arizona	195,000	196,000	1,940	1,905	378,000,000	373,000,000	-1.3
California	172,5000	1,721,000	1,965	2,015	3,390,000,000	3,468,000,000	2.3
Colorado	187,000	198,000	2,205	2,235	412,000,000	443,000,000	7.5
Florida	115,000	111,000	1,670	1,650	192,000,000	183,000,000	-4.7
Georgia	81,000	81,000	1,765	1,755	143,000,000	142,000,000	-0.7
Idaho	626,000	645,000	2,190	2,210	1,371,000,000	1,425,000,000	3.9
Illinois	83,000	83,000	1,685	1,745	140,000,000	145,000,000	3.6
Indiana	176,000	182,000	1,880	1,950	331,000,000	355,000,000	7.3
Iowa	217,000	218,000	1,990	2,040	432,000,000	445,000,000	3.0
Kansas	162,000	169,000	1,970	1,980	319,000,000	335,000,000	5.0
Michigan	425,000	428,000	2,255	2,310	958,000,000	989,000,000	3.2
Minnesota	447,000	442,000	1,895	1,955	847,000,000	864,000,000	2.0

Data Tables

Value of Milk Production - States and United States: 2019

Search / Filter Table:

Download Data Table

State	Used for milk, cream, and butter by producers, milk utilized	Value of milk, cream, and butter used by producers	Returns per pound of milkfat (dollars)	Cash receipts from marketings
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FLORIDA	1,000,000	219,000	512,898,000	513,774,000
GEORGIA	1,000,000	200,000	352,800,000	354,200,000
IDAHO	1,000,000	183,000	2,854,434,000	2,860,473,000

Showing 1 to 10 of 49 entries

Previous 1 2 3 4 5 Next

Data Dictionary

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Value of marketings from milk produced	Gross producer income, plus value of milk fed to calves.	USD	Total	Survey
Value of milk, cream, and butter used by producers	Total value of milk used where produced. Value at average returns per 100 pounds of milk in combined marketings of milk and cream.	USD	Total	Survey

3	2019	9,333,000	2,019	18,845,000,000
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Show 50 rows per page

1

Milk Cows & Production - 24 Selected States: July 2019 & 2020

Search / Filter Table

Visualize Data Table • Download Data Table

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California	172,5000	1,721,000	1,965	2,015	3,390,000,000	3,468,000,000	2.3
Colorado	187,000	198,000	2,205	2,235	412,000,000	443,000,000	7.5
Florida	115,000	111,000	1,670	1,650	192,000,000	183,000,000	-4.7
Georgia	81,000	81,000	1,765	1,755	143,000,000	142,000,000	-0.7
Idaho	626,000	645,000	2,190	2,210	1,371,000,000	1,425,000,000	3.9
Illinois	83,000	83,000	1,685	1,745	140,000,000	145,000,000	3.6
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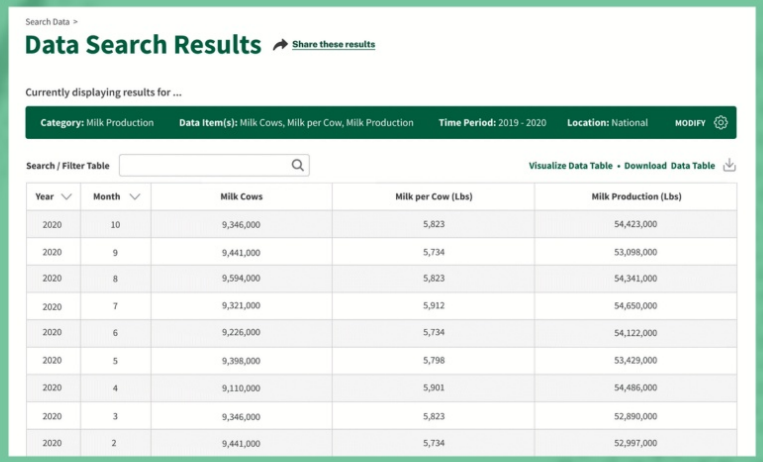
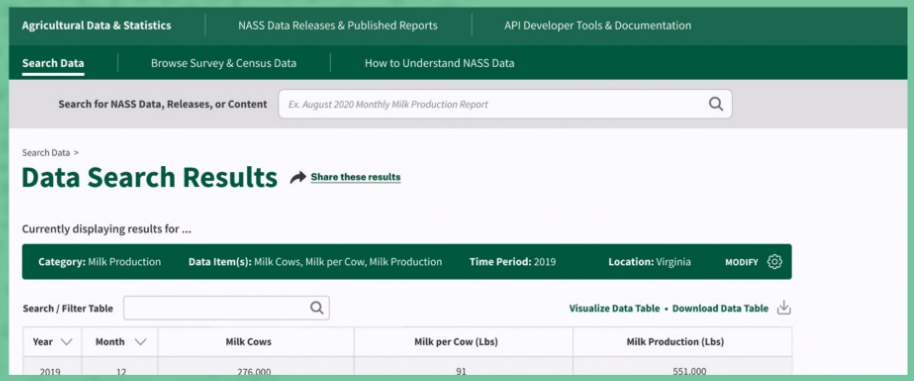
Michigan	425,000	428,000	2,255	2,310	958,000,000	989,000,000	3.2
Minnesota	447,000	442,000	1,895	1,955	847,000,000	864,000,000	2.0

Data



- More user friendly
- Cleaner data exports
- Multiple export options
- Easy to share



Data Search

Search Data >

Data Search Results

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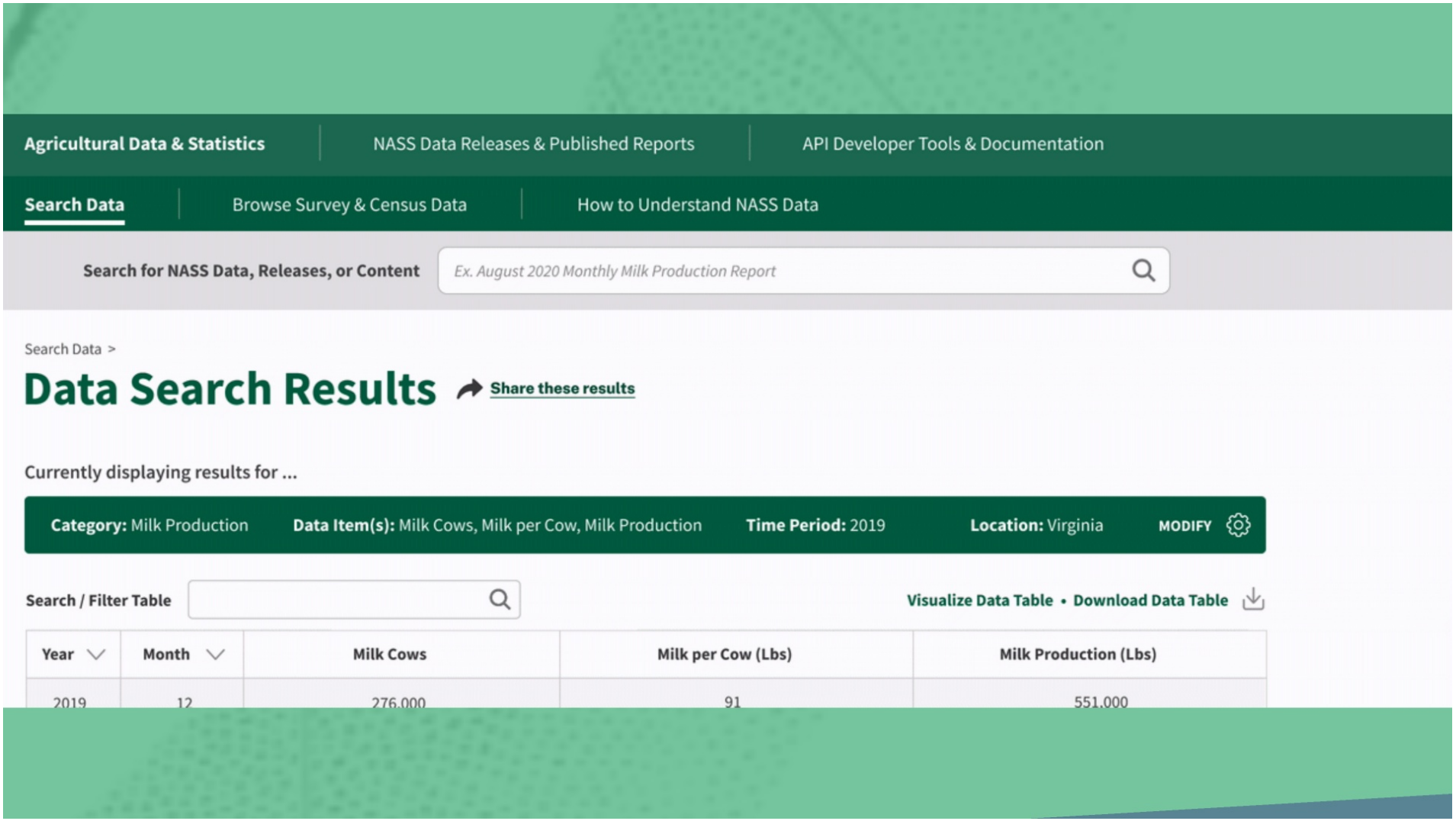
Category: Milk Production **Data Item(s):** Milk Cows, Milk per Cow, Milk Production **Time Period:** 2019 - 2020 **Location:** National MODIFY

Search / Filter Table

Visualize Data Table • Download Data Table

Year	Month	Milk Cows	Milk per Cow (Lbs)	Milk Production (Lbs)
2020	10	9,346,000	5,823	54,423,000
2020	9	9,441,000	5,734	53,098,000
2020	8	9,594,000	5,823	54,341,000
2020	7	9,321,000	5,912	54,650,000
2020	6	9,226,000	5,734	54,122,000
2020	5	9,398,000	5,798	53,429,000
2020	4	9,110,000	5,901	54,486,000
2020	3	9,346,000	5,823	52,890,000
2020	2	9,441,000	5,734	52,997,000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Ex. August 2020 Monthly Milk Production Report
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Currently displaying results for ...
Category: Milk Production
Data Item(s): Milk Cows, Milk per Cow, Milk Production
Time Period: 2019
Location: Virginia
MODIFY
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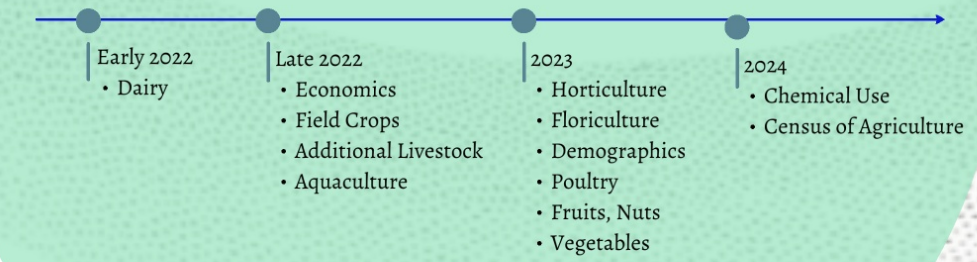
Visualize Data Table • Download Data Table
Year
Month
Milk Cows
Milk per Cow (Lbs)
Milk Production (Lbs)
2019
12
276,000
91
551,000

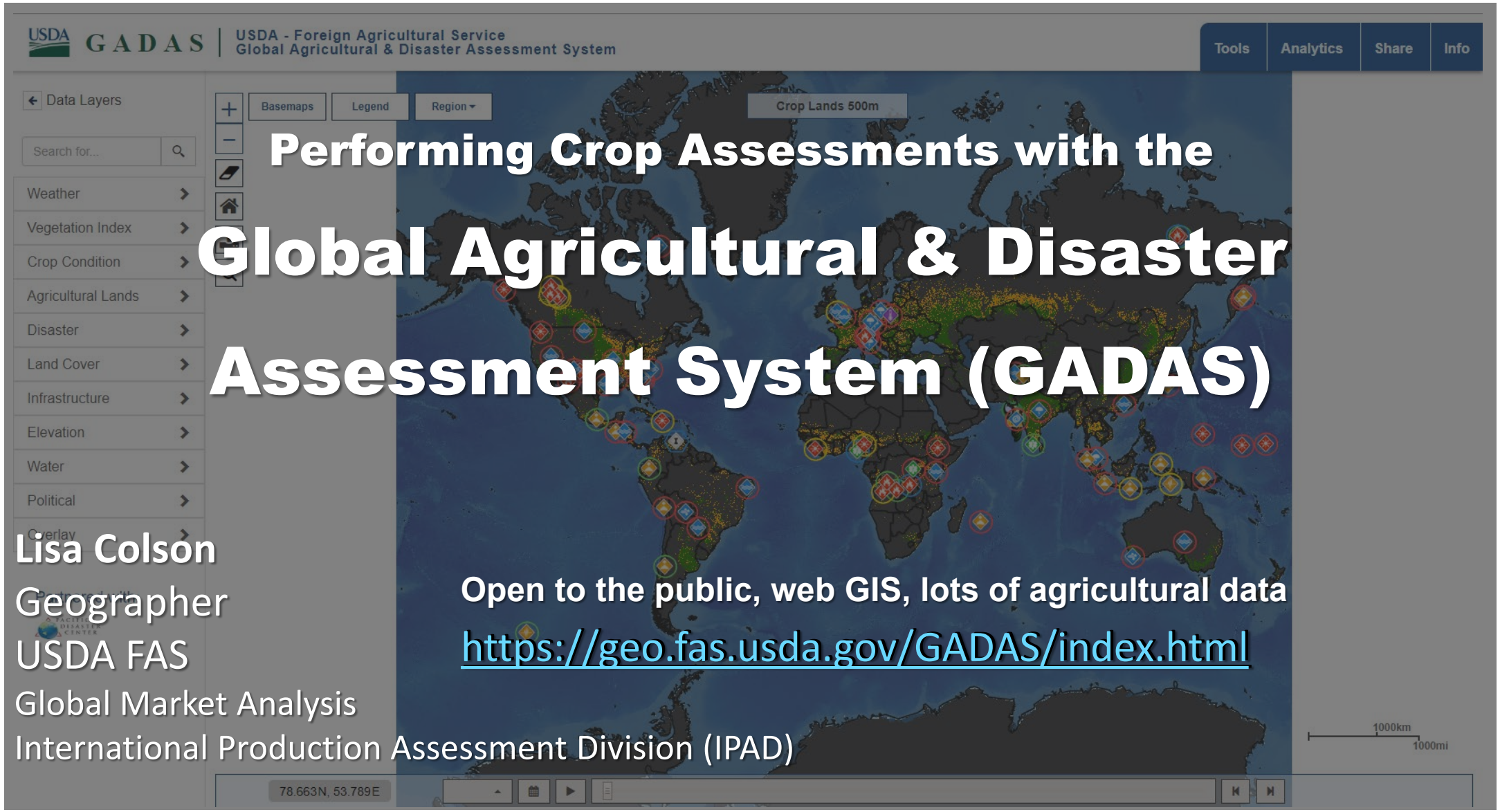
Future Development



Thank You!

Panelists

Bryan Combs | Tony Dorn | Jackie Ross | King Whetstone | Eric Norris



Performing Crop Assessments with the Global Agricultural & Disaster Assessment System (GADAS)

Lisa Colson
Geographer
USDA FAS
Global Market Analysis
International Production Assessment Division (IPAD)

Open to the public, web GIS, lots of agricultural data

https://geo.fas.usda.gov/GADAS/index.html

Agenda

- Why?
  - Highlight our role in market intelligence
- What?
  - Overview of GADAS
- How?
  - Walk through a scenario to demonstrate some key features and functionality
- Who?
  - Acknowledgements
  - Key websites for more information

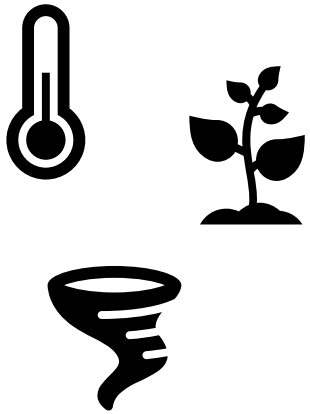
Also covers When? and Where?

Foreign Agricultural Service (FAS)

- FAS is primarily responsible for USDA's:
  - Overseas activities with attachés located at 94 offices covering 176 countries
  - Market development
  - International trade agreements and negotiations
  - Collection and analysis of statistics and market intelligence information

Linking U.S. agriculture to the world to enhance export opportunities and global food security...

Why use Geospatial Data and Web Resources?



- **Objective:** Supports global food crop monitoring and commodity production forecasting
- **All Sources:** Augments information from international reports
- **Situational:** Supports disaster monitoring
- **Authoritative:** Independent source of information that is objective, reliable, and timely

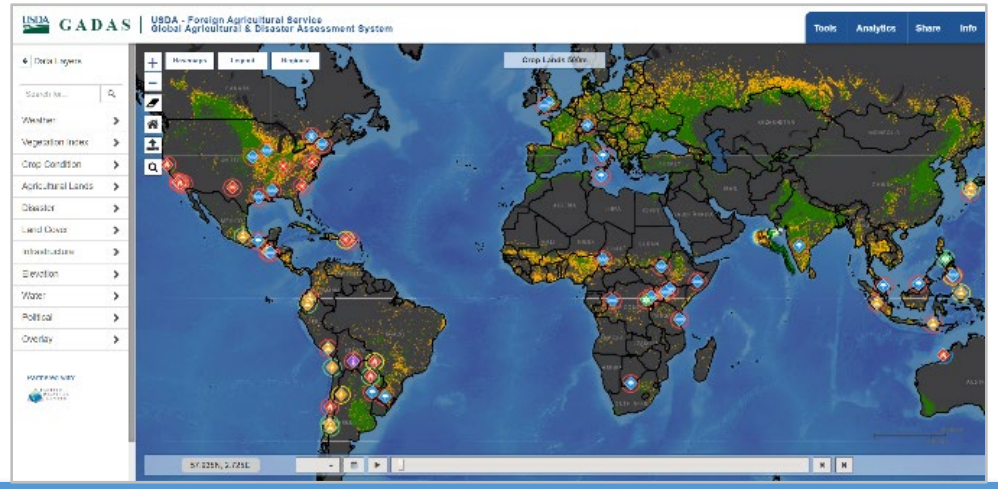
Crop Explorer

https://ipad.fas.usda.gov/cropexplorer/Default.aspx

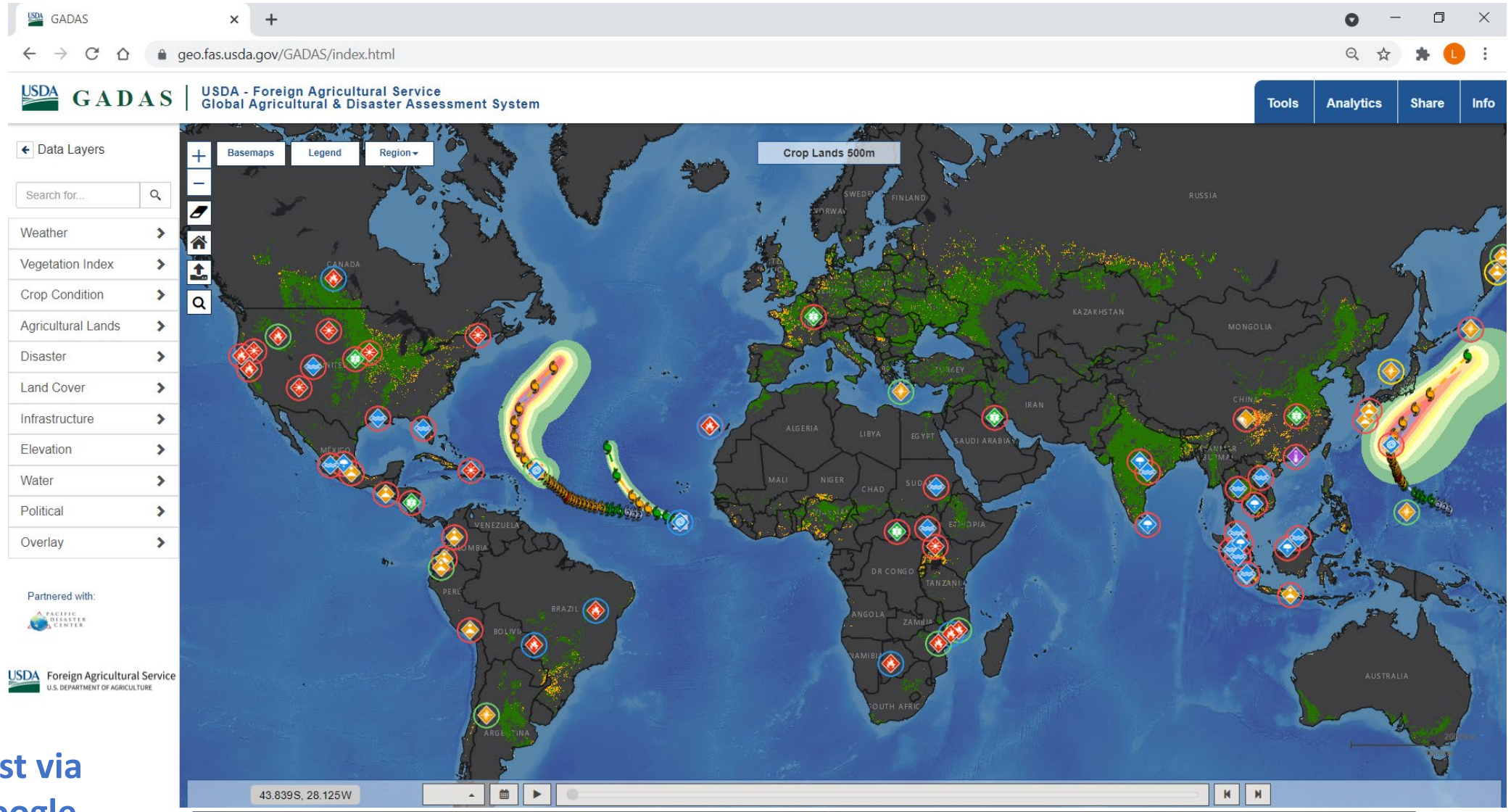
Agrometeorological Data

GADAS

https://geo.fas.usda.gov/GADAS/index.html



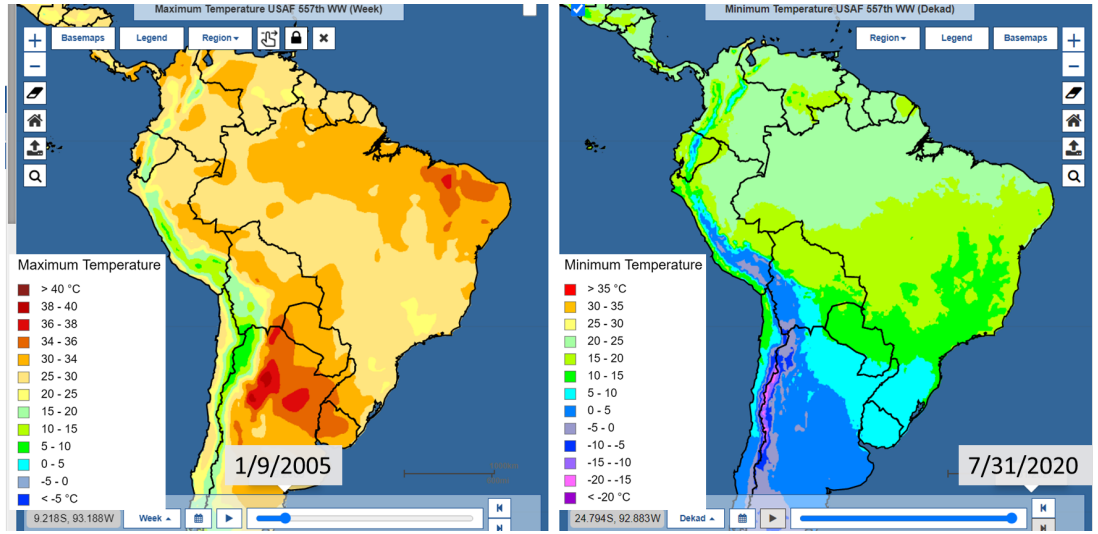
Plus, disaster, imagery, and reference data

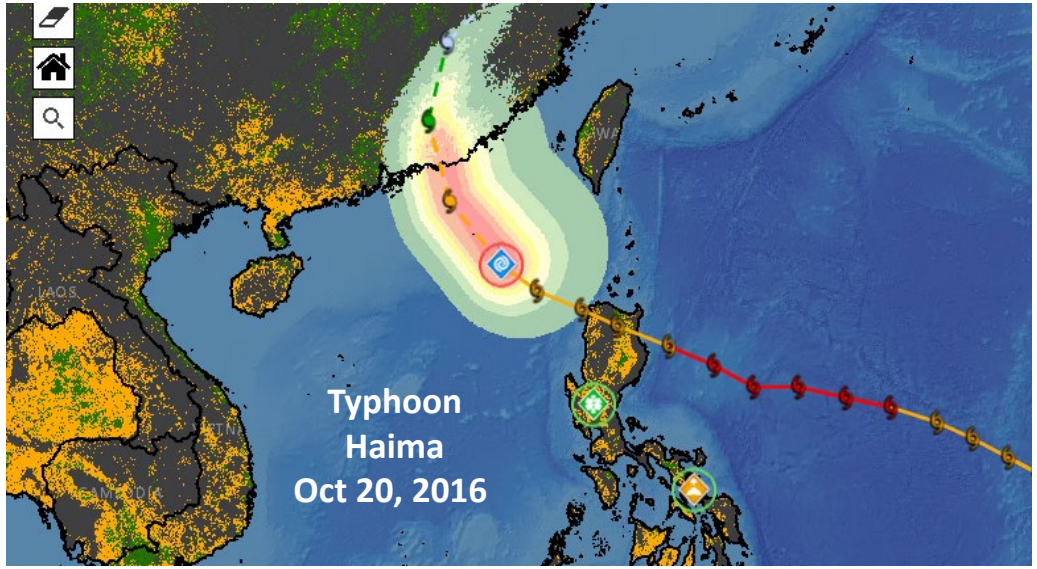


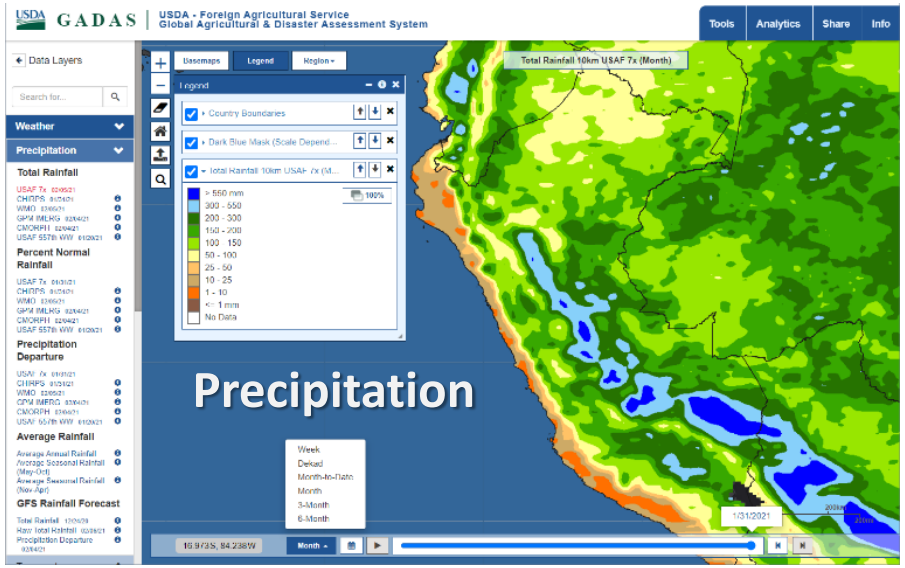
Best via Google Chrome

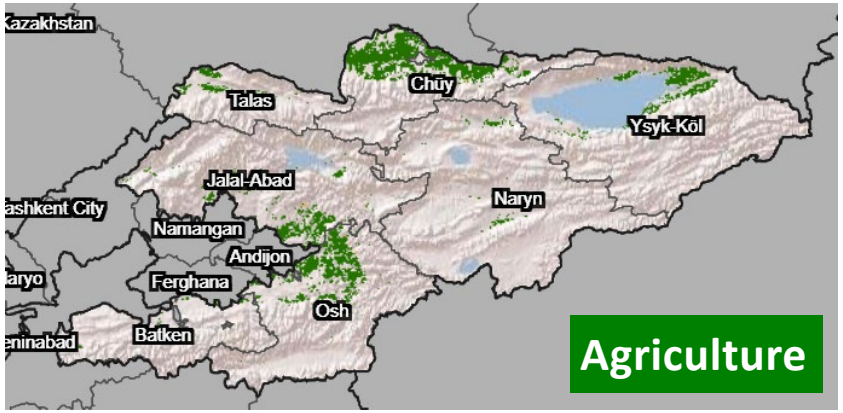
A global web GIS system combining comprehensive real-time earth observation data & tools

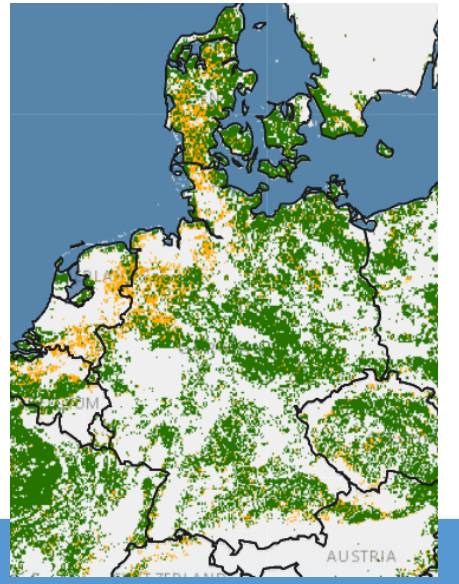
Web GIS: Near real-time weather and natural disaster data; plus, agriculture



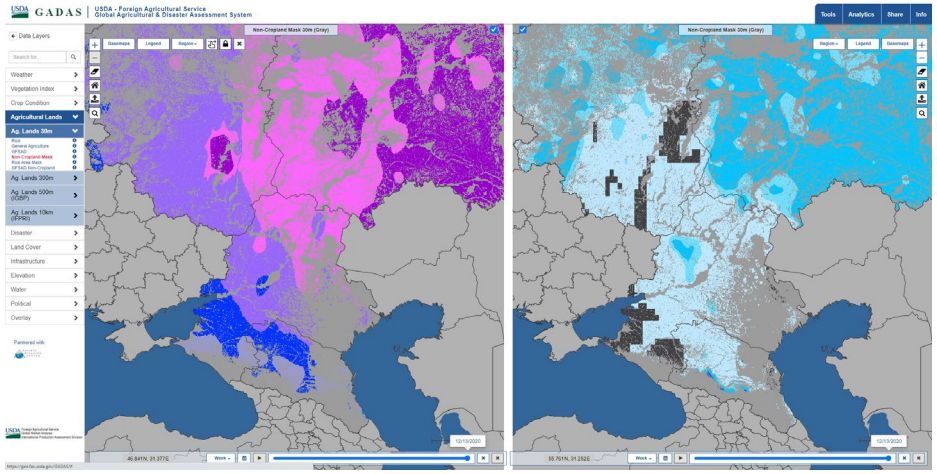


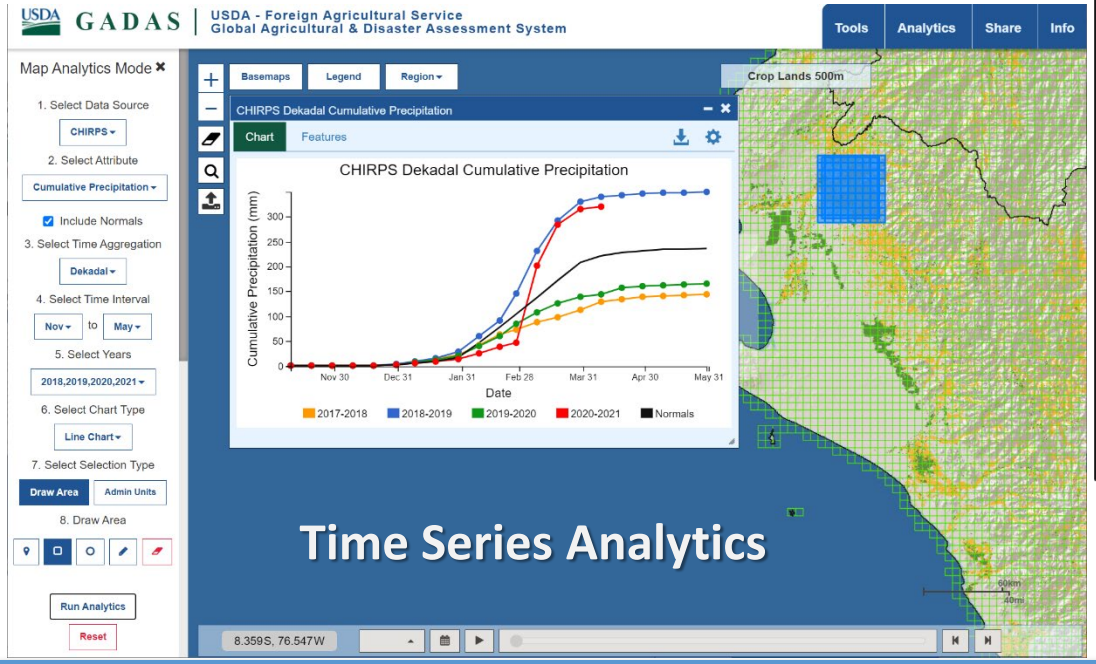


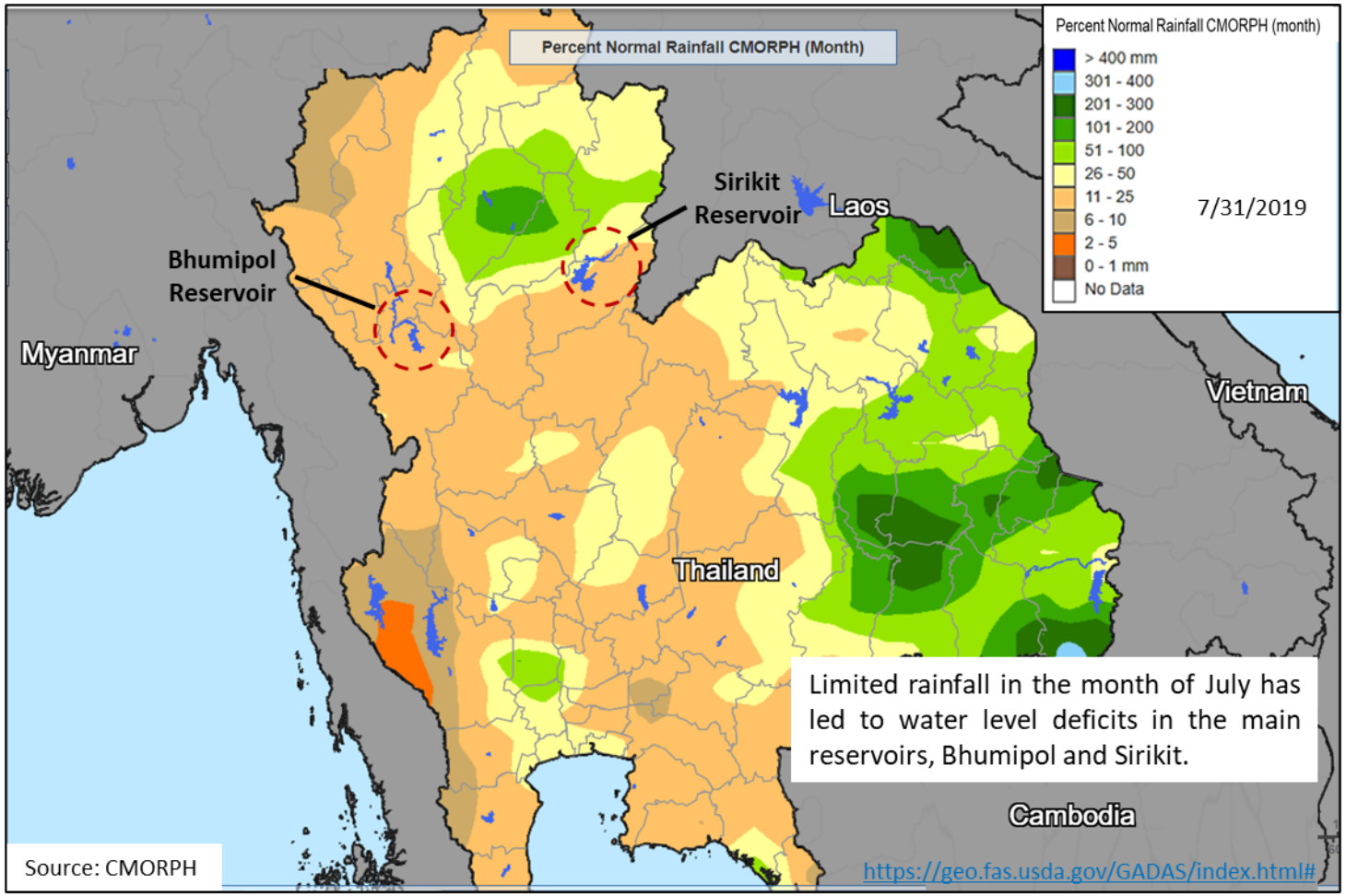




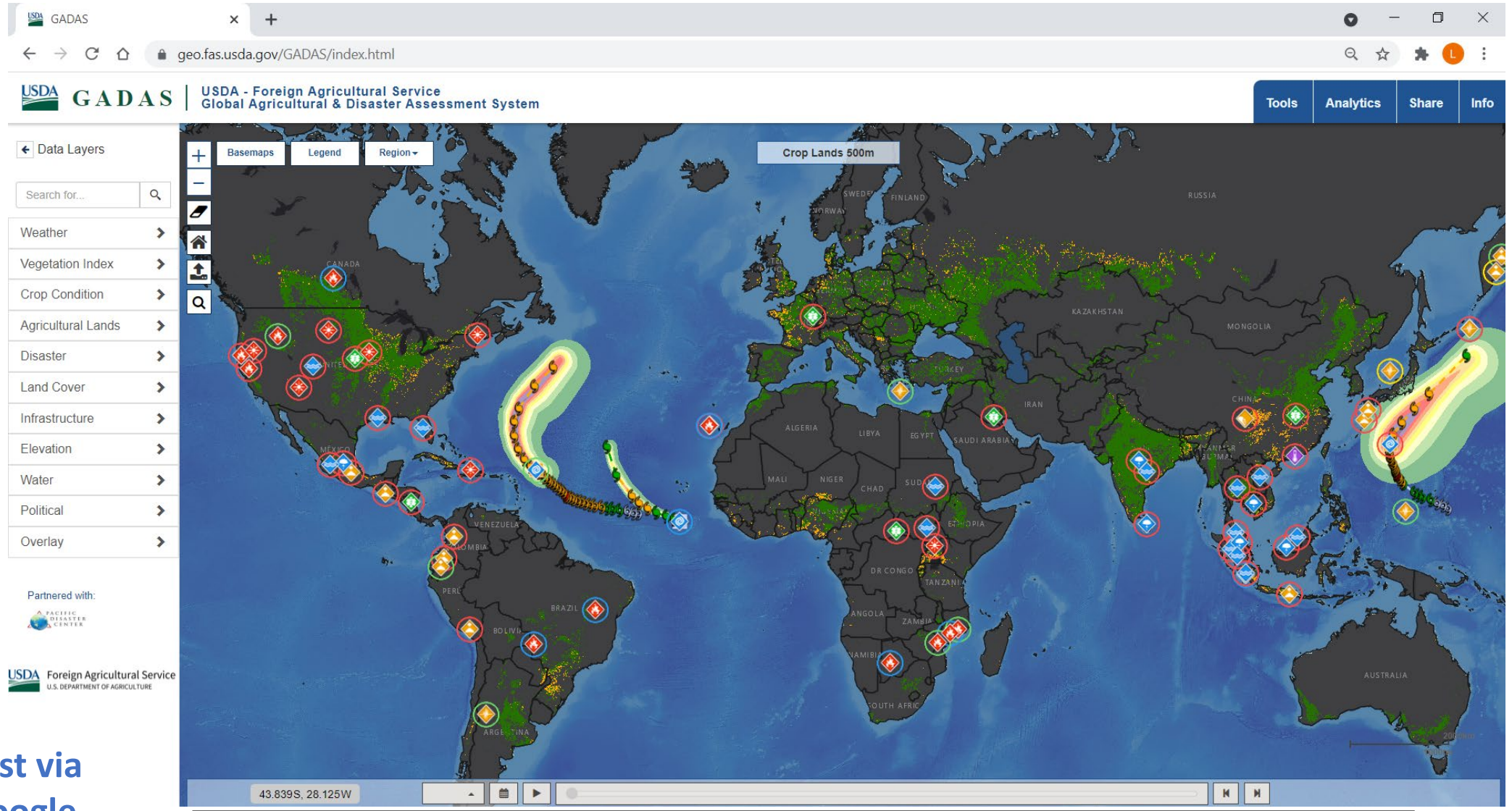
Comparative analysis, Data mining, and Publication-ready products







Created with Political mask (tool), Reservoirs, and Style Editor (tool) for labels



Best via Google Chrome

A global web GIS system combining comprehensive real-time earth observation data & tools

Scenario: Australia Drought Analysis

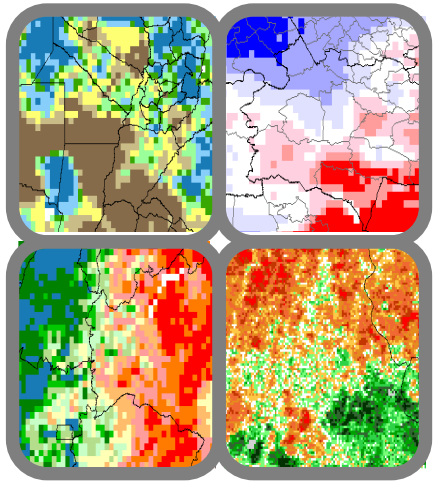
- 2019 was a rough year for Australia that eventually led to enormous fires
  - In this scenario, we will focus on the wheat crop to demonstrate using features of GADAS

1. Review the country's crop calendar and crop geography
2. Explore precipitation data to get oriented (Weather and time slider)
3. Chart precipitation to find the drought period (Analytics)
4. Map the Drought (Crop Conditions)
5. Calculate Ag Area Affected (Example tool)
6. Export the map product to capture the story (Final tool)

Australia – Photo Courtesy of Dath Mita

General Workflow for using GADAS

Observe Conditions



Severity

Duration

Outlook for change

Crop Calendar

Growth stage

Yield sensitivity

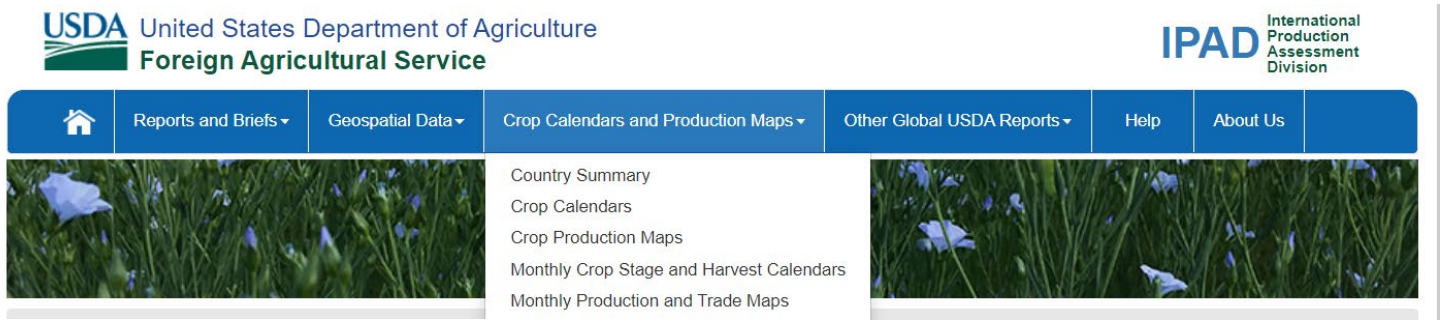
Crop Geography

Percent area affected

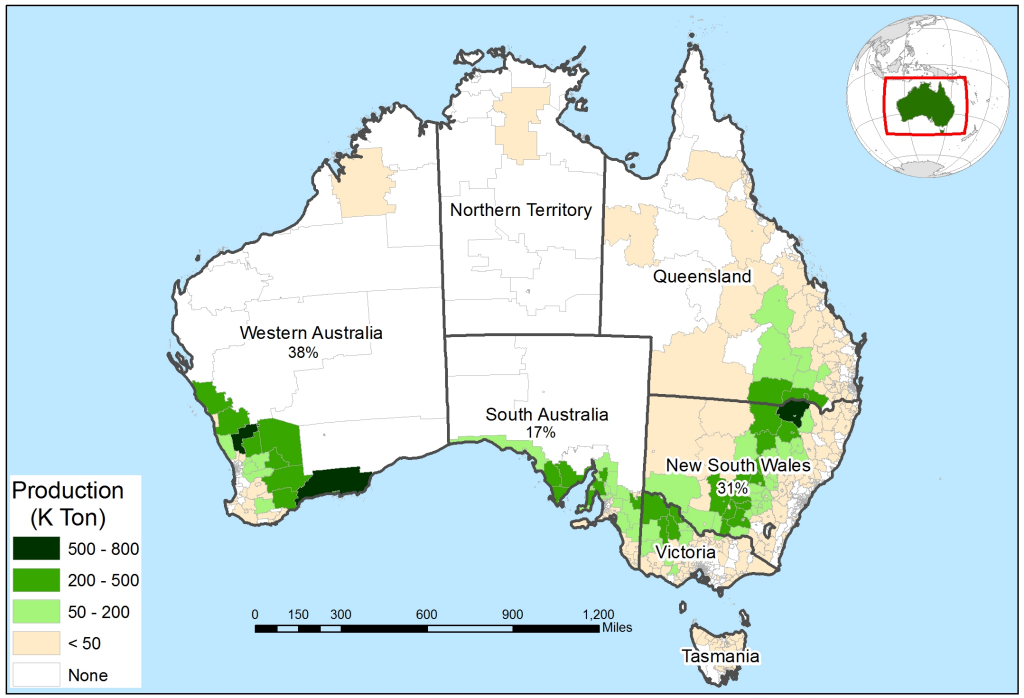
Crop Condition Assessment

Tonnage increase or decrease

Also, Crop Production Maps and Crop Calendars via the IPAD Website



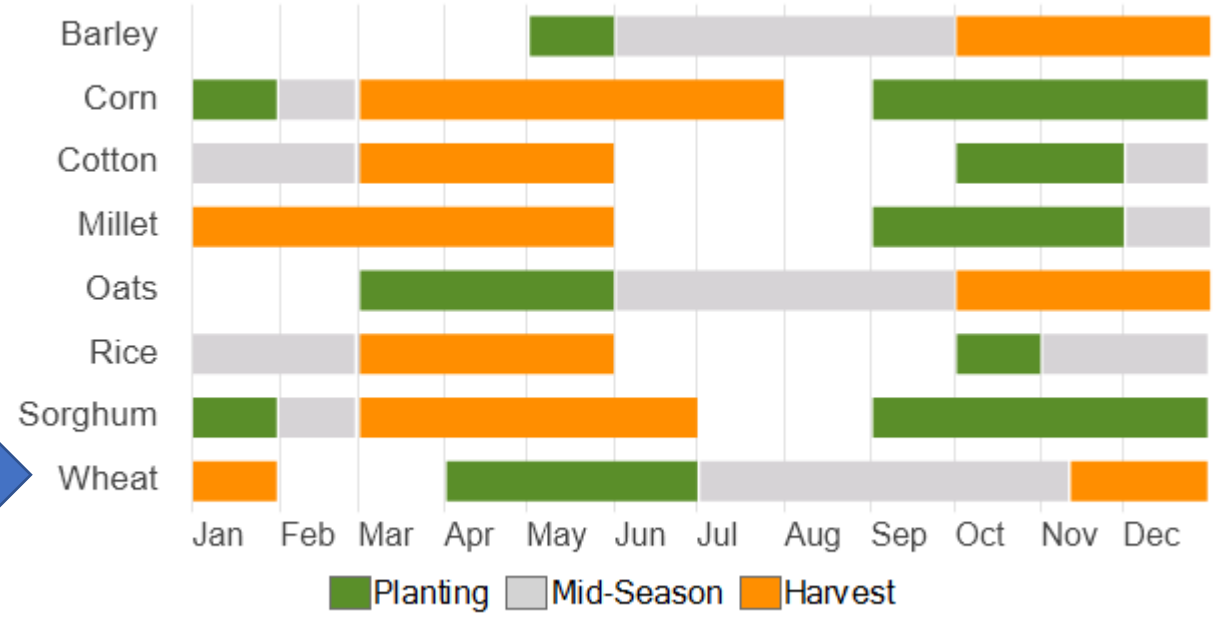
Australia: Wheat Production



Data Source: ABS Ag Census with 2016 SLA boundaries (SA2)
Average production of 2005/06, 2010/11 and 2015/16

Foreign Agriculture Service
Office of Global Analysis
International Production Assessment Division
USDA

Australia: NSW/Victoria – Crop Calendar



USDA

Source: FAS/GMA/IPAD

GADAS Scenario Demonstration

This video is almost 13 min long, walking through the demo

GADAS: Rich Visualization with More Than 500 Data Layers

Key Data Sources:

NASA

USGS

UCSB

PDC

USAF

WMO

NOAA

EC

Time-series data sets updated daily, weekly, and monthly

Thank you to our partners and data providers

Summary

- Deriving USDA's International Monthly Production Estimates
- Agricultural Monitoring of Crop Conditions
- Covering Food Security Assessments
- Disaster Monitoring

A few websites:

IPAD Homepage: https://ipad.fas.usda.gov/

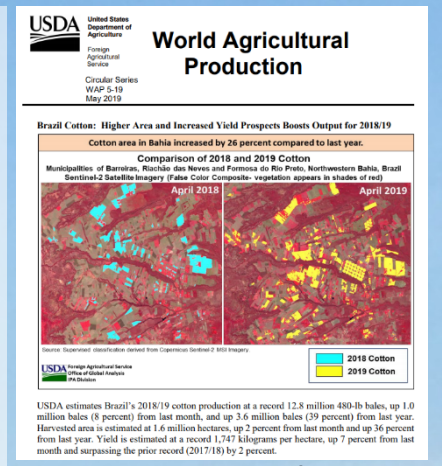
Crop Explorer: https://ipad.fas.usda.gov/cropexplorer/

WAP Circular: https://www.fas.usda.gov/data/world-agricultural-production

WASDE: http://www.usda.gov/oce/commodity/wasde/

PSD Online: https://apps.fas.usda.gov/PSDOnline/app/index.html#/app/home

GADAS: https://geo.fas.usda.gov/GADAS/index.html


USDA United States Department of Agriculture
Foreign Agricultural Service
Circular Series
WAP 5-19
May 2019

World Agricultural Production

Brazil Cotton: Higher Area and Increased Yield Prospects Boosts Output for 2018/19

Cotton area in Bahia increased by 26 percent compared to last year.

Comparison of 2018 and 2019 Cotton

Municipalities of Barreiras, Riachão das Neves and Formosa do Rio Preto, Northwestern Bahia, Brazil
Sentinel-2 Satellite Imagery (False Color Composite- vegetation appears in shades of red)

April 2018

April 2019

2018 Cotton
2019 Cotton

USDA estimates Brazil's 2018/19 cotton production at a record 12.8 million 480-lb bales, up 1.0 million bales (8 percent) from last month, and up 3.6 million bales (39 percent) from last year. Harvested area is estimated at 1.6 million hectares, up 2 percent from last month and up 36 percent from last year. Yield is estimated at a record 1,747 kilograms per hectare, up 7 percent from last month and surpassing the prior record (2017/18) by 2 percent.

WAP Circular

Lisa Colson
GIS Mapping & Imagery Analyst
lisa.colson@usda.gov

Thank you!

Photo Courtesy of Katie McGaughey taken March 2017